

**Carborundum Universal Limited**

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CIN No. : L29224TN1954PLC000318.

1<sup>st</sup> August 2017

BSE Limited  
1<sup>st</sup> Floor, New Trading Ring,  
Rotunda Building, P J Towers,  
Dalal Street, Fort  
Mumbai 400 001

Stock Code: 513375  
*Through BSE Listing Centre*

The Manager  
Listing Department  
National Stock Exchange of India Ltd.  
Exchange Plaza, 5th Floor  
Plot No. C/1, G Block  
Bandra-Kurla Complex, Bandra (E)  
Mumbai 400 051

Stock Code: CARBORUNIV-EQ  
*Through NEAPS*

Dear Sirs,

**Sub: Annual Report for the year 2016-17**

We refer our letter dated 31<sup>st</sup> July 2017 intimating you of the proceedings and the voting results of the 63<sup>rd</sup> Annual General Meeting (63<sup>rd</sup> AGM) of the Company held on 31<sup>st</sup> July 2017.

In terms of provisions of Regulation 34 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, the Annual Report for the financial year 2016-17 duly approved and adopted by the members at the 63<sup>rd</sup> AGM is enclosed.

Request you to kindly take the same on record.

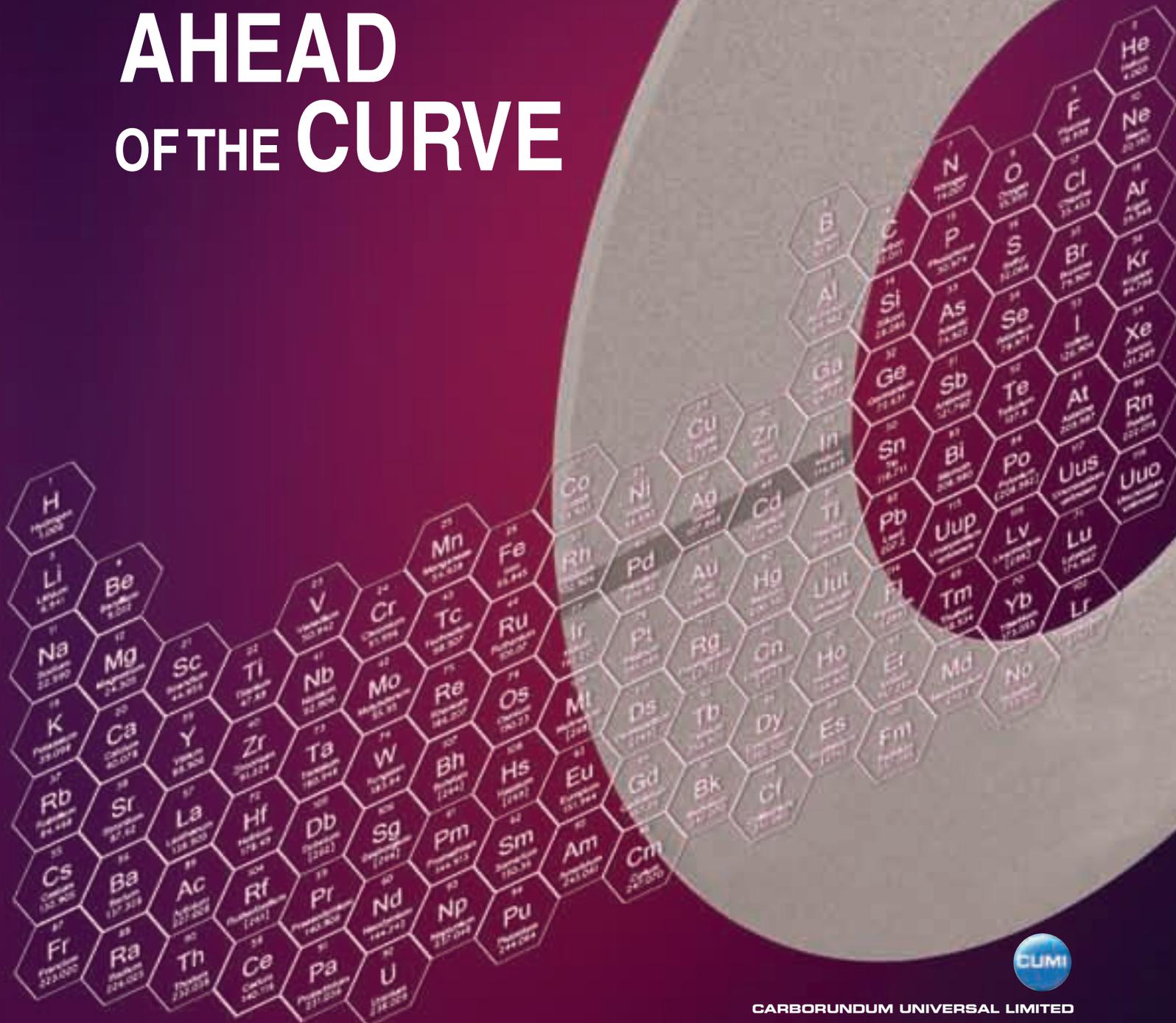
Thanking you

**Yours faithfully**

**For Carborundum Universal Limited**

  
**Rekha Surendhiran**  
Company Secretary

# AHEAD OF THE CURVE



# CONTENTS

Ahead of the Curve	1
Chairman's Message	18
Board of Directors	20
Corporate Information	23
Financial Highlights	24
Directors' Report	26
Corporate Governance Report	72
Independent Auditors' Report on Consolidated Financial Statements	88
Consolidated Financial Statements	92
Independent Auditors' Report on Standalone Financial Statements	168
Standalone Financial Statements	173

Note: Across this report, the word "CUMI" refers to "Carborundum Universal Limited."

## Cautionary Statement

This Report contains statements relating to future business developments and economic performance that could constitute 'forward looking statements'. While these forward looking statements represent the Company's judgements and future expectations, a number of factors could cause actual developments and results to differ materially from expectations. The Company undertakes no obligation to publicly revise any forward looking statements to reflect future events or circumstances. Further, investors are requested to exercise their own judgement in assessing various risks associated with the Company and also the effectiveness of the measures being taken by the Company in tackling them, as those enumerated in this Report are only as perceived by the management.

BUILDING A FUTURE-BOUND  
BUSINESS ARCHITECTURE...

A STRATEGIC AGILITY FOR  
CHANGE AND REINVENTION...

PURSUING INNOVATION-LED,  
TRANSFORMATIONAL TECHNOLOGIES  
NEWGEN PRODUCT STREAMS...

STRENGTHENING CAPABILITIES FOR  
SCALE, SPEED AND COMPETITIVE EDGE...

LEADING A VISION DRIVEN TEAM  
ANCHORED IN STRONG ETHICAL  
SYSTEMS...

EMBEDDING SUSTAINABLE VALUE  
FOR STAKEHOLDER AND SOCIETY...

**2016-17**

AT CUMI, TRUE TO OUR  
PIONEERING DNA, WE FORGED

**AHEAD OF THE CURVE...**

Upscaling, transformational technology platforms, cutting edge products, accelerated delivery cycles... these are the inherent drivers for being ahead of the curve. Drivers that define us at CUMI..

Global business environment is an ever changing ecosystem prone to tectonic change in technologies, processes and market trends. To anticipate, keep pace and ride the cusp of change determines a leader.

At CUMI, to stay ahead of the curve we up-scaled and augmented our manufacturing capabilities, adopted breakthrough processes, forayed into transformational technologies, accelerated our time-to-market delivery cycles and accessed new markets.

To enhance our capabilities, we acquired the manufacturing assets and customer database for the Metallised Cylinder Plant from NTK Ceramics, Japan and re-installed it at our Industrial Ceramics facility at Hosur.

The new facility combined with our existing Metz Plant makes us the second largest producer of Metallised Cylinders in the world, besides giving us an access to new markets, new applications.



*The Roller Hearth Kiln at IC-Hosur*

New plants with totally integrated and innovative processes were commissioned at Edappally, India for scaling up production of Alumina Zirconia and Azure-S Solgel Grains and to manufacture the most cost effective and technologically advanced materials for a wide spectrum of industries.

A state-of-the-art Plant for the manufacture of surface treated Grains was commissioned at Edappally. The first of its kind in the country, this would lend the Company the ability to address specialised applications.

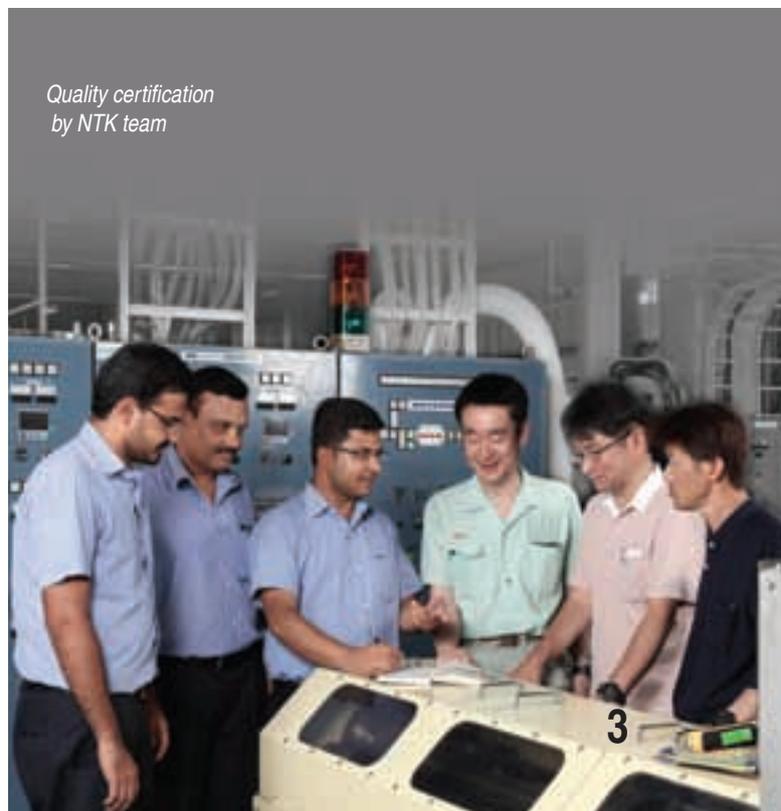
Other capability and capacity building projects undertaken during the year were :

- Expansion of the Coated Abrasives Plant at Sriperumbudur.

- Automation and modernisation of the Manufacturing lines at the Bonded Abrasives plant at Tiruvottiyur.
- Scaling up and optimisation of Thin Wheel manufacturing across Uttarakhand and Maraimalai Nagar.
- Modernisation of the Coated operations at Kolkata.
- Debottlenecking of Cloth and Resin production operations at Marimalai Nagar.
- Commenced the manufacturing of abrasion-resistant, Lined FRP products, using advanced technology for Fluidised Bed Boilers for Flue Gas Desulphurisation in power plants and for slurry lines in process industries.

- Manufacture of Nozzle filling compound for the Iron & Steel industries. An import substitute, manufactured for the first time in India.
- Development of capabilities in Non-oxide Ceramics, injection moulding and partially stabilised Zirconia products.

Moving up the value chain in process and product capabilities, manufacturing plants with capacities to scale up rapidly and transformational technology platforms to address emerging markets, CUMI is ready and ahead of the curve...



To be ahead of the curve demands resilience to disruption, a future-ready business architecture built on strategic variables and change adaptability. At CUMI, we strive to do just that.

Translocating manufacturing plants, repositioning business models, demonstrating an agility for transitional shifts, for CUMI change adaptability has been a major strength to stay ahead of the curve.

To enhance process efficiencies, we shifted the Fusion Plants from Thukela Refractories Isithebe, South Africa to Kochi, India. We recommissioned it after modification and upgradation, giving us about 18,000 tons fusion capacity to make Semi Friable and Brown Fused Alumina to address both domestic and export markets.



*Aerial view of the Bubble Zirconia Manufacturing Facility at SEZ Kochi, India.*

We re-located and re-commissioned the Bubble Zirconia Plant from Foskor Zirconia, South Africa to the SEZ facility at Kochi, India. The plant with a 5,000 ton capacity for manufacturing Bubble Zirconia is the first of its kind in the country and among the select few in the world. Meant primarily for exports, this will enable CUMI to address the growing requirements in Pigments, Abrasives, Refractories, Engineered Ceramics, Nuclear Applications, etc.

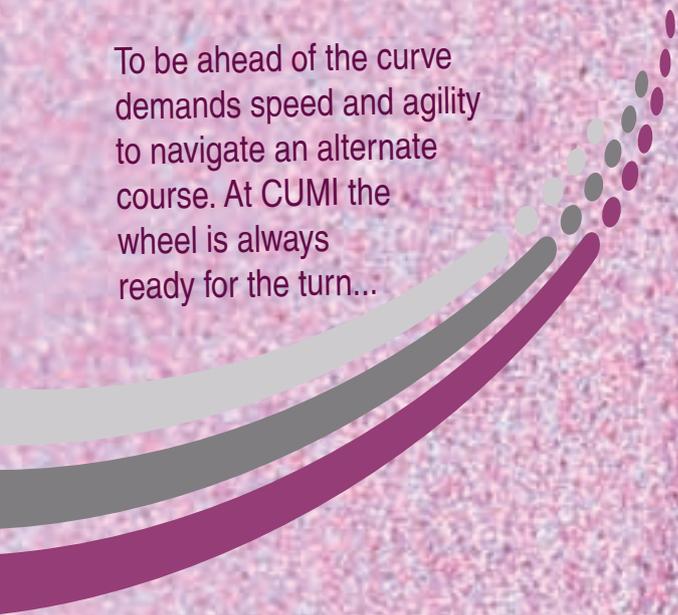
Translocated from Thukela Refractories Isithebe, South Africa, a Plant for manufacturing Slide Plates and floor control Refractories for the Iron & Steel industries was commissioned at Jabalpur, India and the product has been well received in the market.

At CUMI China, we repositioned our business to an asset-light, out-sourced manufacturing model, with dedicated lines, managed by our engineers and complying to our stringent design and quality standards.

With a strengthened channel, CUMI China has become an important logistics hub and nodal centre for serving the South Asian markets.



To be ahead of the curve  
demands speed and agility  
to navigate an alternate  
course. At CUMI the  
wheel is always  
ready for the turn...



*Chairman at VAW - Russia*



*Coated facility at VAW - Russia*

Strategic agility and a future-driven business focus has been the core strength for CUMI's growth and globalisation.

As a Company serving a multitude of industries, we have to be aware and anticipate the challenges of change, of technological shifts, of market transitions to transcend, to stay ahead.

A market leader in each of its business, CUMI has pursued a strategic growth plan in line with changing market needs and industry trends.

The Company has also started work on Industry 4.0 - an initiative to introduce 'smart manufacture' aligned with a 'smart back and front end supply chain'.

Three of our key Plants have been awarded the JIPM TPM Excellence Certification.

A state-of-the-art Surface Technology Centre was opened at the Bonded Abrasives Plant at Tiruvottiyur. CUMI is among the few abrasive companies globally to have a comprehensive simulation lab of this kind.

Customer reach on the digital platform with e-enabled selling and connectivity was taken up across the various SBU's. Real time data updation and complete value chain mapping consolidated the growth in Coated Abrasives in the Non Woven segment in the domestic market.

Expanded distribution and areas of application in CUMI America increased the sales of Non standard, customised Abrasives for critical applications. Metal working fluids- a key adjacency gained good traction from portfolio expansion in machining products. Channel expansion for greater market

penetration progressed aggressively with over 100 new dealer appointments.

Our outreach to customers was at its peak with CUMI participating in major international industrial fairs - Grindtec Augsburg, IMTS Chicago, IMTEX Bangalore, Ceramitec Munich, Wood Show, Las Vegas, etc. International customer meets and agreements on Joint Development Plan with customers were some of the key customer centric initiatives.

With Urbanisation, Energy and Environmental Concerns portending to dictate macro economic trends, CUMI is mapping out plans to address these 3 emerging segments, partnering with customers to develop newgen products and solutions, embedding sustainable relevance to stay ahead of the curve...

NWFA Expo- CUMI America



IMTEX- Bangalore



To embed a culture of continuous innovation and sustainable value creation is an imperative to be ahead of the curve. At CUMI, this has been our core strength.

Innovation. Future driven R&D. Patent protected products and processes. Operational and domain expertise in more than 50 technology platforms covering materials, processing and applications - at CUMI, this has been our competitive advantage.

During the year, each of our business continued to leverage this strength to forge ahead with innovative, newgen products.

#### Bonded Abrasives

- Developed a complete range of Aluminium Oxide, Silicon Carbide and Micro-crystalline Vitrified Grinding Wheels for the Aerospace fastener grinding application, providing CUMI a strong foothold in the aerospace segment.
- Specially graded Micro-crystalline Grains with new vitreous bonds enabling a step-jump in performance of Vitrified Thread Grinding Wheels and Super Finishing Stones.
- New range of Snagging Wheels with superior performance and safety using specially developed Resin and Vitrified bonds for Foundry and Fabrication industries.
- Upgradation of 'TEZZ' and 'SLEEK' brands of Ultra-thin Cutting Wheels with longer life, dust free, best-in-class cutting properties.



## Coated Abrasives

- High performance Ceramic and Zirconia based Polyester and Polycotton products for the Exports market. Designed with a special top coating technique, these products make cutting cooler & faster and are very effective for aggressive metal grinding applications.
- Complete range of Zirconia based fiber discs using unique processing techniques for enhancing performance. The products achieved wide acceptance amongst various industry segments.
- High performance Waterproof Paper with superior cutting and product life for automotive repaint and home improvement segment.
- New range of high performance Non-woven products for Home Care and Industrial segments.
- In terms of long term research, work was completed on progressive, newgen bonding systems for Coated Abrasives, while modifications on grinding surface of products for higher

levels of performance with reduced power consumption and low fatigue was developed in Coated Abrasives.

## Ceramics

- Wear Ceramics - new product development in Ceramic Lined Rubber Hose for dredging applications, Special Wear Coatings and Specialised Lined Equipment for mineral processing.
- Metallised Ceramics (METZ)- scaling up volumes of Metz cylinders to 2 million cylinders and capability enhancement in devices, brazed assemblies and thin film substrates.
- Engineered Ceramics - Capability enhancement in Aluminum Titanate dosing tubes, Fluid handling and General Engineering.
- Non-Oxide Ceramics - Development of Zirconia nozzles for the Steel industry, Reaction Bonded Silicon Carbide products for Pump industry, Composite Liners for Wear Ceramics–rubber backed Ceramics/ FRP, the manufacture of super alloys for the aerospace industries, with

the Andermann Techno Marketing collaboration, with exports to North America and Europe.

- A state-of-the-art, DSIR approved Research and Development facility for Advanced Ceramics was inaugurated at Hosur during the year. The R&D lab at Edappally, India, also received DSIR recognition.
- It is a matter of pride that six of our R&D centres (including the one at Wendt India) have the DSIR recognition. A recognition, that has helped attract the best talent from across the globe to work in these facilities and increased our IP and patent capabilities.

At each of the SBU's, our technical teams with deep and varied industry experience lend support to customers to develop new products and processes.

Reputed for quality and performance, CUMI's products are exported to more than 50 countries spread across North America, Europe, Australia, South Africa and Asia - a competitive strength enabling us to stay ahead of the curve.



DSIR Approved R&D facility at Edappally



Surface Technology Centre at the Abrasives Plant at Tiruvottiyur 9

Collaboration with customers, channel partners and stakeholders is important to forge ahead of the curve. At CUMI, we nurture win-win partnerships...

and application expertise to cater to critical applications in Copper processing and Mining.

Application of Nitride Bonded Silicon Carbide (NBSiC) and Alumina Refractory for precious metal processing plant in overseas market.

The Refractories division enlarged its presence in Glass, Steel industries and Foundries and specialised new Refractories for high end applications in blast furnaces for the Iron & Steel industries.

Established presence in exports to South Africa in furnace Lining and Wear resistant parts in Silicon Carbide for Mineral processing.

Developed a new range of castables for the Petrochemical industries in the Middle East.

In line with this, CUMI's Prodorite division leveraged its technical expertise to offer customised solutions to major mining industries in Middle East and Africa.

The division established its supremacy in Polymer Concrete Cells for copper processing industries in Africa with collaborative partnering and turnkey project execution. CUMI is the only Company in India and among the few in the world with the technology

Forging strategic alliances, technical partnerships and working in collaboration with our customers, channel partners and stakeholders has enabled us to stay ahead of the curve.



*The project execution team with the Polymer Concrete Cells at the work site at Africa.*

## Electrominerals

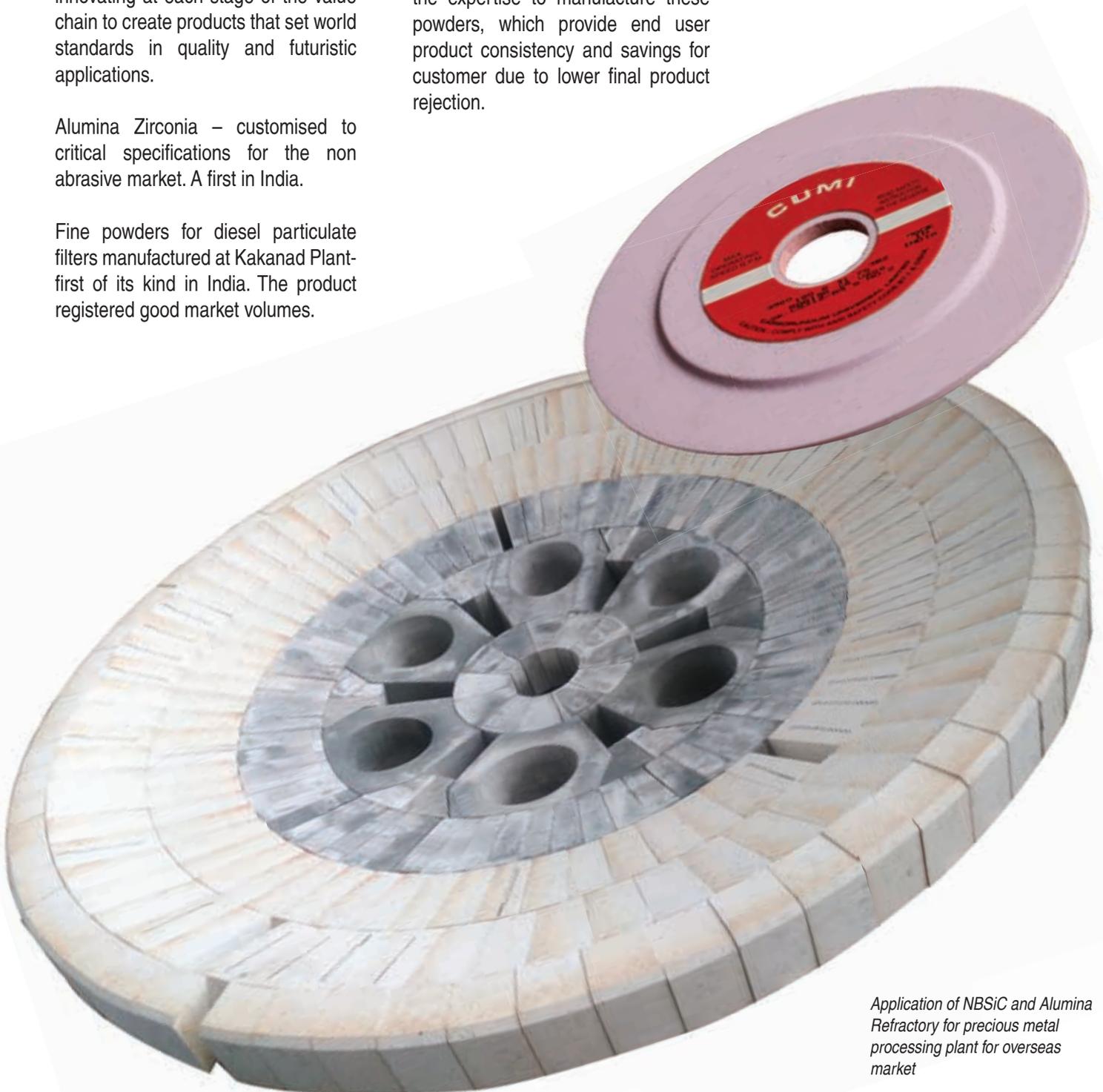
The Electrominerals division made a major technological transition to non fused fine minerals, constantly innovating at each stage of the value chain to create products that set world standards in quality and futuristic applications.

Alumina Zirconia – customised to critical specifications for the non abrasive market. A first in India.

Fine powders for diesel particulate filters manufactured at Kakanad Plant-first of its kind in India. The product registered good market volumes.

Released a special grade of free flow Semi Friable Silicon Carbide micro powders for abrasive and other applications. CUMI is the first in India and among the few in the world with the expertise to manufacture these powders, which provide end user product consistency and savings for customer due to lower final product rejection.

Expanded applications for Ultra-Light high Alumina, high temperature insulation material - a futuristic material, Nebulox, positioning CUMI ahead of the curve...



*Application of NBSiC and Alumina Refractory for precious metal processing plant for overseas market*

Visionary leadership and strategic direction anchored in strong value systems is integral to stay ahead of the curve... at CUMI, we are guided by these fundamentals.

Pioneering zeal, a passion for path breaking and the relentless pursuit of game-changing technologies - CUMI's leadership team is guided by the vision of the founding fathers. A vision, that defines, dictates and drives the Company to stay ahead of the curve.



Reflecting the Five Lights of the Murugappa Group of integrity, passion, quality, respect and responsibility CUMI's Corporate Governance framework and disclosure practices are built on high standards of trust, transparency and a strong regulatory discipline. A major strength of the

Company, enabling it to be reckoned as a global organisation of repute, upholding the trust and contributing to the growth of all its stakeholders.

Leveraging on the core strengths and demonstrating CUMI's core principles of integrity, empowerment,

accountability and strong ethical practices, the senior leadership team has provided the strategic direction and charted the course of the organisation with its vision of becoming a globally admired company in Material Science.



*Mr M M Murugappan - Chairman,  
with the Global Leadership Team*

A vision driven workforce, empowered, ethic centred and engaged is what propels a Company ahead of the curve... like our team at CUMI.

Technology and a digitally driven world is transforming the business eco-system to a deeply connected and highly collaborative working of people.

Our pan global presence and a diverse and multi-cultural roster of 5,000 plus employees, spanning 5 continents, provides us a competitive advantage to collaborate, understand, share learnings, transact and do business in different countries across the world.



*Award to Edapally Plant for National Level Manufacturing Competitiveness from International Research Institute for Manufacturing*



*CII Industrial Innovation Award for the 'Top 25 Innovative Companies' - Electrominerals*



*Golden Peacock Award for Corporate Ethics the Engineering Sector*



*Murugappa Star Performer Award - Abrasives*

At CUMI, moving the needle in people capabilities became the prime imperative towards gearing for the challenges of a changing marketplace and building an innovative work culture. The Company leveraged on collaborative networking tools and social media to build a robust, future-ready, people resource.

Training platforms, each unique and varied, were rolled out to build a leadership pipeline, accelerate seamless succession for critical roles, address the developmental needs of young millennials, embed innovation and cascade design thinking across the organisation.

A career progression framework empowering employees to design and propell their own growth trajectory, a robust communication channel, employee engagement initiatives, rewards and recognition programmes and a relentless drive for excellence - at CUMI, a vibrant people charter is ready to take the lead...



*TPM Award for Excellence in Category 'A' - Tiruvottiyur Plant from Japan Institute for Plant Maintenance (JIPM)*



*National CSR Leadership Foundation Award for 'Best CSR Impact Initiative'.*



*Golden Peacock Award for Corporate Social Responsibility in the Engineering Sector*

To be ahead of the curve mandates a deep commitment to stakeholder and society...at CUMI, this is central to our vision.

Sustainable Community Building is a guiding philosophy of the Murugappa Group. In line with this, CUMI's Corporate Social Responsibility initiatives are centred on providing need based support to the neighbouring communities in which it operates.

Our different business units continue to undertake activities in the areas of Education, Health Care, Environment Protection, Safety, Youth Development, etc.



*A training session at CCSD - Hosur*

Free Health and Medical Camps including Blood Donation Camps are conducted across locations to address the medical needs of the local community.

As part of social awareness initiatives, training programmes on road safety, environmental care, child rights, parenting and career guidance for youngsters in the communities are conducted regularly. Training aid to women on social entrepreneurship, engaging with senior citizens and providing donations to build school

infrastructure are other important socio-welfare initiatives anchored by the Company.

CUMI Centre for Skill Development (CCSD), a direct CSR initiative institutionalized by CUMI even prior to the mandated CSR continues to train youngsters from the less privileged community and provide them with employability skills.

CCSD, both at Hosur and Edapally, offer students a holistic training encompassing ethics, soft skills,

vocabulary, health maintenance, social cause etc, beyond the NCVT syllabus based technical training, thereby equipping them with essential skills to be employed in any industry.

CUMI also participates and sponsors the community welfare programmes anchored by the AMM Foundation. Providing aid for the education of children at the Vellayan Chettiar School and supporting other charitable activities of the Foundation are part of the important socio-welfare initiatives undertaken by the Company.



*Students at Vellayan Chettiar School, Tiruvottiyur.*

## CHAIRMAN'S MESSAGE

Across geographies, divisions and functions, teams exude vibrant energy and demonstrate a deep sincerity of purpose and commitment to be ahead of the curve in all facets of operations.



### Dear Shareholders,

The year 2016-17 was a good year for CUMI amidst a struggling global economy which continues to face downside risks in terms of increased protectionism, heightened policy uncertainty and weaker potential growth. Global industrial growth is forecasted to strengthen in 2017 with a pickup in manufacturing and trade, favourable global financing conditions and stabilising commodity prices. The Indian economy, despite the sharp slowdown at the end of year owing to an unfavourable base effect and the demonetization, continues to be amongst the fastest growing economies in the world. The Goods and Services tax (GST) a significant reform in the indirect tax structure of the country to usher in a harmonised national market for goods and services is expected to have a favourable impact on the economy in spite of the implementation challenges.

CUMI's consolidated revenue increased during the year by nine per cent owing to better performance across all divisions and also well supported by performances of its subsidiaries and joint ventures. The major strategic initiative in terms of relocation of plants from South Africa and China and their subsequent recommissioning in different parts of India were successfully completed during the year, the benefits of which are likely to accrue in the coming years. Relentless cost management efforts and efficiency drive aided in improving overall profitability. The continuous focus on implementation of the Total Productive Maintenance (TPM) practices across all our plants have improved the efficiency of the entire production process. During the year, CUMI's oldest plant at Tiruvottiyur, India was awarded the JIPM excellence award in TPM and the Industrial Ceramics Plant at Hosur, India has successfully completed the

CII TPM health check and is now geared up for the JIPM excellence assessment this year. Capital expenditure programmes were well executed as per plan and prudent working capital management has aided the Company becoming debt free during the year. At a consolidated level, the net debt position is very marginal which signifies the strength of its overall cash flow position.

### Abrasives

In the backdrop of positive macro-economic factors in India like infrastructure development, energy related reforms coupled with conscious efforts like introduction of new products contributed to the better performance strengthening of its dealer & distribution network etc., Abrasives, CUMI's largest operating business recorded a 10 per cent growth during the year. The indigenous sourcing of input materials continue to give this business segment a competitive edge in the market. Better efficiency across the value chain through TPM practices and strong partnership with distributors as well as customers have aided in improving margins. The up gradation of the bond production facility as well as launch of new products bettered the performance of the Russian subsidiary, Volzskhy Abrasive Works. The Indian subsidiary, Sterling Abrasives which manufactures specialist conventional Abrasives has performed well. Wendt India, the joint venture company which addresses the Super Abrasives, Grinding machines & Precision components had a good growth in both revenue and profitability. The discontinuance of in-house manufacturing operations in China have minimised losses and a new business model for its future operations has been well established.

## Ceramics

The Ceramics business which had a tough previous year has done very well this year. Both at the standalone and consolidated levels, there has been a significant improvement in revenues as well as profitability. The year 2016-17 was also momentous for the division in that it has completed 25 years. The Metalized cylinder, Engineered Ceramics and Wear Ceramics segments continue to do very well. The repositioning of the equipment purchased from NTK, Japan has been completed at Hosur, India this year and is expected to commence commercial production soon. The Lined Equipment business at CUMI Australia continued to be good, thus improving the consolidated performance. The strategic initiatives undertaken in the previous years to turn around the business in the United States has started to yield results with a good growth in revenues. The Refractory business growth over the last year has also been good driven by growth in Fired Refractories and Anti-Corrosive segments. Efforts have been taken in the last two years in establishing niche applications for this segment which will drive the future growth. The Company's joint venture Murugappa Morgan Thermal Ceramics engaged in manufacture of Ceramic Fibre products also did well to maintain its revenues and profitability.

## Electrominerals

The Electrominerals business of CUMI which did exceptionally well last year grew marginally this year by three per cent. The decline in Solar Photovoltaic business as well as the weak markets in China and Europe adversely impacted business performance. The increase in input cost as well as lower rainfall in Maniyar, India which houses the hydel power plant for meeting the power requirement of this division has affected the power generation resulting in increased power cost with an overall impact on its profitability. The business is in the final stages of obtaining requisite approvals for establishing an additional power plant at Keerithodu, India to meet its power requirements. The flat sales of Fused Zirconia in South Africa as well as the power shortage in Russia due to maintenance issues for more than two months impacted the production volumes and ultimately the consolidated sales. The Rouble volatility and resultant adverse movement in exchange continued to impact the profitability of the Russian operations at a consolidated level. Recently, CUMI also set up three fusion plants at Cochin, India - a Zirconia Bubble Fusion plant and two Alumina Fusion plants thus creating one of the most advanced and integrated electro-mineral complexes worldwide. This initiative is expected to add, at full capacity, 25,000 tonnes of fused minerals which will improve the future performance of this business.

Southern Energy Development Corporation Limited, the gas based power generation subsidiary recorded its highest ever revenue since its inception this year and its profitability grew by about 168%. Net Access, the IT arm of the Group grew by 33% in sales and about 45% in profits after tax.

The Board has prudently considered an enhanced dividend of ₹ 1.75 per share for the year of which ₹1.00 per share has already been paid as interim dividend during the year.

The year 2016-17 was a year of many recognitions for CUMI. It is with great pride we share that CUMI is the recipient of the prestigious Golden Peacock awards in two categories - Corporate Ethics and Corporate Social Responsibility (CSR). The Electrominerals division was also conferred the national award for excellence in CSR by the National CSR Leadership Foundation. Both the Industrial Ceramics division as well as the Electrominerals division have won the Confederation of Indian Industries (CII) Industrial Innovation awards and have been placed in the list of Top 25 innovative organisations.

In the area of material sciences, CUMI pursued its research and development initiatives vigorously during the year including the setting up of a Centre of Excellence certified by the DSIR for research in technical ceramics for industrial and advanced applications at Hosur, India. With this, CUMI has six research centres recognized by the Department of Scientific and Industrial Research, Government of India. These recognitions and initiatives reinforce our commitment to remain socially responsible as well as relevant in all our endeavors. The CUMI Centre for Skill development (CCSD), the CSR initiative of CUMI in addressing the training and development requirements of rural and underprivileged youth and honing their skills for future employment in any industry progressed well. The safety record across all locations has been excellent. Safety training programmes, capability development programmes, employment engagement initiatives continued during the year with enhanced vigor.

It has been yet another good year from the compliance perspective and the team has done extremely well in adapting to the changing environment. CUMI, its subsidiaries and joint ventures in India have seamlessly migrated to the new Indian Accounting Standards and are gearing up for further changes in the future.

To remain relevant and purposeful has been the inherent strength of the CUMI team across the world. Under the able leadership of Mr. K Srinivasan, Managing Director who is well supported by the leadership across geographies, divisions and functions, teams exude vibrant energy and demonstrate a deep sincerity of purpose and commitment to be ahead of the curve in all facets of operations. I am thankful to the esteemed members of our Board who have been a great source of strength and support to the Company, its leadership and to me, personally, through their involvement, guidance and wise counsel. Mr M Lakshminarayanan and Mr Shoban Thakore will retire from the Board in July 2017. We wish them well. We welcome Mr. P S Raghavan and Mr. Sujain S Talwar to the Board. Mr. Raghavan who has retired from the Indian Foreign Service has a wide global experience in external affairs. Mr. Talwar, a qualified solicitor has vast corporate legal experience. Their induction into the Board gives it a balanced composition with varied experience and expertise.

Our most sincere thanks to all our stakeholders, customers, suppliers, vendors, bankers and ofcourse to all of you shareholders for your unstinted support to the Company in its continuous effort towards "Making Materials Matter".

*M M Murugappan*

## BOARD OF DIRECTORS

Mr. Murugappan holds a Masters degree in Chemical Engineering from the University of Michigan, USA. Besides serving as the Chairman of Tube Investments of India, Shanti Gears, Wendt (India), Murugappa Morgan Thermal Ceramics and as the Vice Chairman of Murugappa Holdings Limited, he is on the Boards of several companies including Mahindra & Mahindra, Cholamandalam Investment and Finance Company, IIT Madras Research Park and Cyient. He was elected as a fellow of the Indian Ceramic Society and is also a member of the American Institute of Chemical Engineers, Indian Institute of Chemical Engineers, Plastics & Rubber Institute. He is also a member of the Board of Governors, IIT Madras.



M M Murugappan, 61 years



T L Palani Kumar, 67 years

Mr. Palani Kumar is a Graduate in Chemical Engineering from IIT, Madras and a Post Graduate (Diploma) in Business Administration from IIM, Ahmedabad. He has served as the Chief Executive Officer of Escorts Tractors Limited & New Holland Tractors Private Limited and as the Managing Director of Bharat Aluminium Company Limited. He is also on the Boards of Fostiima Integrated Learning Resources Private Limited and SBI Capital Markets Limited.

Mr. Shobhan Thakore holds a Bachelor's degree in Arts (Politics) and Law from the Mumbai University. He is a Solicitor of High Court Mumbai and the Supreme Court of England and Wales and has more than 4 decades of experience as an advocate. He has been a partner of Bhaishankar Kanga & Girdharlal and AZB & Partners, Advocates & Solicitors. He is the co-founder of the law firm Talwar Thakore & Associates. He is currently on the Boards of various companies including Alkyl Amines Chemicals, Birla Sun Life Insurance Company, Bharat Forge, Morarjee Textiles, Reliance Jio Private Limited, etc.



Shobhan Thakore, 69 years

Mr. Aroon Raman holds a Master's degree in Economics from Jawaharlal Nehru University, New Delhi and a MBA from Wharton School, USA. He was the Managing Director of Raman Boards and then Raman Fibre Science Private Limited. He has served as Chairman of Confederation of Indian Industry, Karnataka. Besides being the Managing Director of Telos Investments & Technologies Private Limited he is also on the Boards of various companies including Wheels India, Brigade Enterprises, TVS Automobile Solutions and EduTech NTTF Private Limited.



Aroon Raman, 57 years



M Lakshminarayan, 70 years

Mr. Lakshminarayan holds a Masters degree in Mechanical Engineering from IIT, Mumbai and is a fellow member of the Indian Institute of Production Engineering. He has served as the Joint Managing Director of Bosch Limited. Besides being the Chairman of WABCO India, he is also on the Boards of several companies like Rane (Madras), TVS Electronics and Kirloskar Oil Engines India Limited. He has been the Chairman of Confederation of Indian Industry, Southern Region Council & Karnataka State Council besides being a member of Karnataka State Industrial Policy Board and an Executive Council Member of Indian Machine Tool Manufacturer's Association.

Mr. Sanjay Jayavarthanelu holds a Master's degree in Business Administration from Philadelphia University, USA. Currently, he is serving as the Chairman and Managing Director of Lakshmi Machine Works and as the Chairman of Super Sales, Lakshmi Life Sciences and Quattro Engineering India. He is also on the Boards of several companies viz., The Lakshmi Mills Company, Lakshmi Technology and Engineering Industries, etc.



Sanjay Jayavarthanelu, 48 years



Bharati Rao, 68 years

Mrs. Bharati Rao holds a Masters degree in Economics and is a Certified Associate of the Indian Institute of Bankers. She brings in over three-decades of rich experience in Banking and Finance. Having joined State Bank of India in the year 1972, she rose to become its Deputy Managing Director, holding concurrent charge of few of its associate banks and non-banking subsidiaries besides being an Advisor for mergers and acquisitions. She is also on the Boards of Tata Teleservices, Cholamandalam Investment and Finance Company, SBI capital Markets, SBI Caps(UK), Wheels India Limited, etc.



M A M Arunachalam, 49 years

Mr. M A M Arunachalam, also known as Arun Murugappan is an MBA graduate from the University of Chicago. He is the Managing Director of Parry Enterprises India Limited. A fourth generation member of the Murugappa family, he drives the business development and strategic initiatives for the Company by identifying opportunities for its divisions – General Marketing Division (GMD), Parry Travels and Tuflex India. He is also on the Board of Coromandel Engineering Company Limited.

Mr. Raghavan holds a Bachelor's degree in Physics from St. Stephen's College, Delhi as well as in Electronics & Communications Engineering from the Indian Institute of Science, Bangalore. Being in the Indian Foreign Service since 1979, he has held various diplomatic assignments in Moscow, Warsaw (Poland), London (UK), Ho Chi Minh City (Vietnam) and Pretoria (South Africa). He has been the Joint Secretary in the Prime Minister's Office dealing with Foreign Affairs, Nuclear Energy, Space, Defence and National Security; Secretary in the Ministry of External Affairs and the Indian Ambassador to countries like Russia, Ireland and Czech Republic etc. He is presently, the Convenor of National Security Advisory Board of India of the National Security Council Secretariat of the Government of India.



P S Raghavan, 61 years



Sujain S Talwar, 53 years

Mr. Sujain Talwar is a qualified solicitor in India and England & Wales with over 25 years of experience. He is the founding partner of Economics Law Practice, a law firm that has consistently been ranked as a top 10 law firm, with over 150 lawyers and offices in 6 cities. He has in the past worked with reputed law firms such as Crawford Bayley, Pinsent Masons etc. He has been named as a leading individual for his 'depth of knowledge' 'innovative approach' and 'timely deliverables' by the Legal 500

Mr. Srinivasan is a Graduate in Mechanical Engineering from REC, Surathkal, Karnataka. He earlier worked with Widia India, Philips India and Wendt India Limited. He has been associated with the Company since 1999 and was part of the team that set up the first overseas operations in Australia. He has been serving as a Board Member of the Company since 2005 and is currently on the Boards of Wendt India, Sterling Abrasives and Volzhsky Abrasive Works, etc.



K Srinivasan, 59 years

# CORPORATE INFORMATION

## BOARD AND COMMITTEES

### The Board of Directors

M M Murugappan, Chairman (DIN 00170478)  
T L Palani Kumar (DIN 00177014)  
M Lakshminarayan (DIN 00064750)  
Shobhan M Thakore (DIN 00031788)  
Sanjay Jayavarthanelu (DIN 00004505)  
Aroon Raman (DIN 00201205)  
Bharati Rao (DIN 01892516)  
M A M Arunachalam (DIN 00202958)  
P S Raghavan (DIN 07812320)  
Sujain S Talwar (DIN 01756539)  
K Srinivasan, Managing Director (DIN 00088424)

### Committees of the Board

#### Audit Committee

T L Palani Kumar, Chairman  
M Lakshminarayan  
Sanjay Jayavarthanelu  
Bharati Rao  
Sujain S Talwar

#### Nomination and Remuneration Committee

M Lakshminarayan, Chairman  
T L Palani Kumar  
Shobhan M Thakore  
Aroon Raman  
Sanjay Jayavarthanelu

#### Corporate Social Responsibility Committee

Shobhan M Thakore, Chairman  
Aroon Raman  
P S Raghavan  
K Srinivasan

#### Risk Management Committee

M Lakshminarayan, Chairman  
P S Raghavan  
Aroon Raman  
K Srinivasan

#### Stakeholders Relationship Committee

M M Murugappan, Chairman  
M A M Arunachalam  
K Srinivasan

## MANAGEMENT COMMITTEE

K Srinivasan, Managing Director  
N Ananthaseshan, President - Abrasives  
Rajesh Khanna, President - Ceramics  
R Rajagopalan, Executive Vice President - Refractories & Prodorite  
P S Jayan, Executive Vice President - Electrominerals  
M Muthiah, Executive Vice President - Human Resources  
Sridharan Rangarajan, Chief Financial Officer

## COMPANY SECRETARY

Rekha Surendhiran  
Carborundum Universal Limited  
Parry House, 43, Moore Street,  
Chennai 600 001  
Tel: +91-44-30006141  
Fax: +91-44-30006149  
E-mail: rekhas@cumi.murugappa.com

## STATUTORY AUDITORS

Deloitte Haskins & Sells, Chartered Accountants, Chennai

## BANKERS

State Bank of India  
Standard Chartered Bank  
Bank of America  
The Hongkong and Shanghai Banking Corporation Ltd.  
BNP Paribas

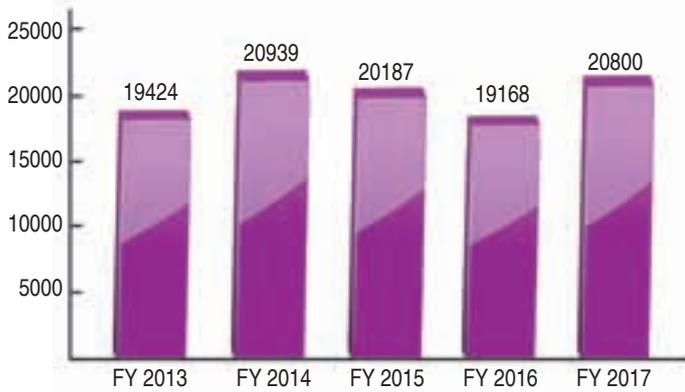
## REGISTRAR AND SHARE TRANSFER AGENT

Karvy Computershare Private Limited  
Unit: Carborundum Universal Limited  
Karvy Selenium Tower B, Plot 31-32, Gachibowli,  
Financial District, Nanakramguda, Hyderabad - 500 032.  
Tel: +91-40-67162222, Fax: +91-40-23420814  
Toll Free no.: 1800-345-4001  
E-mail: einward.ris@karvy.com; website: www.karvy.com  
Contact Person: Mrs. Varalakshmi P - Asst. General Manager

# FINANCIAL HIGHLIGHTS

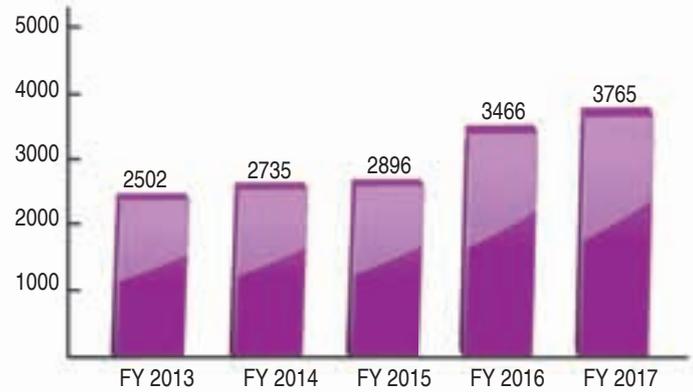
**NET SALES**

₹ million



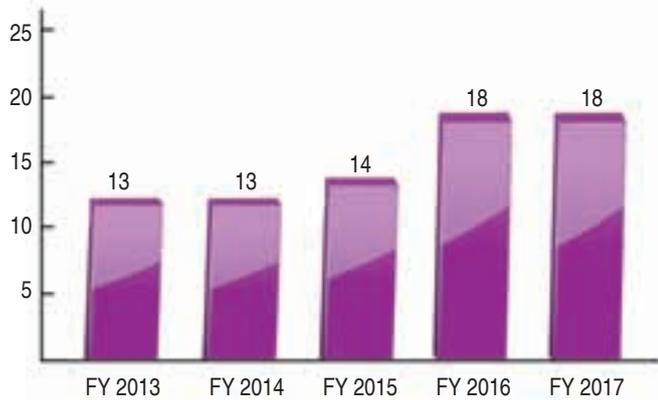
**EBITDA**

₹ million



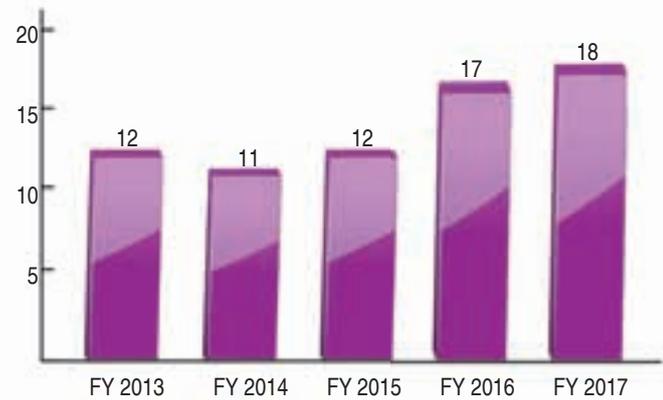
**EBITDA MARGIN**

%



**RETURN ON CAPITAL EMPLOYED**

%



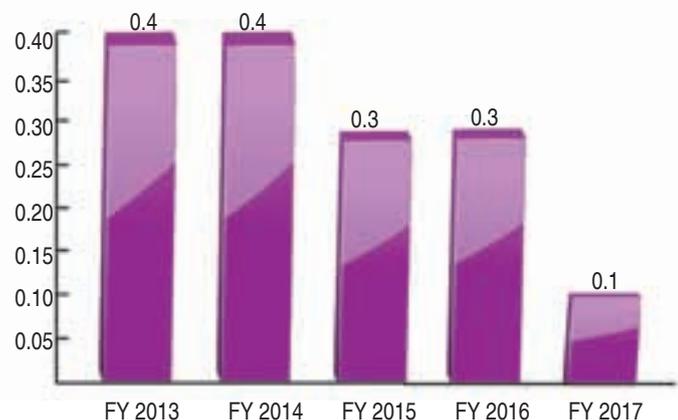
**EARNINGS PER SHARE**

₹



**DEBT / EQUITY**

x



## Financial Highlights

₹ million

Summary information	Consolidated performance					Standalone performance				
	2017 <sup>#</sup>	2016 <sup>#</sup>	2015	2014	2013	2017 <sup>#</sup>	2016 <sup>#</sup>	2015	2014	2013
Net Sales	20800	19168	20187	20939	19424	13828	12735	11518	11276	10800
EBITDA *	3765	3466	2896	2735	2502	2464	2385	1800	1645	1712
PBIT *	2800	2598	1892	1825	1791	1795	1764	1212	1154	1244
PBT	2619	2369	2204	1543	1519	1707	1675	1994	1024	1080
PAT	1749	1441	1326	915	898	1218	1164	1483	728	745
Net Fixed Assets	6626	6222	7204	8260	8273	4595	4435	4070	4283	4286
Net Working Capital	5578	4143	3790	4491	4324	3487	2888	2939	2593	1662
Non Current Investments	1195	1293	78	81	12	2541	2561	2375	1306	1246
Shareholders Networth	13828	11923	10887	11060	10592	10550	9584	8599	7336	6845
Loan Funds	1559	3199	3402	4563	4349	26	1091	835	1188	1322
<b>Ratio Analysis</b>										
<b>Performance Ratios</b>										
EBITDA / Net Sales %	18%	18%	14%	13%	13%	18%	19%	16%	15%	16%
PBIT / Net Sales %	13%	14%	9%	9%	9%	13%	14%	11%	10%	12%
Asset Turnover times	1.2	1.1	1.1	1.1	1.1	1.3	1.3	1.3	1.2	1.2
Return on Capital Employed %	18%	17%	12%	11%	12%	17%	17%	13%	14%	15%
Return on Equity %	14%	13%	12%	8%	9%	12%	13%	19%	10%	11%
International Revenue (net) share %	45%	44%	46%	50%	51%	23%	21%	20%	19%	21%
<b>Leverage Ratios</b>										
Interest Cover times	20.8	15.1	11.4	9.7	9.2	28.1	26.8	20.7	12.7	10.4
Debt Equity Ratio	0.1	0.3	0.3	0.4	0.4	0.0	0.1	0.1	0.2	0.2
Debt / Total Assets	0.1	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1
<b>Liquidity Ratio</b>										
Current Ratio	2.4	1.8	1.7	1.8	1.8	2.7	2.2	2.6	2.2	1.6
<b>Activity Ratios</b>										
Inventory Turnover days	66	71	74	73	76	60	62	63	59	62
Receivable Turnover days	66	68	71	68	68	67	68	71	69	65
Creditors No. of days	38	41	49	46	48	47	43	43	43	45
Cash Cycle days	94	98	96	95	96	80	87	91	85	82
<b>Investor related Ratios</b>										
Earning Per Share (₹)	9.3	7.7	7.1	4.9	4.8	6.5	6.2	7.9	3.9	4.0
Dividend Per Share (₹)	NA	NA	NA	NA	NA	1.75	1.50	1.25	1.25	1.25
- Interim	NA	NA	NA	NA	NA	1.00	1.50	0.75	0.75	0.50
- Final (proposed and paid in subsequent year)	NA	NA	NA	NA	NA	0.75	-	0.50	0.50	0.75
Dividend Payout %	NA	NA	NA	NA	NA	28.8%	26.0%	16.0%	36.6%	35.1%
Price to Earnings Ratio	27.0	22.8	25.4	25.3	31.0	-	-	-	-	-
Enterprise Value / EBITDA	12.8	10.3	12.7	10.1	12.8	NA	NA	NA	NA	NA
Enterprise Value / Net Sales	2.3	1.9	1.8	1.3	1.7	NA	NA	NA	NA	NA

\* excluding exceptional income/expenses (net)

# The figures mentioned herein above for the years ended 31<sup>st</sup> March 2017 and 31<sup>st</sup> March 2016 are based on Indian Accounting Standards (Ind AS), hence not comparable with previous year figures prepared under previous GAAP.

For more details, refer Ind AS transitional notes forming part of the Consolidated and Standalone Financial Statements.

## Directors' Report

Your Directors have pleasure in presenting the 63<sup>rd</sup> Annual Report together with the Audited Financial Statements for the year ended 31<sup>st</sup> March 2017. The Management Discussion & Analysis Report which is required to be furnished as per SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (hereinafter referred to as the Listing Regulations) has been included in the Directors' Report so as to avoid duplication and overlap.

### ECONOMIC OVERVIEW & COMPANY PERFORMANCE

#### Economic Overview

Moderate global trade, subdued investment and heightened policy uncertainty marked another challenging year for the world economy. As per International Monetary Fund (IMF), the global growth was estimated to be at 3.1 per cent in 2016. The growth could have been better, had it not been for the anaemic performance in advanced economies. The year also witnessed events, defined by political shocks in advanced economies that impacted economies all over the world - first, the decision by the United Kingdom electorate in June 2016 to leave the European Union, followed by the United States Presidential election in November 2016. Both the events had ramifications well beyond their borders and will continue to have implications in 2017 and beyond. The picture in emerging markets and developing economies around the world remained diverse. The growth rate in China was one of the slowest in the last twenty six years. However, it was within the Government's target and a bit stronger than the expectations. Strong fiscal support and a booming property market were the main factors that drove China's economic growth in 2016. The Latin American countries, such as Argentina and Brazil, were in recession. Oil prices increased during the year, reflecting an agreement among major producers to trim supply. The Russian economy has responded well in the last two years to the dual shocks of collapsing oil prices and the continuation of Western sanctions. Activities in Russia were slightly better in 2016 owing to firming up of oil prices. With strong infrastructure and real estate investment in China as well as the expectation of fiscal easing in the United States, prices for base metals also strengthened during the year.

In India, against the backdrop of robust macro-economic stability, the year was marked by two major domestic policy developments, the passage of the constitutional amendment

paving the way for implementing the transformational Goods and Services Tax (GST) and the action to demonetise the two highest denomination notes in the country. With respect to GST, we broadly know that it is going to be positive for the organised sector. However, it is expected to have teething troubles in the initial phase and the impact of the same on earnings is yet to be ascertained. Demonetisation had a short-term impact but is expected to provide long term benefits. The landslide victory of the ruling party of the Central Government in the assembly elections held during November 2016 provided visibility of political stability to the Indian economy. These developments cemented India's reputation as one of the few bright spots in an otherwise grim global economy. India is not only amongst the world's fastest growing major economies, underpinned by a stable macro-economy with declining inflation and improving fiscal and external balances, but also one of the few economies embarking on major structural reforms. As per Asian Development Bank, the growth in Indian economy for the year 2016 was at 7.1 per cent. This was below the 7.9 per cent growth in 2015, partly due to currency demonetisation. The Indian stock markets braced the odds of Brexit, Presidential elections in the United States election and the demonetisation.

#### Company Performance

##### Revenues

During the year, the standalone business grew by nine per cent and the consolidated revenue also grew at the same rate driven by better performance of all the businesses. The following table summarises the standalone and consolidated revenues - both segment and geography wise:

	2016-17		2015-16		Growth %
	% share	Amount	% share	Amount	
<b>Standalone</b>					
Abrasives	57%	8592	57%	7844	10%
Ceramics	26%	3899	25%	3383	15%
Electrominerals	23%	3396	24%	3299	3%
Eliminations	-6%	(918)	-6%	(767)	20%
<b>Total</b>	<b>100%</b>	<b>14969</b>	<b>100%</b>	<b>13759</b>	<b>9%</b>
India	79%	11833	80%	11035	7%
Rest of the world	21%	3136	20%	2724	15%
<b>Total</b>	<b>100%</b>	<b>14969</b>	<b>100%</b>	<b>13759</b>	<b>9%</b>

₹ million

₹ million

	2016-17		2015-16		Growth %
	% share	Amount	% share	Amount	
<b>Consolidated</b>					
Abrasives	46%	10163	46%	9217	10%
Ceramics	21%	4724	20%	4085	16%
Electrominerals	35%	7694	37%	7486	3%
Power	1%	265	1%	219	21%
IT Services	2%	394	1%	296	33%
Eliminations	-6%	(1241)	-5%	(1059)	17%
<b>Total</b>	<b>100%</b>	<b>21999</b>	<b>100%</b>	<b>20244</b>	<b>9%</b>
India	58%	12669	58%	11732	8%
Rest of the world	42%	9330	42%	8512	10%
<b>Total</b>	<b>100%</b>	<b>21999</b>	<b>100%</b>	<b>20244</b>	<b>9%</b>

Production consistency, higher throughput in special products, focused efforts in building businesses with global customers and favourable product mix with higher share of technical products provided the topline growth.

The Company's consolidated revenue from India increased by eight per cent and from rest of the world increased by ten per cent. At a consolidated level, Abrasives sales grew by ten per cent, Ceramics sales grew by sixteen per cent and the Electrominerals segment grew by three per cent.

### Manufacturing

The manufacturing team played a key role, helping the Company in the growth momentum through effective production planning and order execution. On an average, the plants in India operated at about seventy per cent capacity utilisation levels. Some product

segments like Coated Abrasives and Metallized Ceramics ran at near full capacity. Continued implementation of Total Productive Maintenance (TPM) at shop floors lead to improvement in efficiency of machines and the entire production process. The Tiruvottiyur plant was awarded the JIPM Excellence Award at Kyoto, Japan in March 2017. With this, we have three major plants of the Company certified in TPM. The Industrial Ceramics plant at Hosur also successfully completed the CII TPM Health Check during January 2017 and is now ready for JIPM TPM excellence assessment.

Capital expenditure during the year across all geographies was majorly in the nature of capacity additions besides automation, quality enhancement, line balancing and general infrastructure. TPM initiatives and few manufacturing technology projects helped finding additional capacities in Coated products, which came in handy to cater to the increased demand from customers. The relocation projects from South African entities to India got commissioned in the fourth quarter of 2016-17. The Zirconia Bubble Fusion Plant and Alumina Fusion Plants - will result in the creation of one of the most advanced and integrated Electromineral complexes in the world. The new facilities will add about 25,000 tons of fused minerals generation. The Slide gate products facility was also commissioned successfully in Jabalpur.

### Earnings & Profitability

The Company's standalone Financial Results are summarised in the table below:

₹ million

	As a % of Gross Sales	2016-17	As a % of Gross Sales	2015-16	Increase %
<b>Gross Sales</b>		<b>14969</b>		<b>13759</b>	<b>9%</b>
Other Operating Income		229		183	25%
<b>Revenue from Operations</b>		<b>15198</b>		<b>13942</b>	<b>9%</b>
Other Income		343		399	-14%
<b>Total Income</b>		<b>15541</b>		<b>14341</b>	<b>8%</b>
<b>Expenses</b>					
Cost of material Consumed	34%	5121	36%	4886	5%
Purchase of stock in trade	5%	818	6%	761	7%
Movement of Inventory	0%	12	-1%	(70)	-117%
Excise duty on sale of goods	8%	1141	7%	1023	11%
Employee benefits expense	10%	1533	10%	1413	8%
Finance Cost	1%	88	1%	89	-2%
Depreciation and Amortisation	4%	669	5%	621	8%
Other expenses	30%	4453	29%	3942	13%
<b>Total Expenses</b>	<b>92%</b>	<b>13834</b>	<b>92%</b>	<b>12666</b>	<b>9%</b>
<b>Profit before Tax</b>	<b>11%</b>	<b>1707</b>	<b>12%</b>	<b>1675</b>	<b>2%</b>
<b>Profit after Tax</b>	<b>8%</b>	<b>1218</b>	<b>8%</b>	<b>1164</b>	<b>5%</b>
<b>Total Comprehensive Income</b>	<b>8%</b>	<b>1138</b>	<b>9%</b>	<b>1197</b>	<b>-5%</b>

Aided by the growth in revenues, standalone Profit before tax improved to ₹1707 million from ₹1675 million in the previous year.

The Company uses a variety of raw materials for its products - Bonds, Yarn, Grains, Calcined Alumina, Tabular Alumina, Mullite, Pet Coke, Bauxite, Zircon Sand amongst others. The sourcing is a prudent mix of indigenous and imported materials. Aided by judicious sourcing and optimising throughput in production, material consumption improved during the year.

Other expenses increased from ₹3942 million in preceding year to ₹4453 million in the current year. The increase reflects the volume growth, cost increases and investment in preparing the organisation for the expansion programmes being undertaken. Power and fuel cost also increased during the current year. Captive power generation from the Company's Hydel power unit in Maniyar was lower due to inadequate rainfall. The power consumption was also higher in line with the higher volumes produced compared to the previous year. Rates for fuel inched up after bottoming out in the last year.

Employee benefits expense increased by eight per cent during the year, which is a combination of both increase in head count and salary. The overall employee cost was maintained at ten per cent of the revenues.

Profit before interest and tax margin expanded for Abrasives and Ceramics owing to higher sales and better operating leverage. The margins for Electromineral business were lower owing to power cost increase on account of below average rainfall impacting the Hydel power generation.

Finance costs were at ₹88 million compared to ₹89 million in the previous year. Profit after tax of ₹1218 million was higher compared to that of the previous year ₹1164 million. Total comprehensive income decreased from ₹1197 million to ₹1138 million.

The consolidated Profit before tax (before share of Profit from associates and joint ventures) entity-wise is represented below:

	₹ million	
	2016-17	2015-16
<b>CUMI Standalone</b>	<b>1707</b>	<b>1675</b>
Subsidiaries including step down subsidiaries:		
<b>Indian</b>		
Net Access India Limited	35	25
Southern Energy Development Corporation Limited	90	30
Sterling Abrasives Limited	101	79
<b>Foreign</b>		
CUMI (Australia) Pty Limited	143	123
CUMI International Limited	240	(222)
Volzhsky Abrasives Works	784	897
Foskor Zirconia Pty Limited	(19)	90
CUMI America Inc	(98)	(69)
CUMI Middle East FZE	5	(10)
CUMI Abrasives & Ceramics Company Limited	1	(206)
Thukela Refractories Isithebe Pty Limited	(2)	(68)
CUMI Europe s.r.o	1	(10)
<b>Total of Subsidiaries</b>	<b>1281</b>	<b>659</b>
Inter-Company Eliminations & Consolidation adjustments	(560)	(123)
<b>Consolidated Profit before Tax</b>	<b>2428</b>	<b>2211</b>
<b>Consolidated Profit after Tax attributable to owners</b>	<b>1749</b>	<b>1441</b>
<b>Consolidated Total Comprehensive Income attributable to owners</b>	<b>2142</b>	<b>1263</b>

On a consolidated basis, the Profit before tax (before share of Profit from associates and joint ventures) increased from ₹2211 million to ₹2428 million. Profit after tax and Non-controlling interests was ₹1749 million (previous year ₹1441 million). The performance of the subsidiaries is detailed separately in this Report.

Total comprehensive income increased from ₹1263 million to ₹2142 million.

Segmental profitability improved for Abrasives and Ceramics; however, it dropped in Electromineral on account of lower volumes, adverse exchange movement in Russian operations and increase in power costs in India.

## Financial Position

An overview of the Company's financial position is given below:

₹ million

Financial position	Standalone				Consolidated			
	31.03.2017	31.03.2016	01.04.2015	% change	31.03.2017	31.03.2016	01.04.2015	% change
Net Fixed assets (including goodwill)	4595	4435	4156	4%	7774	7437	7729	5%
Investments-Non current	2541	2561	2319	-1%	1195	1293	1181	-8%
<b>Other assets:</b>								
- Inventories	2268	2252	2085	1%	3867	3704	3742	4%
- Trade receivables	2563	2532	2231	1%	3806	3675	3439	4%
- Cash and cash equiv.	67	84	56	-21%	1298	1136	965	14%
- Others	939	839	659	12%	1282	1432	1073	-10%
<b>Total assets</b>	<b>12973</b>	<b>12704</b>	<b>11506</b>	<b>2%</b>	<b>19222</b>	<b>18676</b>	<b>18128</b>	<b>3%</b>
Liabilities (Other than loans)	2397	2029	1912	18%	3178	2934	3142	8%
<b>Net assets</b>	<b>10576</b>	<b>10675</b>	<b>9594</b>	<b>-1%</b>	<b>16044</b>	<b>15743</b>	<b>14987</b>	<b>2%</b>
<b>Sources of funding:</b>								
Total equity attributable to owner	10550	9584	8758	10%	13828	11923	11006	16%
Non-Controlling interest					657	622	578	6%
<b>Loan outstanding:</b>								
- Long term borrowings	18	259	512	-93%	67	362	567	-82%
- Payable within one year	8	506	7	-98%	68	566	635	-88%
- Short term borrowings	-	326	317	-100%	1424	2270	2202	-37%
<b>Total loans</b>	<b>26</b>	<b>1091</b>	<b>836</b>	<b>-98%</b>	<b>1559</b>	<b>3199</b>	<b>3403</b>	<b>-51%</b>
	<b>10576</b>	<b>10675</b>	<b>9594</b>	<b>-1%</b>	<b>16044</b>	<b>15743</b>	<b>14987</b>	<b>2%</b>
<b>Loans (net of cash and cash equivalents)</b>	<b>(41)</b>	<b>1007</b>	<b>780</b>	<b>-104%</b>	<b>261</b>	<b>2063</b>	<b>2438</b>	<b>-87%</b>

On a standalone basis, the total equity as on 31<sup>st</sup> March 2017 was ₹10550 million. Additions for the year (net of dividend) was ₹966 million.

Liabilities (other than loans) increased from ₹2029 million in last year to ₹2397 million during 2016-17. The Loan outstandings reduced significantly from ₹1091 million to ₹26 million.

Other assets increased from ₹5708 million to ₹5837 million.

Net fixed assets (including goodwill) increased from ₹4435 million to ₹4595 million. The major capex pursued and commissioned during the year were relocated projects viz., Bubble Zirconia plant and Fused Alumina plants, Thin Wheel expansion with consolidation of Chinese entity machineries into India, debottlenecking in Coated operations and routine maintenance & improvement capex.

On a consolidated basis, the total equity attributable to owners as on 31<sup>st</sup> March 2017 was ₹13828 million. There was an increase (net of dividend) to the extent of ₹1905 million. Non-controlling interest was at ₹657 million.

Liabilities (other than loans) was ₹3178 million. The Loan outstandings reduced significantly from ₹3199 million to ₹1559 million.

Net fixed assets (including goodwill) increased from ₹7437 million in the last year to ₹7774 million during the FY 2016-17. Capital Expenditure at a consolidated level during the year was at ₹1268 million. Other assets increased from ₹9947 million to ₹10253 million.

## Cash Flow

The Company's cash flow generation is healthy. The following table summarises the Company's consolidated and standalone cash flows for the current and previous years:

₹ million

Cash flow	Standalone		Consolidated	
	2016-17	2015-16	2016-17	2015-16
Cash flow from Operations	2284	1633	3741	2615
Taxes paid	(515)	(514)	(788)	(837)
<b>Cash flow from operating activities</b>	<b>1769</b>	<b>1119</b>	<b>2953</b>	<b>1778</b>
Capital Expenditure (Net of disposal)	(750)	(1028)	(1061)	(843)
Cash flow from other investing activities	293	144	248	116
<b>Cash flow from investing activities</b>	<b>(457)</b>	<b>(885)</b>	<b>(813)</b>	<b>(727)</b>
<b>Cash flow from financing activities</b>	<b>(1329)</b>	<b>(206)</b>	<b>(2071)</b>	<b>(856)</b>
Net Increase/(Decrease) in Cash & Cash equivalents	(17)	29	69	195
<b>Net Cash and Cash equivalents at the beginning of the year</b>	<b>84</b>	<b>56</b>	<b>1136</b>	<b>965</b>
Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies			93	(24)
<b>Cash and Cash equivalents at the end of the year</b>	<b>67</b>	<b>84</b>	<b>1298</b>	<b>1136</b>

On a standalone basis, net cash generation from operations was ₹1769 million in FY 2016-17 compared to previous year's ₹1119 million. Better cash generation came from efficient working capital management with respect to receivables and inventories. Days Sales Outstanding (DSO) reduced and Inventory Turns increased compared to the previous year.

Net cash outflow on account of investing activities was ₹457 million majorly towards addition of property, plant and equipment. Net cash outflow on account of financing activities was ₹1329 million which is attributable primarily to repayment of borrowings and dividends paid. The net decrease in cash and cash equivalents was ₹17 million against an increase of ₹29 million in FY 2015-16.

On a consolidated basis, net cash generation from operations was ₹2953 million in FY 2016-17. Net cash outflow on account of investing activities was ₹813 million. Net cash outflow on account of financing activities was ₹2071 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹69 million against an increase of ₹195 million in FY 2015-16.

## SHARE CAPITAL

The paid up equity share capital as on 31<sup>st</sup> March 2017 was ₹188.66 million. The capital increased during the year by ₹0.28 million, consequent to allotment of shares upon exercise of Stock Options by employees under the Company's ESOP Scheme, 2007.

## DIVIDEND

Considering the past dividend payout ratio and the current year's operating Profit, the Board has considered it appropriate to recommend a final dividend of ₹0.75 per equity share of ₹1/- each. It may be recalled that in February 2017, an interim dividend at the rate of ₹1/- per equity share of ₹1/- each was declared and paid. This aggregates to a total dividend of ₹1.75/- per equity share of ₹1/- each for the year, which is higher than the previous year. During the year, the Board has adopted a Dividend Policy which is available at <https://www.cumi-murugappa.com/policies.html>. The dividend paid as well as being recommended for the year ended 31<sup>st</sup> March 2017 is in line with this policy.

## TRANSFER TO RESERVES

An amount of ₹500 million has been transferred to the General Reserve of the Company as at 31<sup>st</sup> March 2017.

## PERFORMANCE OF BUSINESS SEGMENTS

The business profile, market developments and current year performance are elaborated in the following sections:

### Abrasives

#### Business Profile

The business is into manufacture and sales of Abrasives. The key product segments are Bonded Abrasives, Coated Abrasives, Super Abrasives and allied products.

An Abrasive is a substance which grinds, cleans, scours, abrades or removes solid material by rubbing action or by impact. Abrasives are mineral like materials available in different shapes, sizes and types according to need. Abrasive materials and Abrasive products are utilised in several end user industries such as manufacture of Machinery, Electrical & Electronic equipment, Transportation and Metal fabrication among others.

The division has more than sixty years of experience in Abrasives manufacturing. The techno-commercial knowledge of the team and their wealth of experience has been the strength of the division in manufacturing world class products.

In order to match all international standards and to compete globally, the division sources its raw materials both from the Electrominerals division and from best suppliers across the world. These cost-effective manufacturing techniques and quality control systems form the core of the division's objectives - best products and customer satisfaction at affordable prices.

The business is driven by a combination of manufacturing and marketing entities. There are ten manufacturing plants located in India, Russia and Thailand. The marketing entities in North America, Middle East, China and distributors across the globe enable the division to reach out across geographies.

The Company caters to customers located around fifty five countries through its network of manufacturing facilities and marketing establishments.

### Industry scenario

The global Abrasives market is segmented based on region. Asia Pacific represents the largest and the fastest growing market for the Abrasives industry and China is the largest producer of Abrasive materials and Abrasive products. The growing demand for various types of Abrasives from transportation, building & construction and other durable goods industries is expected to drive the Asia Pacific Abrasives market. Growth in the US - which holds the world's second largest national market for Abrasives, is expected to deliver a moderate growth. The market is dominated by leading players operating across the globe.

In India, the Abrasives industry is catered by few leading players serving major portion of the Indian market. Imports are predominantly in the high and low end Abrasives. The Bonded Abrasives and the Coated Abrasives are important segments in the Indian scenario and contribute maximum in terms of revenue to this industry.

In the domestic Russian market, there are three major players. The Company is one of the major players in Vitrified Bonded Abrasives.

### Sales Overview

The Abrasives business stepped into 2016-17 against the backdrop of positive macro-economic factors considering perceived uptick in investment climate, ability of new Government to push structural reforms like fast track clearance for infra projects, GST rollout, energy related reforms etc.

The focus for the Abrasives business was to grow topline at better than the market growth rate with significantly better profitability. Accordingly, the Abrasives business on a standalone basis recorded a growth in revenue from ₹7844 million to ₹8592 million with improvement in margins.

The Coated business registered good growth in the conventional products in domestic market. The growth came about by way of launch of new products, focus on technical products, strong brand recall and dealers' readiness to invest in this product segment and quality consistency of the products. Coated Abrasives division is now at a stage where the market is growing and the demands for its products are good. These are largely driven by the consistent quality and availability. Both these attributes are direct outcomes of the TPM processes implemented and practised in the facilities at Maraimalai Nagar and Sriperumbudur.

The Non-standard business was engaged on productivity improvement for customers with a slew of new product launches. The Company forayed into showcasing itself as a technology expert and create value for customers through conducting seminars to enhance the knowledge level of its customers. Metal working fluid also delivered good growth riding on the back of portfolio enlargement with focus on machining.

Distribution leadership has been one of the strategic pillars for the Company's growth and the business has been making steady progress in this front. During the year, the business aggressively appointed new channel partners and expanded its dealer network both in India and abroad. Retail development and industrial storming initiatives were conducted for better market penetration.

The Abrasives sales in Russia increased this year owing to introduction of new products and targeting newer territories. Wendt India which addresses the Super Abrasives & Grinding machines market had a marginal growth in its revenues. Sterling Abrasives which addresses the agriculture related applications delivered a good growth during the year.

### Manufacturing

Manufacturing supported the marketing initiatives well in terms of timely delivery, product performance and consistency.

The key strategy over the years has been to increase the indigenous sourcing and lowering the gap between exports and imports to ensure sustainable profitability in the Abrasives business. Business continued to focus on pursuing dual strategy - firstly, of moving from traditional Brown to Semi-friables to gain significant competitive advantage; secondly, of offering superior Coated technical products with high performance Zirconia and Ceramic grains.

In order to cater to increased demand for Coated products, the division pursued capacity expansion projects in Maraimalai Nagar to ensure feed with higher width across all product ranges in cloth and paper to Sriperumbudur Coated facility.

Today's successful organisations require a significant competitive advantage, hence it is utmost essential for companies to use winning strategies to survive and be successful. The Company has adopted TPM not only as a tool but also as its strategic initiative and this has given the Company a competitive edge today. TPM is an organisation-wide strategy to increase the effectiveness of production environments, especially through methods of increasing the effectiveness of equipment. The TPM journey, which started in 2011 marked the beginning of an era of change. Sriperumbudur and Maraimalai Nagar plants were awarded Total Productive Maintenance (TPM) award for Excellence - Category "A" by Japan Institute of Plant Maintenance (JIPM) during 2014-15. In 2015-16, the Tiruvottiyur plant qualified for the JIPM audit after clearing the CII TPM Health check. This year, Tiruvottiyur plant was awarded the JIPM

Excellence Award for Excellence - Category "A". In the years to come, other Abrasives plants - Hosur and Uttarkhand will strive towards achieving TPM certification.

In its TPM pursuit, the Company has taken Total Effectiveness as a prime focus, which includes Productivity, Quality, Cost, Delivery, Safety, Environment, Health and Morale. Today, we have reached higher levels of Overall Equipment Effectiveness (OEE), On Time Delivery, reduction in energy consumption; Defect Phenomena Elimination, Breakdown elimination by significant percentage; Productivity improvement by substantial quantum - the Company continues its journey towards World Class Manufacturing Management Standards.

The entity in Russia completed the up-gradation of bond production facility in vitrified Abrasives area. New products like high-porosity Bonded Abrasives were introduced to the local markets during the year.

As a part of the restructuring initiatives in China, the manufacturing operations have been discontinued and a new business model for the future business operations has been set up. This will pave the way for future growth in China.

Aided by buoyancy in revenues and cost reduction projects and others initiatives, the business recorded an increase in standalone operating Profits before interest and taxes at ₹1047 million from ₹937 million last year. At a consolidated level, the Profits grew from ₹831 million last year to ₹1133 million this year.

## Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2016-17	2015-16	Change	2016-17	2015-16	Change
Total revenue	8592	7844	10%	10163	9217	10%
Segment results (PBIT)	1047	937	12%	1133	831	36%
Capital employed	3122	3301	-5%	4629	4720	-2%
Share to total revenue of CUMI	57%	57%	-	46%	46%	-
Share to segment results (PBIT) of CUMI	58%	53%	-	43%	34%	-

## Ceramics

### Business Profile

The Ceramics business has three product groups viz. Industrial Ceramics, Super Refractories and Anti-corrosives.

Industrial Ceramics business offers Alumina and Zirconia products of technical ceramic grades addressing wear protection, electrical insulation, thermal protection and ballistic protection applications. The Super Refractories product group

supplies fired, monolithic, flow control products, POW Wellfiter and fibre as also Refractory design and installation services addressing the insulation and thermal resistance requirements of industries. The Refractory fibre, Refractory design and installation businesses are addressed through our joint ventures Murugappa Morgan Thermal Ceramics Limited and Ciria India Limited. The Anti-corrosives product group offers acid resistant bricks, polymer concrete cells and various other products addressing the anti-corrosion requirements of industries.

The key user industries for Ceramics business are Power Generation and Transmission, Coal washeries, Grain handling, Sanitary tiles and Sanitary ware, Ballistic protection, Cement, Non-ferrous metals, Iron and Steel industries, Carbon black, Insulators, Furnace building, Glass, Petrochemicals and Construction.

The operations are carried out through ten manufacturing/ service facilities located in India, Australia and Russia. The subsidiaries in North America, Middle East and China also support this business in getting an extended customer reach.

The Industrial Ceramics business based out of India is largely a global business and majority of the sales volumes are through exports. The Refractory business in India is predominantly a local business.

The Company is one of the major players in India, Australia and Russia in specific product groups.

Industrial Ceramics division celebrated its silver jubilee in November 2016. The division over the years has been able to carve a niche for itself in the business of high Alumina Ceramics. The division has grown exponentially over the past years and is now strategically placed to step into the next level of growth journey.

### Industry scenario

There has been no material change in the Ceramics industry structure in India, which is catered to by a few major players.

Globally however, NTK Japan exited Metallized Cylinders business in 2015-16 and its manufacturing assets and customers database were acquired by the Company's Ceramics business. The Company is now the second largest producer in the world. In the Wear Ceramics space, there are six major players globally - the Company is one of the reputed players in the world. In the

Engineering Ceramics, there are around five players globally with CUMI Ceramics being relatively smaller in size.

In Australia, CUMI is one of the major players in the Lined Equipment and Mineral processing industry. There are about a dozen players in the industry, most of whom market products imported from China and USA.

Refractory industry in India is a highly fragmented market with a market size of around ₹60 billion. The Company's product profile caters to the top end temperature range applications.

The Refractory industry in Russia is a highly fragmented market and Volzhsky Abrasives Works (VAW) caters primarily to the aluminium industry in Russia.

### Sales Overview

Revenues of the Ceramics business grew by 15 per cent on a standalone basis from ₹3383 million to ₹3899 million.

Metallized Cylinders and Wear Ceramics products business sustained the continued marketing efforts in targeting newer markets and partnering with global customers. This year the business could achieve breakthrough sales in Engineered Ceramics business with its highest ever sales. Business is working on strategic initiatives to maintain current share as also identifying to grow up the value chain in both structural and functional ceramic products.

The Refractory business delivered good growth compared to last year. The division's sales were driven by growth in Fired Refractories and Anti-corrosive segments. New products like Tap Hole Clay and Slide gate faced delays in customer acceptance and sales of these products are expected to pick up significantly during 2017-18.

In Russia, Nitride Bonded Silicon Carbide Refractories, registered growth on revenues.

### Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2016-17	2015-16	Change	2016-17	2015-16	Change
Total revenue	3899	3383	15%	4724	4085	16%
Segment results (PBIT)	509	398	28%	704	501	41%
Capital employed	2820	2754	2%	3694	3558	4%
Share to total revenue of CUMI	26%	25%	-	21%	20%	-
Share to segment results (PBIT) of CUMI	28%	23%	-	27%	21%	-

## Manufacturing

The Industrial Ceramics division accomplished important business milestones during the year. A new state-of-the-art Research and Development facility (DSIR approved Lab) was inaugurated during the second quarter of the year with advanced characterisation and research facilities. The new Metallized Cylinder manufacturing line with assets from NTK, Japan was set up and the commissioning is likely to commence during early 2017-18.

The contract manufacturing for base level Ceramics started in 2014-15 continued successfully during the current year. Focus was given on improving efficiency through reduction in reclaim, improvement in grinding and lapping. Significant focus and efforts were given towards new product development in Wear Ceramics, resulting in introduction of value added Ceramic products. The business continued its pursuit in strengthening relationship and strategic co-operation with key OEMs. During the year, the business was able to qualify as partner with OEM's for the new products launched.

The division started its TPM journey in 2014-15 and with sustained and intense efforts, cleared TPM Health Check by CII TPM Club of India during January 2017.

The Refractory business in last three years has invested in new technology mainly for Iron & Steel and Foundry industries. The business has also invested in consumable (flow control) products mainly for mini Steel industry and this investment is expected to provide growth opportunities from the year 2017-18.

## Electrominerals

### Business Profile

The major product groups of this segment are Fused Alumina (comprising Brown and White Alumina), Silicon Carbide (crude, macro and fine), Fused Zirconia, Alumina Zirconia, Pearl Zirconia and Zircon Mullite. The Company also manufactures a range of 'specialities' like Semi Friable, Azure-S and fine powders for niche markets. The operations are carried out through eight manufacturing facilities located in India, Russia and South Africa.

The business focusses on aggressive growth in the export market with suitable product portfolios and provides customers with application specific products, with an objective to attain improved product profitability. For this, the business ensures speedy execution of projects and enhanced asset utilisation.

The business intends to continue its focus on special products through internal capability building and strategic partnerships in the market place to promote its products in different parts of the world.

Key user industries for this business are Abrasives, Refractories, Steel, Photovoltaic, Brake linings, Nuclear energy, Wooden laminates, Friction composites, Semiconductor and others.

The business has captive bauxite mines, sand mines and a captive power plant.

### Industry Scenario

The Fused Alumina installed capacity globally is around 2 million tons with major capacities being in China. The Company is largely a local player with customers based in India. Apart from the domestic players, imported products have a visible share in the Indian market. Competitive imports become favourable or unfavourable depending on Free Trade Agreements between countries, duty structures and exchange rates.

In the Silicon Carbide space, the installed capacity would be anywhere to the extent of 1.5 to 2 million tons with large portion of it being in China, VAW, Russia with a capacity of 0.08 million tons is the second largest single location capacity in the world.

In the Fused Zirconia space, the global capacity could be approximately 0.07 million tons. China would occupy around twenty five percent of the global market. The Company with a capacity of 0.01 million tons is the third in the world.

The Company continues to retain its position as one of the reputed manufacturers of Silicon Carbide and Fused Zirconia.

### Sales Overview

The Electrominerals business recorded revenues of ₹3396 million compared to last year standalone revenues of ₹3299 million.

The year 2016 was a year of challenges for the exports of Electromineral business. The Solar Photovoltaic business which supported the business in the first half of the year 2016-17 was almost nil during second half coupled with weak market in China & Europe that affected the sale of value added products.

In South Africa, the Fused Zirconia sales was flat. The Russian operations continued to fuse with full capacity utilisation. The entity also launched various grits with new fractions meeting industry requirements. During the year, the Russian business faced power shortage due to transformer shutdown for around two months, which affected the production volumes for the year by around 4000 tons.

### Manufacturing

The relocated facilities from South Africa were commissioned in Cochin, India in March 2017. The new Zirconia Bubble Fusion Plant and the two Alumina Fusion Plants will result in creation

of one of the most advanced and integrated Electromineral complexes in the world. The direct job creation from this project will primarily be in the technology and application side; it is also expected to create indirect jobs in the front and backend of the supply chain. The new facilities will add, at full capacity, about 25,000 tons of fused minerals generation. With the commissioning of these facilities, the Company has developed capabilities in manufacturing a wide range of Aluminas, Silicon Carbide, Zirconias, Engineered grains like Azure S, Microporous high temperature insulation mineral-Nebulox, microgrits and treated grains.

Product mix of special minerals improved compared to the previous year. However, the new developed grits had to pass through the long qualification cycle with new customers and product acceptance. With an aim to meet the applications and serve the user industry better, the business continues to modify, adapt and improve various production processes for ensuring improvement in recovery, minimising generation of by-products, achieving a higher throughput and generating grains with higher purity and better specifications.

## Key Financial Summary

Particulars	Standalone			Consolidated		
	2016-17	2015-16	Change	2016-17	2015-16	Change
Total revenue	3396	3299	3%	7694	7486	3%
Segment results (PBIT)	212	334	-37%	909	1270	-28%
Capital employed	2488	2400	4%	5514	5026	10%
Share to total revenue of CUMI	23%	24%	-	35%	37%	-
Share to segment results (PBIT) of CUMI	12%	19%	-	35%	52%	-

₹ million

## FINANCE

During the year, the Company generated ₹1769 million of cash surplus from its operations on a standalone basis.

All debts have been serviced on time. The Company's long and short term borrowings (other than financial lease of ₹26 million) as on 31<sup>st</sup> March 2017 stands Nil. The capital expenditure program of ₹774 million was financed from internal accruals.

This year, owing to healthy cash generation which has occurred due to prudent capital expenditure and efficient working capital management, the Company was able to pay back all the bank borrowings at the standalone level. This is a landmark achievement for the Company and it has become debt free, since the Company embarked on its growth phase. On similar

The joint project with Abrasives team for developing high performance grits yielded substantial dividends leading to development of cutting edge Abrasive products.

Maniyar experienced lowest ever rainfall and it significantly affected the power generation. The Electrominerals division's profitability was impacted on account of that.

The existing Maniyar Hydel project serves only twenty five per cent of the division's power requirement. This would make highly imperative for the Minerals business to establish an additional power project as the power demand for the business would be going up from current level due to the ramp up of the facilities commissioned. The Company has announced to set up a 21 MW captive Hydel power project in Keerithode and is in the process of getting final Governmental approvals.

The Profit before interest and tax dropped from ₹1270 million to ₹909 million on a consolidated basis owing to lower volumes arising out of power outage in Russian operations and adverse movement in exchange re-statement of receivables and payables. The results were further impacted by the lower power generation at Maniyar.

lines, the debt at a consolidated level has come down by fifty per cent compared to the previous year from ₹3199 million to ₹1559 million. Borrowings net of cash and cash equivalent level at a consolidated level stands at ₹261 million.

The debt equity ratio for the Company, now is at its best - nil at a standalone level and 0.11 at a consolidated level. The Company's balance sheet is robust and it augurs well for the Company to venture into its next phase of growth.

The credit ratings of the Company, 'A1+' for short-term borrowings and 'AA+Stable' for long-term borrowings were re-affirmed by CRISIL. Over the years, the Company has been resorting to a prudent mix of rupee and foreign currency borrowings to finance its operations and achieve reduction in financing cost. The finance cost at a standalone level is at ₹88 million compared

to ₹89 million last year. The Company availed export financing loans at low interest rate to bring down the overall borrowing cost. The Company also earned ₹18 million by investing surplus cash available for short term.

At a consolidated level, the interest cost has come down from ₹229 million to ₹181 million. The repayment of loans helped in bringing down the finance cost.

With the Indian entity enjoying a significant natural hedge, a cautious approach was adopted to hedge the remaining exposures. The Company adopts prudent tax management policies.

There are no material changes and commitments, affecting the financial position of the Company which have occurred between 31<sup>st</sup> March 2017 and the date of this report.

## **INDIAN ACCOUNTING STANDARDS (IND AS) – IFRS CONVERGED STANDARDS**

The Company, its subsidiaries and joint ventures in India have adopted Ind AS with effect from 1<sup>st</sup> April 2016 pursuant to the Companies (Indian Accounting Standard) Rules, 2015 notified by Ministry of Corporate Affairs on 16<sup>th</sup> February 2015. The Company has completed the modification of accounting and reporting systems to facilitate the adoption of Ind AS. The implementation of Ind AS is a major change process effected since Q1 of the FY 2016-17 and the Company has presented the Ind AS transition impact on the standalone and consolidated financial results (refer Standalone note no. 48 and Consolidated note no. 43 respectively in the Financial Statements).

## **INTERNAL CONTROL**

The Company has an Internal Control System commensurate with the size, scale and complexity of its operations. The controls have been designed and categorised based on the nature, type and the risk rating so as to effectively ensure the reliability of operations with adequate checks and balances.

The Internal Audit team evaluates the effectiveness and adequacy of internal controls, compliance with operating systems, policies and procedures of the Company and recommends improvements, if any. Significant audit observations and the corrective/preventive action taken or proposed to be taken by the process owners are presented to the Audit Committee. Annual review of adherence to the agreed action plan is carried out. The scope of Internal Audit is annually determined by the Audit Committee considering the inputs from the Statutory Auditor and the Management.

Capital and revenue expenditure are monitored and controlled with reference to approved budgets. Investment decisions are subject to detailed evaluation and formal approval according to schedule of authority in place. Periodical review of capital expenditure with reference to benefits forecasted is done. Physical verification of assets is also periodically undertaken.

The Company, during the year carried out an intensive vulnerability assessment, security configuration review, targeted threat assessment, internal penetration testing and application security review for its network and all IT assets as a risk mitigation measure from security breach perspective. The findings were deliberated and the priorities drawn out including promoting information security awareness amongst the employees, strengthening network security posture, installing security incidence & event management platform, carrying out proactive vulnerability assessment & penetration testing and enhancing Information Security Policies & Procedures across various business units.

The Audit Committee reviews the overall functioning of Internal Audit on a periodical basis. The Committee also discusses with the Auditors periodically on their views on the Financial Statements including the financial reporting system, compliance with accounting policies & procedures, adequacy and effectiveness of the Internal Control Systems in the Company.

## **INTERNAL FINANCIAL CONTROLS**

Internal Control is a process, effected by an entity's Board of Directors, Management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance - as defined by the Committee of Sponsoring Organisations (COSO) of the Treadway Commission (appointed by SEC USA).

As per Section 134 of the Companies Act, 2013, the term 'Internal Financial Controls' (IFC) means the policies and procedures adopted by the Company for ensuring:

- a) orderly and efficient conduct of its business, including adherence to company's policies,
- b) safeguarding of its assets,
- c) prevention and detection of frauds and errors,
- d) accuracy and completeness of the accounting records, and
- e) timely preparation of reliable financial information

The three key components of IFC followed by the Company are:

- i. Entity Level controls (ELC) that the management relies on to establish the appropriate "tone at top" relative to financial reporting are - Code of Conduct, Enforcement of Delegation of Authority, Hiring and Retention practices, Whistle blower mechanism and other approved policies and procedures.
- ii. Process Level controls (PLC), to ensure that processes are predictable, stable and consistently operating at the targeted level of performance, with only a normal variation are classified into Manual or IT - Dependent Manual or Automated Controls. They are also classified as Preventive or Detective.
- iii. General IT Controls to ensure appropriate functioning of IT applications and systems built by the Company to enable accurate and timely processing of financial data are - User Access rights management and Logical access; Change management controls; Password policies and practices; Patch management and License management; Backup and Recovery of data.

The adequacy of Internal Financial Controls is ensured by:

- Documentation of the risks and controls associated with the major processes;
- Validation and classification of existing controls to mitigate risks;
- Identification of improvements and upgrades to the controls;
- Improving the effectiveness of controls on residuary risks through data analytics;
- Performing testing of controls by the independent Internal Audit;
- Implementation of sustainable solutions to Audit observations.

The Audit Committee periodically evaluates Internal Financial Controls to ensure that they are adequate and operating effectively.

## HUMAN RESOURCES

The Company's focus on the key organizational asset - its employees remains top priority. The Company continues to focus on hiring right candidates, looking at the employee's entire life cycle, ensure timely interventions that help build a long lasting and fruitful career for them. With this in mind, the Company has initiated several positive changes in its Human Resource practices during the year.

## Helping Employees Build Their Career

The Employee Engagement survey results over the last few years have indicated communication clarity on career prospects for employees as an improvement area. The leadership team ideated on this aspect and a career progression framework was launched during the year. Employees were explained about the various modes of progression within the organisation with the help of case studies. Further, the process of communication to employees on the opportunities that are available across the length and breadth of the organisation and the myriad possibilities of learning from a variety of roles and experiences, that would help hone the leadership skills was institutionalised. The annual appraisal cycle has also been aligned with this framework.

## Capability Development

The efforts taken over the past years has ensured that a pipeline of ready talent is available for key leadership roles has culminated in identification of High-Potential employees across all Strategic Business Units including subsidiaries. This group of High Potential leaders has been drawn from all departments and locations, from the middle management. The process of identification involved manager assessment, psychometric self-profiling and peer review. These identified High Potential employees will be made to go through rigorous Leadership Program during the coming year.

One of the key efforts taken during the year was promoting an Innovation Culture. The senior leadership was trained on 3-Box methodology of Innovation and subsequently the learning was cascaded down to the rest of the employees. The objective of the program was in building creative confidence, helping people question, challenging the status quo, looking deep inside the work that was being done daily and finding new ways to solve problems. Business projects based on this innovative thinking methodology have been drawn up for the year 2017-18. To aid the process, Design Thinking was introduced to the Leadership team to focus their energies on an empathetic customer-centric mode for Innovation; which could uncover newer markets for both the Company and its customers.

As the Company's workforce continue to become younger, the training methods were revamped to appeal to Millennials. The Company's Graduate Engineer Trainee (GET) batch of 2016-17, were part of a blended learning initiative called YOLO (You Only Learn Once), to manage their transition into a workplace in a systematic and effective manner. This is a year-long intervention

consisting of a combination of behavioral and basic work related technical skills.

This year a select set of young managers from the Company have successfully completed the Young Leadership Program at the Group level.

### **Propelling Performance**

In the ongoing quest to have better dialogue and feedback about performance, the mid-year appraisal was emphasized in 2016-17 to stay on track towards goals for the year. In-house training programs were conducted for managers on crucial performance conversations, particularly on the methods of performance improvement planning.

All the business divisions of the Company now have DSIR approved R&D departments, staffed with a mix of young and well experienced talent, including a few doctorates with international experience. Their performance evaluation parameters were defined to encourage industry-institute collaborations and research paper publications.

### **Digitization**

The Company has been embracing technology with fervour and during 2016-17, it has launched several initiatives in employer branding through social media such as Facebook, Twitter, Glassdoor, Flock and LinkedIn Teams have been formed to update information on these applications with a response mechanism relevant to the audience. Efforts towards this initiative have started to yield positive results - recruitment has received a boost and potential and new hires now hold the Company's brand amongst the best employers.

The Company's HR website has also been revamped to appeal to the younger workforce. It has been made more user-friendly in layout and usage. A mobile app was also introduced for ease of access by the employees.

### **Employee Relations**

Across all the plants of the Company, cordial employee relations were maintained through proactive grievance handling mechanisms, total employee involvement and engagement with employees in various developmental initiatives. Programs were organized to look beyond the employees and reach out to their families to offer career counselling sessions for the children and organise plant visits. The strength of the family's bond with the Company has shown up in engagements scores as well.

The Company continues its commitment to employ and empower women through various initiatives including establishing and

implementing extended maternity leave policies and friendly work place policies. The Company also has a policy on prevention of Sexual Harassment at workplace in line with the requirements of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition & Redressal) Act, 2013. An Internal Complaints Committee (ICC) has been set up to redress any complaint regarding sexual harassment and the ICC did not receive any complaint during the year.

Sustainable Community Building is a guiding philosophy of the Murugappa Group. The CUMI Centre for Skill Development at Hosur and Edapally continued to play a significant role in honing the skills of its students from the less privileged community in support of their eventual employment.

The Company works closely with the communities neighbouring the manufacturing plants and provides them need based support. The different business units have undertaken activities such as educating about road safety, child rights, parenting, blood donation and career guidance for youngsters in the communities. Business units have also embarked upon training women on social entrepreneurship, extending support to senior citizens and making donations to schools to build infrastructure. For more details, please refer the Corporate Social Responsibility section of this Report.

### **Safety and Health**

As part of the TPM efforts, many improvements have been introduced to inculcate safe habits like safety patrolling, identifying and removing unsafe conditions, identifying near-misses and eliminating them, training to maintain awareness among the operating teams etc. As a next step, conduct of behavioural safety analysis and providing training to employees on behavioural safety through Safety Kiosks is being planned. Some of the plants have also embarked on initiatives such as ergonomic studies to reduce fatigue in the shop floor.

Mandatory periodic health check-ups and a sophisticated online health monitoring system to monitor the health status of all employees on a real-time basis were rolled out. The health centres are equipped with facilities to handle on-site emergencies.

## **ACHIEVEMENTS AND AWARDS**

The year 2016-17 continued to be a year of recognition for the Company in varied fields.

A new state-of-the-art Research & Development centre at the Industrial Ceramics division in Hosur was inaugurated in August 2016. This centre like the many other R&D centers

across business units has been recognised by the Department of Scientific and Industrial Research.

The Industrial Ceramics division celebrated its Silver Jubilee in November 2016 and as detailed earlier, the Electrominerals division set up a first of its kind composite Electrominerals facility during March 2017.

On the awards front, the Company received the Golden Peacock award in the categories of Corporate Ethics and Corporate Social Responsibility for the year 2016. The Electrominerals division was conferred a National Award for Excellence in CSR by National CSR Leadership Foundation, for its many CSR initiatives. The Industrial Ceramics and Electrominerals divisions also won the CII Industrial Innovation Award for 2016 and have been included in the list of 'Top 25 innovative organisations'.

The total staff on rolls of the Company (including joint ventures and subsidiaries) as on 31<sup>st</sup> March 2017 was 5203 with 3427 employees in India (previous year 5066 with 3225 employees in India).

## PERFORMANCE OF SUBSIDIARIES

Volzhsky Abrasive Works, Russia operated its Silicon Carbide plant to near capacity. However, sales dropped since the previous year from RUB 4284 million to RUB 4267 million due to lower volumes in Silicon Carbide business owing to transformer breakdown impacting about two months fusion process. Abrasives and Refractories sales grew compared to last year owing to introduction of new products and expanding target markets. On the profitability front, the entity registered a drop in profitability (after tax) from RUB 686 million to RUB 585 million.

Foskor Zirconia, South Africa recorded a sales of Rand 191 million compared to Rand 192 million last year. The entity's profit after tax dropped from 12 million ZAR to a loss of 5 million ZAR. The adverse movement in re-statement of forex on receivables, payables led to the loss.

In CUMI Australia, the business in Lined Equipment continued to be good. Sales grew from AUD 16.2 million to AUD 16.3 million. Profit after tax grew from AUD 1.8 million to AUD 2 million.

Sterling Abrasives had a sales of ₹712 million, compared to the last year's sales of ₹669 million. Profit after tax increased from ₹52 million to ₹66 million. The user industry for this company is primarily the agro industry.

CUMI Abrasives and Ceramics Company, the Chinese subsidiary had a sales of CNY 22 million for the year, which was lower than the last year's level of CNY 27 million. The subsidiary has sold its land and buildings and its manufacturing assets during the year and the business model has been transitioned to a trading model. The profit after tax was CNY 0.06 million (owing to gains on sale of land and buildings) compared to loss of CNY 20 million last year.

The sales of CUMI America recorded a good growth (USD 6.2 million from USD 5.1 million), driven mainly by the increase in sales of both Bonded Abrasives and Industrial Ceramics. The loss was at 1.5 million USD in the current year as against the 1 million USD loss in the last year.

For CUMI Middle East, sales grew from USD 1.8 million to USD 2.3 million. Profits for the year were at USD 0.07 million against a loss USD 0.16 million.

Southern Energy Development Corporation Limited (SEDCO), the gas based power generation subsidiary, recorded a sales of ₹265 million as against ₹219 million last year due to improved supply in gas from Oil and Natural Gas Corporation. Profit after tax grew from ₹23 million to ₹62 million.

Net Access India, which provides IT facilities management and other allied services increased its sales from ₹296 million to ₹394 million. Profit after tax grew from ₹16.6 million to ₹24.1 million.

CUMI International Limited, Cyprus recorded a revenue of USD 5.5 million representing mainly dividend income as against last year's income of USD 3.3 million.

CUMI Europe s.r.o, based out of Europe made a profit of CZK 0.5 million.

Performance of associates and joint ventures are given in note no. 6A and 6B respectively of the consolidated financials. Consolidated Financial Statements (incorporating the financial results of the Company, its subsidiaries and associates/joint ventures) have been provided in the Annual Report. Other than the associates/joint ventures referred in the Annual Report, there are no associate/joint venture companies within the meaning of Section 2(6) of the Companies Act, 2013. A statement containing the key financial highlights of each subsidiary, based on the financial statements prepared by them under applicable local regulations for their respective financial years, is also provided in the Annual Report.

## ENTERPRISE VALUE ADDITION

The Company has been able to constantly add value and the summary of value addition is given below in the table: ₹ million

Particulars	2016-17	2015-16	2014-15	2013-14	2012-13
<b>Generation of Gross Value added</b>	<b>3959</b>	<b>3789</b>	<b>3071</b>	<b>2829</b>	<b>2766</b>
(Excludes exceptional income)					
<b>Breakup on Application of Value added</b>					
Payment to Employees and Directors	1549	1429	1309	1270	1133
Payment to Shareholders (on payment basis)	189	377	235	281	281
Payment to Government	543	564	374	349	309
Payment to Lenders	33	64	49	44	85
Towards replacement and expansion	1645	1355	1104	885	958
	<b>3959</b>	<b>3789</b>	<b>3071</b>	<b>2829</b>	<b>2766</b>

- Gross Value Added is Revenue less Expenditure (excluding depreciation, expenditure on employee & directors service, Long term interest)

- Payment to Government is Current tax + Dividend distribution tax

- Replacement and expansion is Retained earning + Depreciation + Deferred tax

Payment to Employees and Directors grew at a CAGR of 8% over the last 5 years. Payment to Government grew at 15% CAGR over the similar period. The Company had been constantly investing towards replacement and expansion expenditure at a CAGR of 14% to ensure fulfilment of market demand.

## RISKS, CONCERNS AND THREATS

The Company has constituted a Risk Management Committee aligned with the requirements of the Companies Act, 2013 and Listing Regulations. The details of the Committee and its terms of reference are set out in the Corporate Governance Report forming part of this Report.

The Company has a robust business risk management process to identify, evaluate and mitigate risks impacting business including those which may threaten the existence of the Company. This framework seeks to create transparency, minimise adverse impact on the business objectives and enhance the Company's competitive advantage. This also defines the risk management approach across the enterprise at various levels including documentation and reporting. The framework has different risk models which help in identifying risk trends, exposure and potential impact analysis at a Company level as also separately for the business segments. Risk management forms an integral part of the Company's Business Plan.

The Company operates across various technology platforms and product verticals built over the years. Relative advantages and disadvantages of such technologies are studied and advances are tracked. Any new technology may impact the performance of the Company in the long run. The Company seeks to address these technology gaps through continuous benchmarking the existing manufacturing processes with developments in the

industry and in this connection has made arrangements with technical research institutions and technology consultants. The Company has been making investments in the next level of Manufacturing 4.0 in select modules. Manufacturing 4.0 is the current trend of automation and data exchange in manufacturing technologies.

Sub-par utilisation of capacities may lead to inadequate leverage benefits. The Company is ramping up its marketing efforts towards successful product establishment and market acceptance of its products, exploring development of alternate products and establishing a range of applications.

This year, the Company has commissioned projects relocated from South Africa to India. The products produced in these relocated facilities would have to be quality compliant, exhibit product consistency, gain customer acceptance and be compliant to user industry requirements. Any delay in successful production or acceptance of the product, will impact timely capacity utilisation of these projects.

Considering that Electrominerals products are produced by way of fusion process which consumes lot of electricity, power cost remains one of the key lever which can favourably or adversely affect our profitability based on the changes in the electricity cost. Apart from pricing, in some locations, availability of power becomes a constraint. Getting access to captive power and creating facilities for captive power generation continues to be

a vital strategy of CUMI, as can be exhibited from Maniyar, SEDCO and the proposed setting up of a project at Keerithode.

Fuel cost increase is another area of concern. Petroleum based products are used, either as direct raw material or as fuel for the firing process. This year the fuel costs increased after two successive years of decrease. Any increase in the cost of fuel impacts the profitability adversely. Improvements in firing technologies are avenues which the Company continues to pursue for dealing with the challenges. The Company is also pursuing projects to reduce the risk exposed on variability of fuel prices.

The Company deals with multiple currencies and is thus exposed to translation risk on account of adverse currency movements. After two continued years of rouble depreciation, the year 2016-17 witnessed an appreciation.

Foreign Exchange risk on foreign denominated loans, imports and exports are mitigated by adopting a country-based Forex policy, periodic monitoring and use of hedging instruments. Efforts are being taken to manage both exports and imports to ensure that at Company level, there is a natural hedging mechanism.

This year, the senior leadership received expert advisory on risk management from a reputed leading consultant, wherein the effectiveness of the Company's internal control framework in addressing risks and accomplishing its goals & objectives were evaluated; policies, procedures and control assessments in response to identified risks were reviewed; Risk dashboard was designed to track key risk indicators.

The Company's input materials are not commoditised and does not warrant any specific hedging to be undertaken. With respect to output materials, adverse impact of changes in commodity prices on user industries could impact the sales which are mitigated by development of alternate products, establishing new range of applications etc. as detailed above. The other mitigation measures for dealing with increase in fuel costs, non-availability of raw materials etc. have been dealt separately in the above paragraphs.

## **BUSINESS OUTLOOK AND OPPORTUNITIES**

According to the World Economic Outlook of the IMF, global economic activity is picking up with a long awaited cyclical recovery in investment, manufacturing and trade. World growth is expected to rise from 3.1 per cent in 2016 to 3.5 per cent in 2017. Stronger activity and expectations of a more robust global demand, coupled with agreed restrictions on oil supply,

have helped commodity prices recover from their troughs in early 2016. Higher commodity prices have provided some relief to commodity exporters and reduced deflationary pressures. Financial markets are buoyant and expect continued policy support in China besides fiscal expansion and deregulation in the United States. If confidence and market sentiments remain strong, short-term growth could be expected.

However, there is a wide dispersion of possible outcomes around the projections given the uncertainty surrounding the policy stance of the new United States administration and its global ramifications. Inward-looking protectionist policies threaten global economic integration and the co-operative global economic order, which have served the world economy well, especially emerging market and developing economies. Geopolitical risks and a range of other non-economic factors continue to weigh on the outlook in various regions-civil war and domestic conflict in parts of the Middle East and Africa, the tragic plight of refugees and migrants in neighbouring countries and in Europe, acts of terror worldwide and the protracted effects of a drought in eastern and southern Africa. If these factors intensify, they would deepen the hardship in directly affected countries. Increased geopolitical tensions and terrorism could also take a large toll on global market sentiment and economic confidence.

Coming to the Indian economy, last year it delivered a respectable growth despite global headwinds and internal monetary & fiscal policy changes. Corporate earnings for the third quarter astonished everybody on the upside, showing no significant slowdown from the Government's demonetisation. The reading sharply contrasted the picture painted by high-frequency indicators, which had pointed to muted activity due to a shortage of hard currency, sparking concerns that the growth figures do not reflect reality in India's economy and could be revised downwards. Meanwhile, data for the fourth quarter was positive; industrial production rebounded in January and the PMIs rose in February. On the political front, the Government gained major victories in a number of state elections, including the country's most populous state Uttar Pradesh. The result reflected support to Prime Minister's economic reform agenda and showed that his popularity remained strong despite the bold demonetisation programme. The victory would pave the way for newer reforms in the coming year. As per Asian Development Bank, India's economic growth is projected to pick up to 7.4% in 2017, primarily on higher consumption. The growth would be abetted by improved investor confidence, lower food prices and better policy reforms.

FY 2017-18 is likely to be driven by the Government spending especially in the infrastructure sector. The promise

of infrastructure sector would not be limited to FY 2017-18 but the investments are expected over a couple of years. The Government is investing in building roads, bridges, highways, airports, waterways etc. offering ample of opportunities for the private players. Rapid urbanisation and resultant growth in infrastructure, construction and auto industry would be the key market driver for Indian Abrasives and Ceramics consumption.

Strong demand drivers such as higher productivity, shortening replacement cycle, changing consumer preferences with increasing aspiration to shift to premium products and higher per capita income, Government's thrust on affordable housing and continued pursuit of 'Make in India' initiative is expected to favourably impact the Company's businesses.

Auto ancillary sector holds a lot of promise given the fact that the penetration of automobiles in India is the lowest amongst world's top 10 auto markets. Moreover, India is also being looked upon as manufacturing hub for low end or small cars by the OEMs. These cars would be manufactured in India and exported around in South East Asian, Middle Eastern, African and Latin American nations. Indian auto ancillary enjoys substantial competitive advantage due to the availability of qualified professionals at reasonable cost and quality conscious supply chain. Growth in automobiles and auto ancillary industry would open up opportunities for high performance Minerals and Abrasives business.

Ushering in of GST will bring about the shift from unorganised to the organised sector as the former is expected to lose their price competitiveness. Abrasives sector has a reasonable share of the unorganised segment. The share shift from customers towards organised players can be anticipated.

Globally, the marketing and manufacturing entities are spread across Middle East, Europe, China, Russia and North America. The demand for the Company's products would be favourably spurred by industrialisation activity, rising per capita incomes and consumer spending, enhanced manufacturing activities and increase in investments. Boost in construction & manufacturing sectors and per capita incomes would result in bolstering demand for industrial consumables products, for which the Company would stand to be a major beneficiary.

## FIXED DEPOSITS

The Company has not accepted any deposits from the public falling within the ambit of Section 73 of the Companies Act, 2013 read with Companies (Acceptance of Deposits) Rules, 2014 and no amount of principal or interest was outstanding as on the Balance Sheet date.

## LOANS AND INVESTMENTS

The particulars of loans, guarantees and investments covered under Section 186 of the Companies Act, 2013 are given below:

₹ million					
Sl. No	Description	As on 31.03.2016	Additions	Deletions	As on 31.03.2017
1.	Loans given by the Company	-	-	-	-
2.	Corporate guarantee given by the Company	2609.93	29.18	948.03	1691.08
3.	Investments made by the Company	2446.36	34.00	-	2480.36

## RELATED PARTY TRANSACTIONS

The Company as per the requirements of the Companies Act, 2013 and Regulation 23 of the Listing Regulations has a Policy for dealing with Related Parties.

In line with its stated policy, all Related Party transactions are placed before the Audit Committee for review and approval. Prior approval of the Committee is obtained on a quarterly basis for transactions which are of foreseen and repetitive nature. Omnibus approvals in respect of transactions which are not routine or which cannot be foreseen or envisaged are also obtained as provided under the applicable laws. The list of Related Parties is reviewed and updated periodically as per the prevailing regulatory conditions.

The details of transactions proposed to be entered into with Related Parties are placed before the Audit Committee for approval on an annual basis before the commencement of the financial year. Thereafter, a statement containing the nature and value of the transactions entered into by the Company with Related Parties is presented by the Chief Financial Officer for quarterly review by the Committee. Further, revised estimates or changes, if any to the proposed transactions for the remaining period are also placed for approval of the Committee on a quarterly basis. Besides, the Related Party transactions entered during the year are also reviewed by the Board on an annual basis.

All transactions with Related Parties entered during the financial year were in the ordinary course of business and on an arm's length basis. There are no materially significant related party transactions made by the Company with its Promoters, Directors, Key Managerial Personnel or their relatives which may have a potential conflict with the interest of the Company at large. There are no contracts or arrangements entered into with Related Parties during the year to be disclosed under Sections 188(1) and 134(h) of the Companies Act, 2013 in form AOC-2.

The Company's policy on dealing with Related Parties as approved by the Board is available on the Company's website at the following link <https://www.cumi-murugappa.com/policies.html>. None of the Directors and KMPs had any pecuniary relationship or transaction with the Company other than those relating to remuneration in their capacity as Directors/ Executives and corporate action entitlements in their capacity as shareholders of the Company.

## **CORPORATE SOCIAL RESPONSIBILITY**

The Murugappa Group is known for its tradition of philanthropy and community service. The Group's philosophy is to reach out to the community by establishing service oriented philanthropic institutions in the field of education and healthcare as the core focus areas. The Company being a constituent of the Group has been upholding this tradition by earmarking a part of its income for carrying out its social responsibilities.

The Company continues to engage in Corporate Social Responsibility (CSR) activities directly as well as through implementation agencies.

The Company set up the CUMI Centre for Skill Development (CCSD) in year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force from the less privileged sections of the Society. During the FY 2015-16, the Company replicated this model in Edapally, Cochin. CCSD provides specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. Three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. The Company continues to harness the potential of CCSD centres so far established.

In addition, the Company has also been contributing to the cause of health and education by making grants to AMM Foundation, an autonomous charitable trust, engaged in philanthropic activities in the field of education and healthcare since 1953. During the year, the Company's focus areas for these grants were contributions to AMM Vellayan Chettiar Higher Secondary School, Tiruvottiyur - which has been making a difference in the field of education for the past 50 years. The school runs with the vision - To provide Quality Education with good virtues, for the under privileged and marginalized communities around Tiruvottiyur. During 2016-17, the Company also undertook AMM Murugappa Chettiar Centenary scholarships for eligible under privileged college students across Tamil Nadu. Besides

the above, the Company also actively pursued local community assistance programmes in and around its plant and office locations.

The Company is headquartered in Chennai and has three of its Abrasives plants operating in and around Chennai. Despite being affected by the Vardah cyclone in December 2016, the Company in the quintessential CUMI-way helped the community and rescue workers through supply of food packets and other necessities. The Green development programmes of the Company are being pursued with more rigour post the destruction of a large number of trees in our plants.

The Company's CSR policy is available on the Company's website at the following link <https://www.cumi-murugappa.com/policies.html>.

The Annual report on the CSR activities in the prescribed format is annexed hereto as Annexure A and forms part of this Report.

## **BUSINESS RESPONSIBILITY REPORTING**

The Company's ethical and responsible behaviour complements its corporate culture. Being a public listed company, the Company recognises that its accountability is not limited only to its shareholders from a financial perspective but also to the larger society in which it operates. During the year, consequent to the requirements of reporting of its business responsibility initiatives becoming mandatory under the Listing Regulations, the Company formulated a consolidated Policy on Business Responsibility which lays down the broad principles guiding the Company in delivering its various responsibilities to its stakeholders. The Policy is intended to ensure that the Company adopts responsible business practices in the interest of the social set up and the environment so that it contributes beyond financial and operational performance. A copy of the Policy is available at <https://www.cumi-murugappa.com/policies.html> and the Business Responsibility Report for the year ended 31<sup>st</sup> March 2017 in terms of Regulation 34 of the Listing Regulations is annexed to this report as Annexure B.

## **GOVERNANCE**

### **Board of Directors and Key Managerial Personnel**

The Board of the Company comprises eleven Directors of which majority (eight) are independent. As at 31<sup>st</sup> March 2017, the Board comprised nine Directors. During the year, Mr. M A M Arunachalam, was appointed as an Additional Director and he holds office till the date of ensuing Annual General Meeting. The Company has received a notice from a shareholder proposing his candidature as Director in the ensuing Annual General Meeting.

Mr. M Lakshminarayan and Mr. Shobhan M Thakore, Independent Directors who were appointed for a term of three years at

the 60<sup>th</sup> Annual General Meeting held on 1<sup>st</sup> August 2014 would be retiring on 31<sup>st</sup> July 2017. In view of their proposed retirement, basis the recommendation of the Nomination and Remuneration Committee, the Board reviewed its composition. Mr. P S Raghavan and Mr. Sujain S Talwar were appointed as Additional Directors at the meeting held on 9<sup>th</sup> May 2017. Further, considering that Mr. Raghavan and Mr. Sujain Talwar satisfy the independence criteria prescribed in applicable regulations, the Board has also recommended their appointment as Independent Directors of the Company for a term of 5 years commencing from 9<sup>th</sup> May 2017 to the shareholders. Following the changes in the Board composition, the constitution of the various Committees of the Board were also reviewed and revised.

Further, the Nomination and Remuneration Committee at its meeting held on 9<sup>th</sup> May 2017 also considered extending the services of Mr. K Srinivasan whose term as Managing Director of the Company would be expiring on 22<sup>nd</sup> November 2017. Based on the Committee's recommendation and subject to the approval of the shareholders, the Board has re-appointed Mr. K Srinivasan as the Managing Director of the Company for a further period of two years from 23<sup>rd</sup> November 2017 till 22<sup>nd</sup> November 2019.

Mr. M M Murugappan, retires by rotation at the forthcoming Annual General Meeting and being eligible has offered himself for re-appointment.

Suitable proposals regarding the above changes in the Board composition have been included in the Notice convening the 63<sup>rd</sup> Annual General Meeting for consideration and approval by the shareholders.

The Company has received declarations from all its Independent Directors confirming that they meet the criteria of independence prescribed both under the Companies Act, 2013 and the Listing Regulations.

Mr. K Srinivasan, Managing Director, Mr. Sridharan Rangarajan, Chief Financial Officer and Mrs. Rekha Surendhiran, Company Secretary continue to be the Key Managerial Personnel of the Company as per Section 203 of the Companies Act, 2013 and there were no changes during the year.

### **Board Meetings**

During the year, five Board Meetings were held, the details of which are given in the Corporate Governance Report.

### **Board Evaluation**

Pursuant to the provisions of the Companies Act, 2013 and the Listing Regulations, the Board carried out an annual performance evaluation of its own performance, the Directors individually as well as the evaluation of the working of its various Committees as per the evaluation framework adopted by the Board on

the recommendation of the Nomination and Remuneration Committee. Structured assessment forms which were duly reviewed and revised during the course of the year were used in the overall Board evaluation comprising various aspects of the Board's functioning in terms of structure, its meetings, strategy, governance and other dynamics of its functioning besides the financial reporting process, internal controls and risk management. The evaluation of the Committees was based on their terms of reference fixed by the Board besides the dynamics of their functioning in terms of meeting frequency, effectiveness of contribution etc.

Separate questionnaires were used to evaluate the performance of individual Directors on parameters such as their level of engagement and contribution, objective judgement etc. The Managing Director's evaluation was based on leadership qualities, strategic planning, communication, engagement with the Board etc.

The Chairman was also evaluated based on the key aspects of his role. The performance evaluation of the Independent Directors was carried out by the entire Board. The performance evaluation of the Chairman and the Non-Independent Directors was carried out by the Independent Directors at their separate meeting held during the year.

### **Policy on Appointment and Remuneration of Directors**

Pursuant to Section 178(3) of the Companies Act, 2013, the Nomination and Remuneration Committee of the Board has formulated the criteria for Board nominations as well as the policy on remuneration for Directors and employees of the Company.

The criteria for Board nominations lays down the qualification norms in terms of personal traits, experience, background and standards for independence besides the positive attributes required for a person to be inducted into the Board of the Company. Criteria for induction into Senior Management positions have also been laid down.

The Remuneration policy provides the framework for remunerating the members of the Board, Key Managerial Personnel and other employees of the Company. This Policy is guided by the principles and objectives enumerated in Section 178(4) of the Companies Act, 2013 and reflects the remuneration philosophy and principles of the Murugappa Group to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance of the Company. The policy lays down broad guidelines for payment of remuneration to Executive and Non-Executive Directors within the limits approved by the shareholders. The Remuneration

Policy was reviewed by the Board during the year. Further details are available in the Corporate Governance Report.

The Board Nomination criteria and the Remuneration policy are available on the website of the Company at <https://www.cumi-murugappa.com/policies.html>.

### **Composition of Audit Committee**

The Audit Committee of the Board comprises only Independent Directors. Mr. T L Palani Kumar is the Chairman and the other members are Mr. M Lakshminarayan, Mr. Sanjay Jayavarthanavelu and Mrs. Bharati Rao. Mr. Sujain S Talwar has been inducted into the Committee on 9<sup>th</sup> May 2017. During the year, five Audit Committee meetings were held, the details of which are provided in the Corporate Governance Report.

### **Statutory Auditors**

M/s. Deloitte Haskins & Sells, Chartered Accountants, (FR No. 008072S) Chennai, were appointed as Statutory Auditors of the Company at the 62<sup>nd</sup> Annual General Meeting to hold office upto the conclusion of the 63<sup>rd</sup> Annual General Meeting. Their office as Auditors will expire at the conclusion of the ensuing Annual General Meeting.

In line with the requirements of the Companies Act, 2013, the Company is required to appoint new Auditor in the place of M/s. Deloitte Haskins & Sells. Based on the recommendation of the Audit Committee, the Board of Directors have recommended the appointment of M/s. Price Waterhouse Chartered Accountants LLP, (Reg. No.FRN 012754N/N500016) as the Statutory Auditors of the Company to hold office from the conclusion of this Annual General Meeting until the conclusion of the 68<sup>th</sup> Annual General Meeting of the shareholders of the Company at a remuneration of ₹38,66,000/- for the FY 2017-18, subject to annual ratification by the shareholders pursuant to applicable laws. A resolution seeking the approval of the shareholders for the appointment of Statutory Auditors is included in the Notice convening the ensuing Annual General Meeting.

The proposed Auditors have confirmed their eligibility under Section 141 of the Companies Act, 2013 and the Rules framed thereunder for appointment of Statutory Auditors. Further, as required under Regulation 33 of the Listing Regulations, they have also confirmed that they hold a valid certificate issued by the Peer Review Board of the Institute of Chartered Accountants of India.

The Board of Directors take the opportunity to place on record its grateful appreciation for the contribution and services rendered by M/s. Deloitte Haskins & Sells, its partners and managers during their tenure as the Statutory Auditors of the Company.

The Report given by M/s. Deloitte Haskins & Sells on the Financial Statements of the Company for the year ended 31<sup>st</sup> March 2017 is provided in the financial section of the Annual Report. There are no qualifications, reservations, adverse remarks or disclaimers given by the Auditors in their report.

### **Cost Auditors**

Pursuant to Section 148 of the Companies Act, 2013 read with Companies (Cost Records and Audit) Rules, 2014 and amendments thereof, the Company is required to maintain cost accounting records in respect of products of the Company covered under CETA categories like organic and inorganic chemicals, electrical or electronic machinery, steel, plastic and polymers, ores and mineral products, other machinery, base metals etc. Further, the cost accounting records maintained by the Company are required to be audited.

The Board, on the recommendation of the Audit Committee, had appointed M/s. S Mahadevan & Co. (firm no. 000007), Cost Accountants, Chennai to audit the cost accounting records maintained by the Company under the said Rules for the FY 2016-17 on a remuneration of ₹400,000/-. Further, the said firm has also been appointed by the Board to conduct the cost audit for the FY 2017-18 at the same remuneration.

The Companies Act, 2013 mandates that the remuneration payable to the Cost Auditor is ratified by the Members. Accordingly a resolution seeking the shareholder's ratification of the remuneration payable to the Cost Auditor for the FY 2017-18 is included in the Notice convening the 63<sup>rd</sup> Annual General Meeting.

### **Secretarial Audit**

M/s. R Sridharan & Associates, Practicing Company Secretaries, Chennai was appointed as the Secretarial Auditor to undertake the Secretarial Audit of the Company for the FY 2016-17. The report of the Secretarial Auditor is annexed to and forms part of this Report (refer Annexure F). There are no qualifications, reservations, adverse remarks or disclaimers given by the Secretarial Auditor in the Report.

### **Compliance Management**

The Company's in house compliance management system tracks compliances across the various factories and offices of the Company. This tool has a comprehensive coverage of the various applicable laws and is periodically updated based on the regulatory changes.

### **Corporate Governance**

In terms of Regulation 34(3) read with Schedule V of the Listing Regulations, a separate section on Corporate Governance including the certificate from the Statutory Auditors confirming

compliance is annexed to and forms an integral part of this Report.

### **CEO/CFO Certificate**

The Managing Director and the Chief Financial Officer have submitted a certificate to the Board on the integrity of the financial statements and other matters as required under Regulation 17(8) of the Listing Regulations.

### **DIRECTORS' RESPONSIBILITY STATEMENT**

Pursuant to the provisions contained in Section 134(3)(c) of the Companies Act, 2013, the Board to the best of its knowledge and belief and according to the information and explanations obtained by it confirm that:

- in the preparation of the annual accounts, for the financial year ended 31<sup>st</sup> March 2017, applicable accounting standards have been followed and no material departures have been made from the same;
- the accounting policies mentioned in Note 3 of the Notes to the Financial Statements have been selected and applied consistently and judgments and estimates that are reasonable and prudent have been made so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the Profit of the Company for that period;
- proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the assets of the Company for preventing and detecting fraud and other irregularities;
- the annual accounts have been prepared on a going concern basis;
- that internal financial controls to be followed by the Company have been laid down and that such internal financial controls are adequate and operating effectively;
- proper systems have been devised to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively.

### **EXTRACT OF ANNUAL RETURN**

The extract of the Annual Return in the prescribed form MGT 9 is annexed to and forms part of this Report (refer Annexure E).

### **ENERGY CONSERVATION, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS & OUTGO**

The information on energy conservation, technology absorption, expenditure incurred on Research & Development and forex

earnings/outgo as required under Section 134(3)(m) of the Companies Act, 2013 read with Rule 8 of the Companies (Accounts) Rules, 2014 is annexed to and forms part of this Report (refer Annexure C).

### **SIGNIFICANT AND MATERIAL ORDERS PASSED BY THE REGULATORS OR COURTS**

There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status of the Company and its future operations.

### **PARTICULARS OF EMPLOYEES**

The information on employees and other details required to be disclosed under Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 is annexed to and forms part of this Report (refer Annexure D).

During the year FY 2016-17, with the approval of the shareholders obtained through a Postal Ballot process, the Company introduced and implemented the Carborundum Universal Limited ESOP Plan 2016 (ESOP 2016) for grant of 37,72,000 Stock Options to eligible employees of the Company including any Managing Director and Whole-time Director as well as that of its subsidiaries. Under the earlier Company's ESOP Scheme 2007, no Option grants have been made since February 2012. The ESOP 2016 introduced in February 2017 currently governs the grant of Options to employees. The disclosures with respect to Options granted under the ESOP 2007 and ESOP 2016 are contained in the Corporate Governance section forming part of this Report. Further, the disclosures relating to Stock Options as per Securities and Exchange Board of India (Share based Employees Benefits) Regulations, 2014 read with the circular issued by SEBI on 16<sup>th</sup> June 2015 has been provided on the Company's website and is available in the link <https://www.cumi-murugappa.com/policies.html>. Both the ESOP Scheme 2007 and ESOP 2016 are in compliance with the SEBI (Share Based Employee Benefits) Regulations, 2014.

### **ACKNOWLEDGEMENT**

The Board gratefully acknowledges the co-operation received from various stakeholders of the Company viz., customers, investors, channel partners, suppliers, government authorities, banks and other business associates during the year. The Board also places on record its sincere appreciation of all the employees of the Company for their commitment and continued contribution to the Company.

On behalf of the Board

Chennai  
May 9, 2017

**M M Murugappan**  
Chairman

## Annexures to the Directors' Report

All information furnished in the annexures relates to Carborundum Universal Limited, India as a standalone entity.

### ANNEXURE A

#### Annual Report on Corporate Social Responsibility (CSR) Activities

- A brief outline of the Company's CSR policy, including an overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects/programs

The Company is cognizant of its responsibility towards the society in which it operates and has been engaged in CSR activities directly through the establishment of a skill development centre as well indirectly through contributions to AMM Foundation, an autonomous charitable trust in the field of Education and Healthcare, in addition to pursuing activities for the benefit of the communities around its local areas of operations.

In line with its objectives and practices, the CSR policy focuses on Health, Education and Skill Development. The policy is uploaded in the website of the Company.

2. Website link where the CSR policy is uploaded	<a href="http://www.cumi-murugappa.com/policies.html">http://www.cumi-murugappa.com/policies.html</a>	
3. The composition of the CSR Committee#	Mr. Shobhan M Thakore, Chairman (Independent Director) Mr. Aroon Raman (Independent Director) Mr. K Srinivasan (Managing Director)	
4. Average net profit of the Company for last three financial years	₹1070.36 million	
5. Prescribed CSR Expenditure (two per cent of the amount as in item 3 above)	₹21.41 million	

- Details of CSR spent during the financial year
  - Total amount spent for the financial year
  - Amount unspent, if any

₹22.80 million  
Nil

- Manner in which the amount spent during the financial year is detailed below:

Sl. No.	CSR Project or activity identified	Sector in which the project is covered	Project or Programs - location	Amount Outlay/direct by Co.*	Amount spent on the projects or programs - 1) direct expenditure 2) overheads	Cumulative Expenditure upto reporting period	Amount Spent Direct/ agency
(i)	CUMI Centre for Skill Development	Enhancing employment skills of under privileged youth in manufacturing sector	Hosur, Krishnagiri, Cochin, Ernakulam	10.71	12.71	12.71	Direct
(ii)	Grant to Vellayan Chettiar Higher Secondary School (VCHSS)	Education	Tiruvotiyur, Chennai	10.00	9.39	9.39	Agency
(iii)	AMM Murugappa Chettiar centenary full fee Scholarship	Education	Chennai, Coimbatore, Cuddalore, Kanyakumari, Karaikudi, Madurai, Thiruvaur, Tirunelveli	0.70	0.70	0.70	Agency
<b>Total</b>				<b>21.41</b>	<b>22.80</b>	<b>22.80</b>	

Agency: AMM Foundation

\*Grant made during the year for VCHSS was ₹ 10 million as against which a sum of ₹ 9.39 million was utilized by the implementing agency as of 31<sup>st</sup> March 2017 (therefore the total CSR incurred was ₹ 23.41 million for the year).

- Reasons for shortfall in spend: NA

- The implementation and monitoring of CSR Policy for the FY 2016-17 is in compliance with the CSR objectives and Policy of the Company.

Chennai  
May 9, 2017

On behalf of the Board

**K Srinivasan**  
Managing Director

**Shobhan M Thakore**  
Chairman - CSR Committee

#Mr. P S Raghavan has been inducted into the Committee on 9<sup>th</sup> May 2017.

## ANNEXURE B

### Business Responsibility Report

#### SECTION A: GENERAL INFORMATION ABOUT THE COMPANY

1.	Corporate Identity Number (CIN) of the Company	L29224TN1954PLC000318			
2.	Name of the Company	Carborundum Universal Limited			
3.	Registered address	'Parry House' 43 Moore Street Chennai - 600001			
4.	Website	www.cumi-murugappa.com			
5.	E-mail id	cumigeneral@cumi.murugappa.com			
6.	Financial Year reported	1 <sup>st</sup> April 2016 to 31 <sup>st</sup> March 2017			
7.	Sector(s) that the Company is engaged in (industrial activity code-wise)				
	<b>Group</b>	<b>Class</b>	<b>Sub-class</b>	<b>Description</b>	<b>Sector</b>
	239	2399	23993	Manufacture of other non-metallic mineral products	Abrasives
	239	2393	23939	Manufacture of other porcelain and ceramic products	Ceramics
	007	0072	00729	Mining of other non-ferrous metal ores	Electrominerals
8.	List three key products/services that the Company manufactures/provides (as in Balance Sheet)	Abrasives, Ceramics and Electrominerals			
9.	Total number of locations where business activity is undertaken by the Company				
	(a) Number of International Locations (Provide details of major 5)	On a standalone basis, the Company does not have any manufacturing unit located outside India			
	(b) Number of National Locations	On a standalone basis, the Company carries manufacturing operations across 19 locations in India			
10.	Markets served by the Company	Local/State/National/International - All markets			

#### SECTION B: FINANCIAL DETAILS OF THE COMPANY

1.	Paid up Capital (INR)	₹188.66 million
2.	Total Turnover (INR)	₹15541.02 million
3.	Total Profit after taxes (INR)	₹1217.75 million
4.	Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	2.13% of the average net profits in the preceding three financial years.
5.	List of activities in which expenditure in 4 above has been incurred	(a) Skill Development - Enhancing employment skills of under privileged youth in the manufacturing sector (b) Education For further details, please refer the Corporate Social Responsibility Report (Annexure A of Directors' Report)

#### SECTION C: OTHER DETAILS

1.	Does the Company have any Subsidiary Company/ Companies?	Yes. As on 31 <sup>st</sup> March 2017, the Company has 5 direct subsidiaries. Its wholly owned subsidiary – CUMI International Limited has 7 subsidiaries. Out of the total 12 subsidiaries, 3 are situated in India and 9 are situated outside India.
2.	Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company?	Each subsidiary company carries out BR initiatives as per their local requirements.
3.	Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]	The Company does business with reputed organisations who undertake BR initiatives as per their respective organisational policies. The CUMI Centre for Skill Development, a direct CSR initiative of the Company, is joint collaboration with Wendt (India) Limited, joint venture company.

# Business Responsibility Report

## SECTION D: BR INFORMATION

### 1 Details of Director responsible for BR

#### (a) Details of the Director responsible for implementation of the BR policy/policies

1. DIN	00088424
2. Name	K Srinivasan
3. Designation	Managing Director

#### (b) Details of the BR head

No.	Particulars	Abrasives	Ceramics	Refractories & Prodorite	Electrominerals
1. DIN		NA	NA	NA	NA
2. Name		N Ananthaseshan	Rajesh Khanna	R Rajagopalan	P S Jayan
3. Designation		President - Abrasives	President - Ceramics	EVP - Refractories & Prodorite	EVP - Electrominerals
4. Telephone number		91-44-30006161			
5. E-mail ID		cumibr@cumi.murugappa.com			

### 2 Principle-wise (as per NVGs) BR Policy/policies

#### (a) Details of compliance

No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
i.	Do you have a policy/policies for	Y	Y	Y	Y	Y	Y	Y	Y	Y
ii.	Has the policy been formulated in consultation with the relevant stakeholders?	The policy(ies) has been framed keeping in mind the interests of the stakeholders at large.								
iii.	Does the policy conform to any national/international standards?	Various practises/processes emanating out of the policy(ies) conform to national/international standards.								
iv.	Has the policy been approved by the Board? If yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
v.	Does the Company have a specified committee of the Board/Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
vi.	Indicate the link for the policy to be viewed online?	<a href="https://www.cumi-murugappa.com/policies.html">https://www.cumi-murugappa.com/policies.html</a>								
vii.	Has the policy been formally communicated to all relevant internal and external stakeholders?	The policy(ies) has been disseminated on the Intranet as well as on the website of the Company.								
viii.	Does the Company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
ix.	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/ policies?	The individual policies by and large prescribe a grievance redressal mechanism for the stakeholders concerned. Wherever, the individual policies do not explicitly state the grievance redressal mechanism, grievances can be addressed to cumibr@cumi.murugappa.com.								
x.	Has the Company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	The Internal Auditors of the Company review the implementation of policies from time to time. The Company's various factories have been subject to audit by external certification agencies. No dedicated Business Responsibility audit has been conducted.								

#### (b) If answer to the question at serial number 2(a)(i) against any principle is 'No', please explain why: Not Applicable

Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
i. The Company has not understood the Principles									
ii. The Company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
iii. The Company does not have financial or manpower resources available for the task									
iv. It is planned to be done within next 6 months									
v. It is planned to be done within the next 1 year									
vi. Any other reason (please specify)									

Not applicable

# Business Responsibility Report

## 3. Governance related to BR

- i. **Indicate the frequency with which the Board of Directors, Committee of the Board or CEO to assess the BR performance of the Company. Within 3 months, 3-6 months, annually, more than 1 year**

The assessment is a continuous process and there is no defined frequency at which this assessment is done.

- ii. **Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?**

The requirement of publishing BRR annually is applicable to the Company from FY 2016-17 only. This report is available at <https://www.cumi-murugappa.com/policies.html>.

## SECTION E: PRINCIPLE-WISE PERFORMANCE

### Principle 1: Businesses should conduct and govern themselves with ethics, transparency and accountability

1. **Does the policy relating to ethics, bribery and corruption cover only the Company? Yes/No. Does it extend to the group/ joint ventures/ suppliers/ contractors/ NGOs/ others?**

Commitment to ethical and lawful business conduct is a fundamental shared value of the Board of Directors, Senior Management and all other employees of the Company. CUMI's value systems are aligned with the Murugappa Group's Values and Beliefs guided by the Five Lights - spirit of the Murugappa Group: Integrity, Quality, Passion, Respect and Responsibility towards all stakeholders and the communities that the Company operates in and serves. The Company as well as all companies within the CUMI Group- its subsidiaries, associates or joint ventures are governed by this philosophy as well as the requirements of their local jurisdictions.

CUMI's Right path – a corporate manual setting out the corporate culture lays down the guidelines required to be adhered to by every employee both in letter and spirit. This manual prepared with a view to give clarity on ethical issues, maintaining transparency in all dealings and practice ethics in a dynamic business environment is required to be adhered to by all employees. The Company's Code of Conduct, Code of Conduct for Prevention of Insider Trading, Diversity policy, Policy on prevention of sexual harassment, ethical guidelines on stakeholder dealing, Whistle Blower policy which are also enshrined in the Right Path serve as

a guiding norm in matters relating to ethics, anti-bribery and anti-corruption for all employees.

The Company has a policy to do business with suppliers/ contractors and others who are aligned with its value systems. Appropriate due diligence is exercised while selecting them. During the FY 2016-17, the Company has been awarded the prestigious Golden Peacock Award in Corporate Ethics in the engineering sector category.

2. **How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the management?**

During the year, there were two referrals made under the Whistle Blower policy of the Company and one complaint referred under the grievance redressal mechanism. All three have been thoroughly investigated and closed. While one led to blacklisting of a contractor, two others were spurious complaints.

### Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle

The Company undertakes to assure safety and optimal resource use over the life-cycle of its products. The Company being material science technology oriented continuously innovates and strives for optimal resource use over the life cycle of the products it manufactures.

1. **List up to 3 of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities:**

**Abrasives:** Metal working fluids manufactured by the Abrasives segment are water solubles designed for easier effluent treatment, thereby having a low negative impact on environment.

**Electrominerals:** Azure S – Innovative Selective Catalytic Reduction systems have been developed to avoid scrubbing process.

**Industrial Ceramics:** Technical Ceramics - Furniture for Solid Oxide fuel cells - used in alternate mode of power generation for green energy equipment.

The Company has dedicated state of the art Research and Development centres across its businesses certified by the Department of Scientific and Industrial Research (DSIR) serving as centres of excellence for research

## Business Responsibility Report

and strengthening the platform for competency & sustainable growth.

### 2. For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product (optional):

#### a. Reduction during sourcing/production/ distribution achieved since the previous year throughout the value chain?

- Significant part (~ 30%) of the energy requirement for the Electrominerals division - the major user of electric energy is from our own Hydro power station - green energy.
- Almost entire power requirement for the Company (standalone) is met by our own gas based power station - clean power.
- We are a zero discharge Company in almost all locations.  
As the Company's product range is over 20,000 SKUs, unit consumption is not an appropriate measure.

#### b. Reduction during usage by consumers (energy, water) has been achieved since the previous year?

- We have been continuously developing superior Grinding wheels that are more efficient in material removal resulting in lower power consumption by user entities.
- We develop superior Grains that have higher material removal per unit energy.

### 3. Does the Company have procedures in place for sustainable sourcing (including transportation)? If yes, what percentage of your inputs was sourced sustainably?

The Company's integrated operations ensures sustainable exploitation of the available resources. Joint project opportunities amongst various business units improve efficiencies in sourcing besides resulting in product efficiencies.

Conscious efforts are made to ensure that everyone connected with the Company be it the designers, producers, value chain members, customers and recyclers are made aware of their responsibilities. The Company's Total Productivity Maintenance (TPM) practices help in achieving operational efficiencies also resulting in energy conservation and sustainable operations. Usage of materials which are either recycled or capable of recycling assumes top priority. The Company's plants at Sriperumbudur, Maraimalai Nagar

and Tiruvottiyour are recipients of the prestigious TPM award for excellence by the Japan Institute of Plant Maintenance.

### 4. Has the Company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve the capacity and capability of local and small vendors?

The Company's global and complex operations does not complement the procurement of goods and services from local and small producers in its location of manufacturing operations. However, the Company interacts with the local & small producers at regular intervals on the business and quality requirements. Assured volumes instils confidence in them to supply quality products by adopting sustainable and safe practices. The Company from time to time provides training and guidance on optimum use of resources, thereby saving cost and time. This has resulted in the small producers manufacturing products which are benchmarks in quality, thereby gaining an edge over the market.

### 5. Does the Company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%)?

Duly recognising that over-consumption results in unsustainable exploitation of the planet's resources, the business units in the Company are committed to promoting sustainable consumption, including recycling of resources.

The Company has sustainable processes in place to recycle the products and waste, post completion of the manufacturing life cycle.

- The Company has an integrated value cycle mapping process. For example: the setters (a process consumable) used in the Ceramic plant(s) is post usage sent to the Refractory plant(s) for use in Castable manufacture.
- All process wastes of the Coated Abrasive plant(s) are treated and the recovered Grains are used in Refractory manufacture.

### Principle 3: Businesses should promote the well being of all employees

Any organisation is as good as the people who work for it. The trusting and caring ecosystem allows the Company to nurture a workforce that works passionately in tandem with its core values.

The Company is committed to providing equal opportunities both at the time of recruitment as well as during the course of

## Business Responsibility Report

employment irrespective of caste, creed, gender, race, religion, disability etc. The Company strives to keep the workplace environment safe, hygienic humane, upholding the dignity of the employees including conducting trainings and sending suitable communications on regular basis. The Company's strategic pillars for capability development, propelling performance, scaling up capability and the dedicated HR initiatives thereunder continue to facilitate constant upgradation of the skill and competency of the employees.

To enhance technical know-how, sponsorship support is extended in Bachelors/Masters programmes in technology. The dedicated learning and development programmes enhance the right skill sets and relevant knowledge to employees to achieve operational and futuristic benefits. The learning solutions are designed as per the training need analysis. Proactive steps and structured problem solving mechanisms with focus on people issues and periodical communication on business related issues ensure cordial industrial relations.

Providing and maintaining a safe and hygiene working environment is a continuous process at CUMI. Periodic awareness sessions, training on usage of protective equipments, identifying and eliminating unsafe conditions are given top priority. Most of our plants are BS-OHSAS 18001-2007 certified for occupational health and safety management systems. The Company continues its commitment to employ and empower women and its initiatives such as friendly work place policies for women, policy for prevention of sexual harassment, redressal mechanism in the form of Internal Complaints Committee, women welfare Committees etc. augurs well.

**1. Total number of employees:** The number of employees as on 31<sup>st</sup> March 2017 (including Non-Management staff) was 2134.

**2. Total number of employees hired on temporary/contractual/casual basis:** 3420

**3. Number of permanent women employees:** 84

**4. Number of permanent employees with disabilities:** 2

**5. Do you have an employee association that is recognized by Management?**

Yes. There are recognised trade unions affiliated to various trade union bodies.

**6. What percentage of your permanent employees are members of this recognised employee association?**

About 55% of the employees are members of recognised employee associations.

**7. Number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.**

No.	Category	No. of complaints filed during the financial year	No. of complaints pending as on end of financial year
1.	Child labour/forced labour/ involuntary labour	Nil	Nil
2.	Sexual harassment	Nil	Nil
3.	Discriminatory employment	Nil	Nil

**8. What percentage of your under mentioned employees were given safety & skill up-gradation training in the last year?**

Category of employees	Safety Training	Skill upgradation
Permanent Employees	87%	100%
Permanent Women Employees	58%	100%
Casual/Temporary/Contractual Employees	82%	100%
Employees with Disabilities	Nil	100%

**Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised**

**1. Has the Company mapped its internal and external stakeholders?**

Yes. The Company has identified its internal and external stakeholders.

**2. Out of the above, has the Company identified the disadvantaged, vulnerable & marginalised stakeholders?**

The Company's Corporate Social Responsibility (CSR) policy drives the initiatives undertaken by the Company towards the benefit of the disadvantaged, vulnerable and marginalised stakeholders. The systems and process in place to systematically identify stakeholders and for understanding their concerns and for engaging with them is reviewed from time to time. The feedback mechanism available for shareholders and customers to assess the services levels and other complaints follows the spirit laid down herein.

**3. Are there any special initiatives taken by the Company to engage with the disadvantaged, vulnerable and marginalised stakeholders?**

The Company on a periodical basis undertakes dedicated activities as a part of its CSR initiatives for the disadvantaged,

## Business Responsibility Report

vulnerable and marginalised stakeholders in and around the Company's factories/plants. Education, sports and health aids are provided to schools in rural/under-developed areas and to schools supporting differently abled children. The Company acknowledges the importance of skill development in this competitive environment and has set up the CUMI Centre for Skill Development (CCSD) with the motto of 'Honing Skills Helping Life' at Hosur and Cochin and plans to gradually replicate this model to its other locations. The CCSD has been set up to build a skill bank of a technically competent and industry ready work force by providing specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and economically backward sections of the society. The Company also pursues other local community assistance programmes in and around its plant and office locations.

### Principle 5: Businesses should respect and promote human rights

#### 1. Does the policy of the Company on human rights cover only the Company or extend to the group/joint ventures/suppliers/contractors/NGOs/others?

The Company's policy on human rights is imbibed in its values represented in the Five Lights guiding the Company, its group companies and their employees across all spheres. The alignment with this value system is expected out of any person dealing with the Company.

#### 2. How many stakeholder complaints have been received in the past financial year and what percent was satisfactorily resolved by the Management?

Nil under this principle.

### Principle 6: Business should respect, protect, and make efforts to restore the environment

#### 1. Does the policy related to Principle 6 cover only the Company or extends to the group/joint ventures/suppliers/contractors/NGOs/others?

Safeguarding and protecting the environment is a shared value of the Company and its subsidiaries, joint ventures and associates. However, these companies have their own Safety, Health and Environment policies depending on the nature of their business and the local regulatory requirements. The Company's suppliers and contractors would be governed by their respective policies. The Company exercises due diligence in the selection of suppliers/contractors/others who are aligned with its value system.

#### 2. Does the Company have strategies/initiatives to address global environmental issues such as climate change, global warming, etc?

Being in the manufacturing business, the Company has mechanisms in place to ensure compliance with the applicable environmental laws. The Company is committed to be an environment friendly organisation and has a dedicated Environmental Policy across all its business units. The Company is an active player in practising initiatives to address environmental issues and ensuring sustainable development. Almost all the locations of the Company have received the ISO 14001 certificate for their Environment Management Systems and ISO 9001 for Quality Management Systems. Most of the plants are seen as Model Plants with Zero Discharge and Zero Emission. Further, the Risk Management framework covering the Environmental risks is reviewed on a periodical basis and the steps that are required to be taken for mitigating the related risks are analysed and implemented.

The Company also recognises the significance of a greener belt by virtue of which a number of saplings are planted on a yearly basis to reduce the carbon footprint.

#### 3. Does the Company identify and assess potential environmental risks?

Yes. Identification of potential environmental risks and the mitigation plan thereon is a continuous process. A report of the same is also placed before the Risk Management Committee of the Board of Directors on a periodical basis. Further, the Company also ensures that the effluent/emissions are within the permissible limits as prescribed by the statutory authorities.

#### 4. Does the Company have any project related to Clean Development Mechanism?

No, the Company has not undertaken any specific project related to the Clean Development Mechanism as per the Kyoto Protocol. However, all the manufacturing locations of the Company are certified ISO 14001 (Environment Management System), QMS - ISO 9001 (Quality Management System), OSHAS - 18001. Most of the plants are also certified with the EnMS ISO 5001:2011.

#### 5. Has the Company undertaken any other initiatives on – clean technology, energy efficiency, renewable energy, etc?

The Company utilises its resources in an optimal and responsible manner ensuring sustainability through

## Business Responsibility Report

reduction, re-use, re-cycling and managing waste. Appropriate measures to check and prevent pollution are undertaken and wherever required assessment of environmental consequences, if any, is taken up with due regard to public interest. Equitable sharing of access and commercialization of biological and other natural resources and associated traditional knowledge is encouraged. The Company seeks to improve its environmental performance by adopting cleaner production methods, promotion of energy efficient and environmental friendly technologies. Suitable processes and systems are developed with contingency plans and processes that help in preventing, mitigating and controlling environmental damages caused due to the Company's operations.

The Company partners with global leaders in the space of Solar (photovoltaic) energy, Clean coal, SOFC (solid oxide fuel cells), windmills and VLBS (Very large scale Battery storage). We co-create products for these companies/industries. Finer details on product/solutions cannot be provided due to contractual obligations.

For more details on the energy conservation initiatives - please refer Annexure C of the Directors' report for the FY 2016-17.

### **6. Are the emissions/waste generated by the Company within the permissible limits given by CPCB/SPCB for the financial year being reported?**

Yes, the Company being in manufacturing business, at all times ensures compliance with the applicable environmental laws. The Environment Policy of the Company and the ISO-14001 certification of its facilities reiterates its commitment to be an environment friendly organisation setting standards in environment management.

### **7. Number of show cause/legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of financial year: Nil**

### **Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner**

#### **1. Is your Company a member of any trade and chamber or association? Yes**

- a. Confederation of Indian Industry
- b. Indian Ceramic Society
- c. Indian Refractory Manufacturers Association
- d. Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association

- e. Kerala Management Association
- f. MMA
- g. Employers Federation of India.
- h. South India Chamber of Commerce.
- i. SIGMA – Europe.

### **2. Have you advocated/lobbied through above associations for the advancement or improvement of public good?**

The Company is not actively involved in lobbying. However, as a responsible corporate citizen, the Company as a part of industry associations/chambers makes recommendations/representations before regulators and associations for advancement and improvement of industrial climate in India. The Company also represents its views/opinions on energy security & management, water, food security and sustainable business principles through various forums.

### **Principle 8: Businesses should support inclusive growth and equitable development**

#### **1. Does the Company have specified programmes/initiatives/projects in pursuit of the policy related to Principle 8?**

The Company upholds the Murugappa Group's tradition by earmarking a part of its income for carrying out its social responsibilities, even before the mandatory CSR provisions under the Companies Act, 2013 were notified. The Company believes that social responsibility is not just a corporate obligation that has to be carried out but it is one's dharma. Therefore, our philanthropic endeavours are a reflection of our spiritual conscience and this provides us a way to discharge our responsibilities to the various sections of the society.

The CSR Committee, constituted for implementation of the well-defined CSR policy laid out by the Company, reviews the spend to be made and the projects for which such funds need to be allocated. The CSR policy highlights the responsibility statement of the Company towards CSR, the principles guiding the initiative, the manner of implementation and the reporting thereof. Skill Development, education and health care are the priority focus areas for the CSR initiatives of the Company.

The Company set up the CUMI Centre for Skill Development (CCSD) in year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force. During

## Business Responsibility Report

the year 2015-16, the Company replicated this model in Edapally, Cochin. The Centre provides specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. The three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. Running its 4<sup>th</sup> year of operation, the CUMI Centre for Skill Development (CCSD) believes in providing the right environment to candidates who emerge from deprived backgrounds and hone them to meet the future skill challenges of the world and not just for organisational skills. Strategically located at Hosur (as well as in Cochin) connecting the borders of Karnataka, Tamil Nadu and Andhra Pradesh, the centre aims at attracting a diverse population also focusing specially on girl children as a healthy mix in each batch of students.

A portion of the CSR spend is also allocated for projects in the field of education/healthcare through implementing agency. The Company makes contributions to the Vellayan Chettiar Higher Secondary School (VCHSS), Tiruvottiyur, which has been making a difference in the field of education for the past 50 years. Tiruvottiyur being an area dominated by the fisher folk, most of the students in VCHSS belong to this community. With about 3000 students, this Government aided school provides quality education to the marginalised. The school runs with the vision - To provide Quality Education with good virtues, for the under privileged. The school caters to the students from the marginalised communities around Tiruvottiyur. The educational qualification of the parents is maximum limited to schooling. Most families also face socioeconomic difficulties due to problems like alcoholism resulting in health issues, desertion by families etc. More than 250 students from the school receive educational assistance through the Touch a life scheme. Almost all the students benefiting from this scheme belong to single parent family. With the amounts funded through CSR, this school is now equipped with laboratories for Physics, Chemistry, Botany, Microbiology & Zoology, a Computer Centre and a General Science Lab for high school and middle school sections to facilitate experiential learning among the students. During 2016-17, the Company also undertook AMM Murugappa Chettiar Centenary scholarship for eligible underprivileged college students across colleges in Tamil Nadu.

### **2. Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/any other organization?**

The Corporate Social Responsibility initiatives of the Company are implemented through an in-house team as well as through implementing agency – AMM Foundation which is an autonomous charitable trust.

### **3. Have you done any impact assessment of your initiative?**

Replicating the CCSD model of Hosur in Cochin is a result of the impact assessment conducted by the Company.

### **4. What is your Company's direct contribution to community development projects?**

Please refer the CSR report in Annexure A of the Directors' report for the FY 2016-17 for complete details on the spend made by the Company during the financial year ended 31<sup>st</sup> March 2017.

### **5. Have you taken steps to ensure that this community development initiative is successfully adopted by the community?**

The Company's dedicated CCSD team operating at Hosur and Cochin constantly engages with the NGO's, residential associations etc. in and around the factories to understand and identify the deserving candidates from various backgrounds. Further, the students enrolled with CCSD along with their parents meet the executives of the centre on a monthly basis along with the residential association representatives and discuss on the positives that have been achieved through the programme. A two way flow of feedback – one from the Centre regarding the student's performance and another from the parent's end ensures that the student's development is taken utmost care of. Further, the representatives of the self-help groups, who also participate in the meeting, give their opinion on any other development programmes that can be initiated for the betterment of the students. The students enrolled at the centre are also highlighted the importance of being a responsible citizen; they regulate traffic at important junctions, initiate 5S, Cleanliness Drives from their hostel rooms to external environment. The confidence and the professional conduct shown by the students is an acknowledgement to the Company of its successful implementation of the CCSD initiative.

The indirect programmes for assisting communities in and around plant locations has also positively impacted & influenced those in the nearby communities.

## Business Responsibility Report

### Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner

#### 1. What percentage of customer complaints/consumer cases are pending as on the end of financial year?

The total number of customer complaints across all businesses which were pending at the end of the year constitutes less than 5% which have been subsequently resolved.

#### 2. Does the Company display product information on the product label, over and above what is mandated as per local laws?

Yes. Wherever relevant, the Company encourages that its packaging/labelling contain detailed information regarding safe handling, storage and use, which is over and above what is mandated as per local laws.

#### 3. Is there any case filed by any stakeholder against the Company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years and pending as on end of financial year: None

#### 4. Did your Company carry out any consumer survey/ consumer satisfaction trends?

Yes. The Company on a periodical basis conducts various

consumer survey/satisfaction trends. The Company put its customers at the fulcrum of its business strategy. The Company understands their requirements and provides them holistic solutions rather than merely supplying materials.

The Company collaborates meaningfully with its customers for co-creating sustainable products and solutions. Dedicated customer/dealer meetings, customer plant visits, transparent and compliant product labelling ensures awareness creation for the product usage and safe disposal. Customer visits are not necessarily confined to their product needs but also extends to sharing of best practices like TQM, TPM etc. It is also worthy to note that a significant portion of the Company's business pertains to offering customised products. Hence, customer's requirements rank very high to the Company.

The Business Responsibility Policy of the Company governing its business sustainability efforts is available on the Company's website [www.cumi-murugappa.com](http://www.cumi-murugappa.com).

On behalf of the Board

Chennai  
May 9, 2017

**M M Murugappan**  
Chairman

## ANNEXURE C

### I. ENERGY CONSERVATION

All business divisions of the Company pursued energy conservation efforts relentlessly during the year. All the locations of Abrasives got ISO 50001 (EnMS – Energy Management System) certified during FY 2016-17.

Conscious efforts were undertaken for reduction in specific Power and Fuel Consumption through Overall Equipment Effectiveness improvement. The activities performed towards energy conservation were predominantly in the nature of installation of LED lighting, replacing the conventional high energy consumption lightings, installation of Turbo ventilation, improvements in dust collectors, humidifiers, installation of variable frequency drive for kilns, circulation fans, hot air blowers, motors amongst others.

Corrective changes were carried out in boiler feed water temperature. Hydraulic capability main line for some of the plants were introduced. Optimisation of blower operation in tunnel kiln was carried out resulting in reduction of loss of energy. Air

compressors were operated at lower operating pressure and idle running losses were controlled by pressure control method.

During the year ended 31<sup>st</sup> March 2017, a capital investment of around ₹17 million was made on energy conservation equipments across the various SBUs.

### II. TECHNOLOGY ABSORPTION

#### Efforts made towards technology absorption, adaptation and innovation:

During the year, development of Hi-performance Abrasives products in the top of the pyramid continued to be the focus. Joint programs between Abrasives and Electrominerals have given strategic advantage in terms of capability and costs. Combining these Hi-performance grains with suitable premium binding systems have helped create a new range of high performance Crank Grinding wheels, Roll grinding wheels, Gear grinding wheels, Thread and Flute grinding wheels and high performance Coated products.

Another technology initiative was to create complete grinding solutions (Grind to finish) for customers. In this context, the business worked on developing a few set of products that helped complete the full basket of products for its distributors and end users.

In the area of Application Engineering, business embarked on scientific approach to capturing customer requirements, simulating real time use at its Surface Technology Center. This has helped to improve First Time Right product establishment for the customer.

In the areas of Refractories, technical input was received from technology partners for development and improvement of Silicon Carbide based Refractories for various applications.

Electrominerals continued to work on the process for developing product variants of special products towards targeting new applications.

#### Benefits derived as a result of the above efforts:

The new Abrasives products were successfully established in Indian Market and in specific International markets (USA, Russia and China). High end Disc based products in fiber and paper backings were successfully launched in the market. Thin Cutting wheels were successfully seeded for Construction and Fabrication markets. Major 'Make in India' import substitution projects were kicked off in Crankshaft and for other Auto ancillary producers. Zirconia and Ceramic range of products were established with heavy duty backings. In Electrominerals division, seven new products were released in the market.

#### Imported technology:

No new technology was imported during the year. The details of the technology imported in the last three years reckoned from the beginning of FY 2016-17 are:

Technology imported	Roll Grinding Wheel
Year of import	2014-15
Has technology been fully absorbed	Yes
If not fully absorbed, areas where this has not taken place, reasons thereof and future plans of action	-

### III. EXPENDITURE ON RESEARCH & DEVELOPMENT

During the year, the R&D centres of the Company at Ranipet I & II and Edapally received recognition by the

Department of Science and Industrial Research (DSIR), Government of India. With this the Company now has DSIR approved R&D centres at all its divisions.

Across the CUMI group of companies, there was continuous focus on technology innovations including creation of several IPs in form of patent/design/trademark registrations, peer review paper presentations in international forums and journals.

Research and Development (R&D) efforts during the year continued to focus on new product/applications development. The Abrasives business was able to successfully establish products for aerospace industry. Range of Coated products and Resin Bonded Grinding wheels were expanded with Hi-performance binders. Range of Non-Woven products with improved structure and stable dimensions were successfully launched. R&D activities were also carried out in Refractory products for Iron and Steel industry, Cement, Foundry and Petrochemical industry. Electrominerals division worked towards development of own raw material in line with the backward integration strategy, imparting surface modification properties in specific applications like Coated and Bonded Abrasives.

R&D centres continued to work for the future products to address the changing business environment – Light weighting, surface conditioning, combination backings etc.

#### EXPENDITURE ON R & D

Description	2016-17	₹ million
Capital including CWIP	13.74	
Recurring	110.21	
Total - (A)	123.95	
Sales - (B)	14968.64	
<b>Total expenditure as a percentage of sales (B/A)</b>	<b>0.83%</b>	

### IV. FOREIGN EXCHANGE EARNINGS AND OUTGO

Particulars	2015-16	2016-17	₹ million
Foreign Exchange Earnings	2951	3140	
Foreign Exchange Outgo			
- Revenue	2893	2960	
- Capital	409	425	

## ANNEXURE D

### Information on Employees and other details

- I. The details of top ten employees in terms of remuneration drawn during the financial year 2016-17 as per Rule 5(2) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 duly amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 are as follows:

Name and Age	Designation/ Nature of duties	Gross remuneration paid (₹)	Qualification & experience (years)	Date of commencement of employment	Previous employment
1	2	3	4	5	6
Srinivasan K (59)	Managing Director	19,157,718	B Tech (Mech) (37)	30.01.2002	Vice President - Wendt (India) Limited
Ananthasheshan N (54)	President, Abrasives	9,828,770	M.Sc (Applied Science), M.Tech Material Science (31)	19.02.1986 <sup>(e)</sup>	-
Sridharan Rangarajan (51)	Chief Financial Officer	9,154,886	B Com, ACA, Grad CWA (31)	22.06.2011	CFO, Indian Operations - TIMKEN
M Muthiah (57)	Executive Vice President, Human Resources	7,938,454	MA (SW) and PG Dip in Management (33)	15.10.2003	Plant HR Head, Hyundai Motor India Limited
Rajagopalan R (59)	Executive Vice President, Refractories & Prodorite	7,195,334	B E (Mech), MBA (Oubs) (37)	01.10.1980 <sup>(e)</sup>	-
Shyam S Rao (54)	Senior Vice President, Industrial Ceramics	6,137,140	B.Tech Metallurgy, MS Material Science, PhD Material Science (23)	07.05.1999	Widia India Limited
Jayan P S (57)	Executive Vice President, Electrominerals	4,635,613	B.Sc & B.Tech (29)	30.05.1987 <sup>(e)</sup>	-
Srikanth C (51)	Senior Vice President - Mktg, Abrasives	4,526,083	BE Mechanical Engineering & MBA Marketing (30)	05.09.1992	Cutfast Abrasives Tools Limited
Vijayalakshmi D (51)	Senior Associate Vice President - Corporate Communications	4,084,320	B.Sc Physics (29)	21.01.2010	Ogilvy Public Relations Worldwide
Sivakumaran M V (45)	Vice President - Mfg, Abrasives	3,701,473	M.Sc, MBA & M.Tech (19)	01.07.1997 <sup>(e)</sup>	-

#### Notes:

- Remuneration as shown above includes salary, allowances, Company's contribution to provident, superannuation and gratuity funds, medical facilities and perquisites valued as per income-tax rules. During the year, no Options were granted under the Employees Stock Option Scheme, 2007. However, during the year the Carborundum Universal Limited Employee Stock Option Plan 2016 was introduced and implemented and the eligible employees were granted in aggregate 914,900 Options. The employee-wise grant details are available in the disclosure under SEBI (Share Based Employee Benefits) Regulations, 2014 uploaded in the website of the Company. The deemed benefit on exercise of Options under the ESOP Scheme 2007 has not been considered as there is no cost to the Company.
- The employment of the above persons is whole-time in nature and terminable with 3 months' notice on either side.
- Mr. K Srinivasan was re-appointed as the Managing Director by the Board from 01.02.2015 till 22.11.2017 with the approval of shareholders at the 61<sup>st</sup> Annual General Meeting. He is subject to the service conditions of the Company.
- The above mentioned employees are not relatives (in terms of the Companies Act, 2013) of any Director of the Company. Further, no employee of the Company is covered by the Rule 5(2)(iii) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 (Employee holding by himself or with his family shares of 2% or more in the Company and drawing remuneration in excess of the Managing Director). Hence, the details required under Rule 5(3)(viii) is not applicable.
- Date of joining as Graduate Engineer Trainee in the Company.
- The remuneration details are for the financial year 2016-17 and all other particulars are as on 31<sup>st</sup> March 2017.
- None of the employees of the Company other than the Managing Director were in receipt of remuneration for the FY 2016-17 in excess of Rupees one crore and two lakh per year or rupees eight lakh and fifty thousand per month.

ii. The details of remuneration during the year 2016-17 as per Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 as amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 as are as follows:

(i) Ratio of remuneration of each Director to the median remuneration of the employees of the Company for the financial year:

Name	Designation	Ratio
Mr. M M Murugappan	Chairman	21.70
Mr. T L Palani Kumar	Independent Director	2.26
Mr. M Lakshminarayan	Independent Director	2.27
Mr. Shobhan M Thakore	Independent Director	1.99
Mr. Aroon Raman	Independent Director	1.84
Mr. Sanjay Jayavarthanavelu	Independent Director	2.02
Mr. Bharati Rao	Independent Director	2.02
Mr. M A M Arunachalam*	Non-Executive Director	0.78
Mr. K Srinivasan	Managing Director	40.81

\* Appointed as an Additional Director w.e.f. 28<sup>th</sup> October 2016.

ii) Percentage increase in the remuneration of each Director, Chief Executive Officer, Chief Financial Officer, Company Secretary in the financial year:

Name	Designation	Increase (%)
Mr. M M Murugappan	Chairman	(0.49)
Mr. T L Palani Kumar	Independent Director	(3.20)
Mr. M Lakshminarayan	Independent Director	(7.39)
Mr. Shobhan M Thakore	Independent Director	1.63
Mr. Aroon Raman	Independent Director	(5.46)
Mr. Sanjay Jayavarthanavelu	Independent Director	(2.56)
Mr. Bharati Rao	Independent Director	(11.63)
Mr. M A M Arunachalam*	Non-Executive Director	NA
Mr. K Srinivasan	Managing Director	7.59
Sridharan Rangarajan	Chief Financial Officer	10.53
Rekha Surendhiran	Company Secretary	6.86

\*Appointed during 2016-17, hence not comparable.

Mr. P S Raghavan and Mr. Sujain S Talwar were appointed on 9<sup>th</sup> May 2017 and hence no details are required to be furnished for the FY 2016-17.

**Notes:**

- The decrease in the remuneration of the Non-Executive Directors was mainly on account of the number of Board meetings attended by them during the year. During 2016-17, five Board meetings of the Company were held as against eight meetings during the previous year.
- Mr K Srinivasan's remuneration for the year 2016-17 includes an un-availed LTA component of FY 2014-15 received during the year. Mr. Srinivasan's remuneration for the year 2015-16 has been adjusted for the un-availed LTA components pertaining to

the previous year(s). All these have been appropriately factored in while computing the increase % above.

- Mrs. Rekha Surendhiran's remuneration for the FY 2015-16 has been adjusted appropriately for the un-availed LTA component pertaining to the previous years. This has been factored in while computing the increase % above.

iii) Percentage increase in the median remuneration of employees in the financial year: 16.25 per cent (employees who were in employment for the whole of FY 2015-16 & whole of FY 2016-17 considered for this purpose in the respective financial years).

iv) Number of permanent employees on the rolls of the Company as on 31<sup>st</sup> March 2017: 2134

v) The average percentile increase already made in the salaries of employees other than the managerial personnel in the last financial year is 12.20 per cent and the average percentage increase in the managerial remuneration is 4.70 per cent (employees/Directors who were in employment for whole of FY 2015-16 as well as whole of FY 2016-17 considered for this purpose).

The decrease in remuneration of the Non-Executive Directors was mainly on account of the number of Board meetings attended by them during the year. During 2016-17, five Board meetings of the Company were held as against eight meetings held during the previous year.

Annual increase in employees remuneration is based on Company and individual performance. The individual performance parameters varies based on employee cadres. For management cadre employees, the performance is based on parameters such as financial performance, customer perspective, internal process improvements and learning & development. For non-management cadre and others, the performance is based on operational performance of SBUs/locations/branches and long term settlements. This also applies to the Managing Director.

The Managerial remuneration is subject to regulatory ceiling limits. Other than Managing Director, the remuneration of Directors comprises only sitting fees and commission.

There are no exceptional circumstances for increase in managerial remuneration.

vi) The Company affirms that the remuneration is in compliance with its Remuneration policy.

## ANNEXURE E

### Extract of Annual Return

**Form No. MGT-9**  
**EXTRACT OF ANNUAL RETURN**  
**as at the Financial Year ended on 31<sup>st</sup> March 2017**

[Pursuant to section 92(3) of the Companies Act, 2013 and Rule 12(1) of the Companies (Management and Administration) Rules, 2014]

#### I. REGISTRATION AND OTHER DETAILS

i)	Corporate Identification Number	L29224TN1954PLC000318
ii)	Registration Date	21.04.1954
iii)	Name of the Company	Carborundum Universal Limited
iv)	Category/Sub-Category of the Company	Company Limited by Shares/Indian Non-government Company
v)	Address of the Registered office and contact details	"Parry House", 43, Moore Street, Chennai - 600001 Tel: +91-44-30006161 Fax: +91-44-30006149 e-mail: investorservices@cumi.murugappa.com
vi)	Whether listed company? Yes/No	Yes
vii)	Name, Address and Contact details of Registrar and Transfer Agent	Karvy Computershare Private Limited Unit: Carborundum Universal Limited Karvy Selenium Tower B, Plot 31-32, Gachibowli Financial District, Nanakramguda, Hyderabad - 500032 Tel: +91-40-67162222 Fax: +91-40-23420814 e-mail: einward.ris@karvy.com

#### II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10 % or more of the total turnover of the Company shall be stated:

Sl. No.	Name and Description of main products/services	NIC Code of the Product/service	% to total turnover of the Company*
1	Abrasives	23993	57.34
2	Ceramics	23939	25.94
3	Electrominerals	00729	16.72

\*Does not include inter-segment sales

## Extract of Annual Return

### III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sl. No.	Name and address of the Company	CIN	Holding/ Subsidiary/ Associate	% of Shares held	Applicable Section
<b>Direct holding</b>					
1	Net Access India Limited 'Parry House', VI Floor, 43 Moore Street, Chennai - 600 001	U74999TN1997PLC039545	Subsidiary	100.00	2(87)(ii)
2	Southern Energy Development Corporation Limited, 'Parry House,' 43 Moore Street, Chennai - 600 001	U40100TN1985PLC012425	Subsidiary	84.76	2(87)(ii)
3	Sterling Abrasives Limited Plot No 45/46 G I D C Industrial Estate, Odhva Road Ahmedabad- 382 415	U29259GJ1979PLC003467	Subsidiary	60.00	2(87)(ii)
4	CUMI International Limited 284 Arch. Makarou III Ave. Fortuna Court, 2 <sup>nd</sup> Floor, 3105 Limassol Cyprus	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
5	CUMI (Australia) Pty Limited Level 1, 56 Hudson Street, Hamilton NSW 2303	Company Incorporated outside India	Subsidiary	51.22	2(87)(ii)
<b>Holding through CUMI International Limited (a wholly owned subsidiary)</b>					
6	Volzhsky Abrasives Works 404130 Volzhsky, Volgograd Region, Avtodoroga No. 6, 18 Russia	Company Incorporated outside India	Subsidiary	98.07	2(87)(ii)
7	Foskor Zirconia (Pty) Limited PO Box.1, Phalaborwa, South Africa, 1390	Company Incorporated outside India	Subsidiary	51.00	2(87)(ii)
8	CUMI America Inc 7310 Turfway Road, Ste 550, Florence Kentucky 41042 USA	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
9	CUMI Middle East FZE No. 313, BC - 3 PO Box. 16190, RAK FZE Trade Zone, Ras Al Khaimah, United Arab Emirates	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
10	CUMI Abrasives & Ceramics Company Limited East of Donghuan Road, Yanjiao Development Zone, Sanhe City, Hebei Province, P.R., China, 065201	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
11	Thukela Refractories Isithebe Pty Ltd. No.1 Yellow Street, Isithebe, South Africa	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
12	CUMI Europe s.r.o Bucharova 2657/12 bld c 158000 Prague, Czech Republic	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
<b>Joint Ventures</b>					
13	Murugappa Morgan Thermal Ceramics Ltd. PB NO 1570, Dare House Complex 5 <sup>th</sup> Floor Extn. 2, NSC Bose Road, Chennai - 600 001	U26919TN1982PLC009622	Associate/ Joint Venture	49.00	2(6)
14	Ciria India Limited P-11 Pandav Nagar, Mayur Vihar Phase-1 New Delhi - 110 091	U74899DL1997PLC091417	Associate/ Joint Venture	30.00	2(6)
15	Wendt (India) Limited Flat no.105, Cauvery Block, National Games Housing Complex, Koramangala, Bangalore - 560 047	L85110KA1980PLC003913	Associate/ Joint Venture	39.87	2(6)

## Extract of Annual Return

### IV. SHAREHOLDING PATTERN (Equity share capital breakup as percentage of total equity)

#### i) Category-wise shareholding

Sl. No	Category of Shareholders	No. of Shares held at the beginning of the year (1 <sup>st</sup> April 2016)				No. of Shares held at the end of the year (31 <sup>st</sup> March 2017)				% change during the year
		Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>A. Promoters</b>										
<b>(1) Indian</b>										
a)	Individual/HUF	7,834,038	-	7,834,038	4.16	7,544,438	-	7,544,438	4.00	(0.16)
b)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
c)	Bodies Corporate	58,946,944	-	58,946,944	31.29	58,946,944	-	58,946,944	31.25	(0.05)
d)	Banks/FI	-	-	-	-	-	-	-	-	-
	Sub-total (A)(1)	66,780,982	-	66,780,982	35.45	66,491,382	-	66,491,382	35.25	(0.20)
<b>(2) Foreign (A)(2)</b>										
a)	NRIs -									
	Individuals**	-	-	-	-	289,600	-	289,600	0.15	0.15
b)	Others -									
	Individuals	-	-	-	-	-	-	-	-	-
c)	Bodies Corporate	-	-	-	-	-	-	-	-	-
d)	Banks/FI	-	-	-	-	-	-	-	-	-
	Sub-total (A)(2)	-	-	-	-	289,600	-	289,600	0.15	0.15
	Total shareholding of Promoter (A) = (A)(1)+(A)(2)	66,780,982	-	66,780,982	35.45	66,780,982	-	66,780,982	35.40	(0.05)
<b>AA. Promoter Group</b>										
a)	Individuals/HUF (AA)(1)	6,482,904	-	6,482,904	3.44	6,482,904	-	6,482,904	3.44	(0.01)
b)	Bodies Corporate/others (AA)(2)	9,287,320	-	9,287,320	4.93	9,287,320	-	9,287,320	4.92	(0.01)
	Total shareholding of Promoter Group (AA)=(AA)(1)+(AA)(2)	15,770,224	-	15,770,224	8.37	15,770,224	-	15,770,224	8.36	(0.01)
	Total shareholding of Promoter & Promoter Group (A)+(AA)	82,551,206	-	82,551,206	43.82	82,551,206	-	82,551,206	43.76	(0.06)
<b>B. Public Shareholding</b>										
<b>(1) Institutions</b>										
a)	Mutual Funds	22,884,439	-	22,884,439	12.15	32,701,316	-	32,701,316	17.33	5.18

## Extract of Annual Return

Sl. No	Category of Shareholders	No. of Shares held at the beginning of the year (1 <sup>st</sup> April 2016)				No. of Shares held at the end of the year (31 <sup>st</sup> March 2017)				% change during the year
		Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
b)	Banks/FI	27,322	-	27,322	0.01	363,845	-	363,845	0.19	0.18
c)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
d)	Venture Capital Funds	-	-	-	-	-	-	-	-	-
e)	Insurance Companies	6,412,479	-	6,412,479	3.40	5,387,570	-	5,387,570	2.86	(0.55)
f)	FIs	37,231,286	3,000	37,234,286	19.77	10,070,343	3,000	10,073,343	5.34	(14.43)
g)	Foreign Venture Capital Funds	-	-	-	-	-	-	-	-	-
	Sub-total (B)(1)	66,555,526	3,000	66,558,526	35.33	48,523,074	3,000	48,526,074	25.72	(9.61)
<b>(2) Non-Institutions</b>										
<b>a) Bodies Corporate</b>										
i)	Indian	6,366,011	141,130	6,507,141	3.45	13,234,396	143,110	13,377,506	7.09	3.64
ii)	Overseas	-	-	-	-	-	-	-	-	-
<b>b) Individuals</b>										
i)	Shareholders holding nominal share capital upto ₹ 1 lakh	20,310,170	3,464,579	23,774,749	12.62	25,687,308	3,012,195	28,699,503	15.21	2.59
ii)	Individual shareholders holding nominal share capital in excess of ₹ 1 lakh	6,692,796	140,460	6,833,256	3.63	12,042,857	140,460	12,183,317	6.46	2.83
<b>c) Others</b>										
i)	Clearing members	26,262	-	26,262	0.01	86,294	-	86,294	0.05	0.03
ii)	NRI	2,089,530	31,260	2,120,790	1.13	3,164,245	31,260	3,195,505	1.69	0.57
iii)	Trusts	7,230	-	7,230	-	24,485	-	24,485	0.01	0.01
iv)	NBFCs Registered with RBI	400	-	400	-	14,200	-	14,200	0.01	0.01
	Sub-total (B)(2)	35,492,399	3,777,429	39,269,828	20.85	54,253,785	3,327,025	57,580,810	30.52	9.68
	Total Public Shareholding (B)=(B)(1)+(B)(2)	102,047,925	3,780,429	105,828,354	56.18	102,776,859	3,330,025	106,106,884	56.24	0.06
<b>C. Shares held by Custodian for GDRs &amp; ADRs</b>										
	<b>Grand Total (A+B+C)</b>	184,599,131	3,780,429	188,379,560	100.00	185,328,065	3,330,025	188,658,090	100.00	NA

\* Decrease in shareholding % of promoter/promoter group is due to increase in share capital arising on account of allotment of equity shares to employees who have exercised their Stock Options during the year under the Company's ESOP Scheme, 2007.

\*\* During the year, the holding of 2,89,600 shares held by Mr. M M Veerappan, Promoter was re-categorised from Indian Individual Promoter to Foreign Individual Promoter based on the change in his residential status.

## Extract of Annual Return

### (ii) Shareholding of Promoters

Sl No.	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in Shareholding during the year
		No. of Shares	% of total Shares of the Company	% of shares Pledged / encumbered to total Shares	No. of Shares	% of total Shares of the Company	% of Shares Pledged / encumbered to total Shares	
1	M V Murugappan	420,280	0.22	0.00	420,280	0.22	0.00	(0.00)
2	M V Subbiah	514,294	0.27	0.00	514,294	0.27	0.00	(0.00)
3	M A Alagappan	1,274,400	0.68	0.00	1,274,400	0.68	0.00	(0.00)
4	A Vellayan	303,260	0.16	0.03	303,260	0.16	0.03	(0.00)
5	A Venkatachalam	598,900	0.32	0.03	598,900	0.32	0.03	(0.00)
6	M M Murugappan	696,340	0.37	0.00	696,340	0.37	0.00	(0.00)
7	M M Venkatachalam	449,400	0.24	0.24	449,400	0.24	0.00	(0.00)
8	M A M Arunachalam	1,100,600	0.58	0.16	1,100,600	0.58	0.03	(0.00)
9	S Vellayan	694,544	0.37	0.00	694,544	0.37	0.00	(0.00)
10	Arun Alagappan	471,400	0.25	0.01	471,400	0.25	0.00	(0.00)
11	V Arunachalam	183,740	0.10	0.00	183,740	0.10	0.00	(0.00)
12	V Narayanan	205,900	0.11	0.00	205,900	0.11	0.00	(0.00)
13	M M Muthiah	289,600	0.15	0.00	289,600	0.15	0.00	(0.00)
14	M M Veerappan	289,600	0.15	0.00	289,600	0.15	0.00	(0.00)
15	Arun Venkatachalam	186,840	0.10	0.00	186,840	0.10	0.00	(0.00)
16	M V Subramanian	79,920	0.04	0.00	79,920	0.04	0.00	(0.00)
17	M V Muthiah	75,020	0.04	0.00	75,020	0.04	0.00	(0.00)
18	Murugappa Holdings Ltd.	55,432,284	29.43	0.00	55,432,284	29.38	0.00	(0.04)
19	Ambadi Investments Pvt. Ltd.	3,121,960	1.66	0.00	3,121,960	1.65	0.00	0.00
20	Ambadi Enterprises Ltd.	384,700	0.20	0.00	384,700	0.20	0.00	(0.00)
21	Tube Investments of India Ltd.	6,000	0.00	0.00	6,000	0.00	0.00	(0.00)
22	E.I.D. Parry (India) Ltd.	2,000	0.00	0.00	2,000	0.00	0.00	(0.00)
23	New Ambadi Estates Pvt. Ltd.	-	-	-	-	-	-	-
24	Coromandel International Ltd.	-	-	-	-	-	-	-
25	Murugappa & Sons (M V Murugappan, M A Alagappan and M M Murugappan hold shares on behalf of the Firm)	-	-	-	-	-	-	-
Total		66,780,982	35.45	0.47	66,780,982	35.40	0.09	(0.05)

\* The above table does not include the holdings of promoter group aggregating to 15,770,224 shares (8.36%) as at 31<sup>st</sup> March 2017.

\* Decrease in shareholding % is due to increase in share capital arising on account of allotment of equity shares to employees who have exercised their Stock Options during the year under the Company's ESOP Scheme, 2007.

### (iii) Change in Promoters' Shareholding: There was no change in the Promoter's shareholding during the year.

Particulars	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
	No. of Shares	% of total Shares of the Company	No. of Shares	% of total Shares of the Company
At the beginning of the year	66,780,982	35.45		
Date wise increase/decrease in shareholding during the year specifying the reasons for increase/decrease (e.g. allotment/transfer/bonus/sweat equity etc.):	-	-		
At the end of the year			66,780,982	35.40

\* Decrease in shareholding % is due to increase in share capital arising on account of allotment of equity shares to employees who have exercised their Stock Options during the year under the Company's ESOP Scheme, 2007.

## Extract of Annual Return

### (iv) Shareholding Pattern of top ten Shareholders (other than Directors & Promoters)

Sl. No.	For each of the top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of Shares	% of total Shares of the Company	No. of Shares	% of total Shares of the Company
1	HDFC Trustee Company Ltd A/c - HDFC Mid-Cap Opportunities Fund				
	At the beginning of the year	9,973,000	5.29		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-4/22/2016 (Purchase)	5950	0.00	9,978,950	5.30
	Transfer-12/23/2016(Purchase)	12600	0.01	9,991,550	5.30
	At the end of the year			9,991,550	5.30
2	SBI Magnum Midcap Fund				
	At the beginning of the year	1,375,176	0.73		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/08/2016 (Purchase)	1,300,000	0.69	2,675,176	1.42
	Transfer-07/15/2016 (Purchase)	500,000	0.27	3,175,176	1.69
	Transfer-09/23/2016 (Purchase)	100,000	0.05	3,275,176	1.74
	Transfer-09/30/2016 (Purchase)	160,409	0.09	3,435,585	1.82
	Transfer-10/21/2016 (Purchase)	98,139	0.05	3,533,724	1.87
	Transfer-10/28/2016 (Purchase)	73,000	0.04	3,606,724	1.91
	Transfer-11/04/2016 (Purchase)	380,109	0.20	3,986,833	2.11
	Transfer-11/11/2016 (Purchase)	85,024	0.05	4,071,857	2.16
	Transfer-11/18/2016 (Purchase)	102,454	0.05	4,174,311	2.21
	Transfer-11/25/2016 (Purchase)	160,699	0.09	4,335,010	2.30
	Transfer-03/17/2017 (Purchase)	600,000	0.32	4,935,010	2.62
	At the end of the year			4,935,010	2.62
3	Smallcap World Fund, Inc				
	At the beginning of the year	7,985,000	4.24		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-12/09/2016 (Sale)	(13,810)	(0.01)	7,971,190	4.23
	Transfer-12/16/2016 (Sale)	(10,841)	(0.01)	7,960,349	4.22
	Transfer-01/06/2017 (Sale)	(498,351)	(0.26)	7,461,998	3.96
	Transfer-01/13/2017 (Sale)	(493,991)	(0.26)	6,968,007	3.69
	Transfer-01/20/2017 (Sale)	(1,443,239)	(0.77)	5,524,768	2.93
	Transfer-01/27/2017(Sale)	(1,159,768)	(0.61)	4,365,000	2.31
	At the end of the year			4,365,000	2.31
4	Amrit Petroleums Pvt Limited				
	At the beginning of the year	2,000,000	1.06		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/15/2016 (Purchase)	2,000,000	1.06	4,000,000	2.12
	At the end of the year			4,000,000	2.12
5	General Insurance Corporation of India				
	At the beginning of the year	3,000,000	1.59		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	At the end of the year			3,000,000	1.59
6	American Funds Insurance Series Global Small Capitalization Fund				
	At the beginning of the year	5,090,000	2.70		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/22/2016 (Sale)	(93)	(0.00)	5,089,907	2.70
	Transfer- 07/29/2016 (Sale)	(390,163)	(0.21)	4,699,744	2.49
	Transfer-08/05/2016 (Sale)	(109,744)	(0.06)	4,590,000	2.44
	Transfer-08/26/2016 (Sale)	(39,570)	(0.02)	4,550,430	2.42
	Transfer- 10/07/2016(Sale)	(260,430)	(0.14)	4,290,000	2.27

## Extract of Annual Return

Sl. No.	For each of the top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of Shares	% of total Shares of the Company	No. of Shares	% of total Shares of the Company
	Transfer- 12/09/2016(Sale)	(7,057)	(0.00)	4,282,943	2.27
	Transfer-12/16/2016 (Sale)	(5,540)	(0.00)	4,277,403	2.27
	Transfer-01/06/2017 (Sale)	(254,683)	(0.14)	4,022,720	2.13
	Transfer-01/13/2017 (Sale)	(252,454)	(0.13)	3,770,266	2.00
	Transfer-01/20/2017 (Sale)	(737,566)	(0.39)	3,032,700	1.61
	Transfer-01/27/2017 (Sale)	(592,700)	(0.31)	2,440,000	1.29
	At the end of the year			2,440,000	1.29
7	Franklin India Smaller Companies Fund				
	At the beginning of the year	1,449,898	0.77		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-04/08/2016 (Purchase)	950	0.00	1,450,848	0.77
	Transfer-04/15/2016 (Purchase)	2,578	0.00	1,453,426	0.77
	Transfer-04/22/2016 (Purchase)	200,000	0.11	1,653,426	0.88
	Transfer-07/08/2016 (Sale)	(34,959)	(0.02)	1,618,467	0.86
	Transfer-07/15/2016 (Sale)	(115,041)	(0.06)	1,503,426	0.80
	Transfer-10/07/2016 (Sale)	(70,406)	(0.04)	1,433,020	0.76
	Transfer-10/14/2016 (Sale)	(29,594)	(0.02)	1,403,426	0.74
	Transfer-11/25/2016 (Purchase)	266,287	0.14	1,669,713	0.89
	Transfer-12/02/2016 (Purchase)	104,592	0.06	1,774,305	0.94
	Transfer-03/17/2017(Purchase)	600,000	0.32	2,374,305	1.26
	At the end of the year			2,374,305	1.26
8	Aadi Financial Advisors LLP				
	At the beginning of the year	-	-		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/15/2016 (Purchase)	2,200,000	1.17	2,200,000	1.17
	Transfer-12/02/2016 (Sale)	(16,491)	(0.01)	2,183,509	1.16
	At the end of the year			2,183,509	1.16
9	HDFC Trustee Company Limited A/c - HDFC Balanced Fund				
	At the beginning of the year	1,410,000	0.75		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-04/15/2016 (Purchase)	13,500	0.01	1,423,500	0.76
	Transfer-11/25/2016 (Purchase)	294,500	0.16	1,718,000	0.91
	Transfer-12/16/2016 (Purchase)	100,000	0.05	1,818,000	0.96
	At the end of the year			1,818,000	0.96
10	L and T Mutual Fund Trustee Ltd - L and T India Prudence Fund				
	At the beginning of the year	-	-		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/08/2016 (Purchase)	900,000	0.48	900,000	0.48
	Transfer-07/15/2016 (Purchase)	640,000	0.34	1,540,000	0.82
	Transfer-11/11/2016 (Purchase)	50,000	0.03	1,590,000	0.84
	Transfer-11/18/2016 (Purchase)	25,000	0.01	1,615,000	0.86
	Transfer-11/25/2016 (Purchase)	2,554	0.00	1,617,554	0.86
	Transfer-12/02/2016 (Purchase)	159,000	0.08	1,776,554	0.94
	At the end of the year			1,776,554	0.94
11	HDFC Trustee Company Limited - HDFC Tax Saverfund				
	At the beginning of the year	2,088,632	1.11		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-10/21/2016 (Sale)	(88,632)	(0.05)	2,000,000	1.06
	Transfer-10/28/2016 (Sale)	(107,000)	(0.06)	1,893,000	1.00
	Transfer-11/04/2016 (Sale)	(319,000)	(0.17)	1,574,000	0.83
	At the end of the year			1,574,000	0.83

## Extract of Annual Return

Sl. No.	For each of the top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of Shares	% of total Shares of the Company	No. of Shares	% of total Shares of the Company
12	The New India Assurance Company Limited				
	At the beginning of the year	2,190,316	1.16		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-05/06/2016 (Sale)	(58,669)	(0.03)	2,131,647	1.13
	Transfer-05/13/2016 (Sale)	(156,103)	(0.08)	1,975,544	1.05
	Transfer-05/20/2016 (Sale)	(62,890)	(0.03)	1,912,654	1.01
	Transfer-05/27/2016 (Sale)	(22,338)	(0.01)	1,890,316	1.00
	Transfer-06/03/2016 (Sale)	(35,000)	(0.02)	1,855,316	0.98
	Transfer-06/10/2016 (Sale)	(4,144)	(0.00)	1,851,172	0.98
	Transfer-06/30/2016 (Sale)	(45,387)	(0.02)	1,805,785	0.96
	Transfer-09/23/2016 (Sale)	(25,223)	(0.01)	1,780,562	0.94
	Transfer-09/30/2016 (Sale)	(88,743)	(0.05)	1,691,819	0.90
	Transfer-11/04/2016 (Sale)	(81)	(0.00)	1,691,738	0.90
	Transfer-11/11/2016 (Sale)	(16,265)	(0.01)	1,675,473	0.89
	Transfer-11/04/2016 (Sale)	(319,000)	(0.17)	1,356,473	0.72
	At the end of the year			1,356,473	0.72
13	Nalanda India Fund Limited				
	At the beginning of the year	16,793,362	8.91		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/08/2016 (Sale)	(1,840,000)	(0.98)	14,953,362	7.94
	Transfer-07/15/2016 (Sale)	(14,953,362)	(7.94)	-	-
	At the end of the year	-	-	-	-
14	Nalanda India Equity Fund Limited				
	At the beginning of the year	4,478,619	2.38		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-07/08/2016 (Sale)	(460,000)	(0.24)	4,018,619	2.13
	Transfer-07/15/2016 (Sale)	(4,018,619)	(2.13)	-	-
	At the end of the year	-	-	-	-
15	ICICI Prudential Life Insurance Company Limited				
	At the beginning of the year	2,002,948	1.06		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-04/08/2016 (Purchase)	395	0.00	2,003,343	1.06
	Transfer-07/15/2016 (Sale)	(81,000)	(0.04)	1,922,343	1.02
	Transfer-07/22/2016 (Sale)	(9,290)	(0.00)	1,913,053	1.02
	Transfer-08/05/2016 (Sale)	(136,190)	(0.07)	1,776,863	0.94
	Transfer-02/17/2017 (Sale)	(1,776,863)	(0.94)	-	-
	At the end of the year	-	-	-	-
16	Kotak Mahindra (International) Limited				
	At the beginning of the year	2,005,766	1.06		
	Transactions during the year ended 31 <sup>st</sup> March 2017				
	Transfer-03/17/2017 (Sale)	(2,005,766)	(1.06)	-	-
	At the end of the year	-	-	-	-

### Notes:

- As the Company is listed, its shares are traded on a daily basis and hence the above dates refer to the respective beneficiary position dates.
- The above list comprises top 10 shareholders as on 1<sup>st</sup> April 2016 and as on 31<sup>st</sup> March 2017.
- The % change in holding despite nil changes during the year is on account of increase in share capital upon allotment of equity shares to employees who have exercised their Stock Options under the Company's ESOP Scheme, 2007.

## Extract of Annual Return

### (v) Shareholding of Directors and Key Managerial Personnel

Sl. No.	For each of the Directors and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of Shares	% of total Shares of the Company	No. of Shares	% of total Shares of the Company
1	M M Murugappan				
	At the beginning of the year	696,340	0.37		
	Transaction during the year ended 31 <sup>st</sup> March 2017	-	-	-	-
	At the end of the year			696,340	0.37
2	M A M Arunachalam				
	At the beginning of the year	1,100,600	0.58		
	Transaction during the year ended 31 <sup>st</sup> March 2017	-	-	-	-
	At the end of the year			1,100,600	0.58
3	K Srinivasan				
	At the beginning of the year	295,530	0.16		
	Transaction during the year ended 31 <sup>st</sup> March 2017				
	Allotment of equity shares on exercise of Options under the ESOP Scheme 2007 - 29.08.2016	25,000	0.01	320,530	0.17
	Allotment of equity shares on exercise of Options under the ESOP Scheme 2007 - 20.10.2016	10,000	0.01	330,530	0.18
	Allotment of equity shares on exercise of Options under the ESOP Scheme 2007 - 30.12.2016	5,000	0.00	335,530	0.18
	Allotment of equity shares on exercise of Options under the ESOP Scheme 2007 - 19.01.2017	10,000	0.01	345,530	0.18
	Allotment of equity shares on exercise of Options under the ESOP Scheme 2007 - 30.03.2017	12,000	0.01	357,530	0.19
	At the end of the year			357,530	0.19
4	Sridharan Rangarajan				
	At the beginning of the year	10,000	0.05		
	Transaction during the year ended 31 <sup>st</sup> March 2017	-	-	-	-
	At the end of the year			10,000	0.05

\* None of the other Directors and Key Managerial Personnel hold shares in the Company.

### V. INDEBTEDNESS OF THE COMPANY INCLUDING INTEREST OUTSTANDING/ACCRUED BUT NOT DUE FOR PAYMENT

₹ million

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
<b>Indebtedness at the beginning of the financial year</b>				
i) Principal Amount	213.32	877.48	-	
ii) Interest due but not paid	-	0.15	-	
iii) Interest accrued but not due	-	-	-	
<b>Total (i+ii+iii)</b>	<b>213.32</b>	<b>877.63</b>	<b>-</b>	<b>1,090.95</b>
<b>Change in Indebtedness during the financial year</b>				
• Addition	246.98	750.00	-	
• Reduction	434.32	1,627.63	-	
<b>Net Change</b>	<b>(187.34)</b>	<b>(877.63)</b>	<b>-</b>	<b>(1,064.97)</b>
<b>Indebtedness at the end of the financial year</b>				
i) Principal Amount	25.98	-	-	25.98
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	-	-	-	-
<b>Total (i+ii+iii)</b>	<b>25.98</b>	<b>-</b>	<b>-</b>	<b>25.98</b>

## Extract of Annual Return

### VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

#### A. Remuneration to Managing Director, Whole-time Directors and/or Manager: Mr. K Srinivasan, Managing Director

₹ million

Sl. no.	Particulars of Remuneration	Total Amount
1	Gross salary	19.13
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	
	(b) Value of perquisites u/s 17(2) of Income-tax Act, 1961	0.03
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	-
2	Stock Option*	-
3	Sweat Equity	-
4	Commission as % of profit	-
5	Others	-
	<b>Total (A)</b>	<b>19.16</b>
	<b>Ceiling as per the Act</b>	<b>87.32</b>

\* The deemed benefit on exercise of Options under the Company's ESOP Scheme 2007 has not been considered as there was no cost to the Company.

#### B. Remuneration to other Directors

₹ million

Sl. no.	Particulars of Remuneration	Name of the Director						Total
1	<b>Independent Directors</b>	<b>T L Palani Kumar</b>	<b>M Lakshminarayan</b>	<b>Shobhan M Thakore</b>	<b>Sanjay Jayavarthanelu</b>	<b>Aroon Raman</b>	<b>Bharati Rao</b>	<b>Total</b>
	Fee for attending Board/ Committee meetings	0.31	0.32	0.19	0.20	0.12	0.20	1.33
	Commission	0.75	0.75	0.75	0.75	0.75	0.75	4.50
	Others	-	-	-	-	-	-	-
	<b>Total (1)</b>	<b>1.06</b>	<b>1.07</b>	<b>0.94</b>	<b>0.95</b>	<b>0.87</b>	<b>0.95</b>	<b>5.83</b>
2	<b>Other Non-Executive Directors</b>	<b>M M Murugappan</b>	<b>M A M Arunachalam</b>					
	Fee for attending Board/ Committee meetings	0.19	0.05					0.24
	Commission	10.00	0.32					10.32
	Others	-	-					-
	<b>Total (2)</b>	<b>10.19</b>	<b>0.37</b>					<b>10.56</b>
	<b>Total Managerial Remuneration (B)=(1+2)</b>							<b>16.39</b>
	<b>Overall ceiling as per the Act excluding sitting fees</b>							<b>17.46</b>

#### C. Remuneration to Key Managerial Personnel other than MD/Manager/WTD

₹ million

Sl. no.	Particulars of Remuneration	Key Managerial Personnel			
		CEO	Company Secretary	CFO	Total
1	Gross salary				
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961		3.32	9.13	12.45
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961		0.02	0.03	0.05
	(c) Profits in lieu of salary under section 17(3) Incometax Act, 1961		-	-	-
2	Stock Option		-	-	-
3	Sweat Equity		-	-	-
4	Commission	NA*	-	-	-
	- as % of profit		-	-	-
	- others		-	-	-
5	Others		-	-	-
	<b>Total</b>		<b>3.34</b>	<b>9.16</b>	<b>12.50</b>

\*The Company has a Managing Director whose details are provided above in VI A.

### VII. PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES AGAINST THE COMPANY, DIRECTORS, OTHER OFFICERS IN DEFAULT IN RESPECT OF PROVISIONS OF THE COMPANIES ACT, 2013 - Nil

**Secretarial Audit Report****for the financial year ended 31<sup>st</sup> March 2017**

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule No.9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,  
The Members,  
**Carborundum Universal Limited**  
Parry House, 43 Moore Street  
Chennai – 600001

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by Carborundum Universal Limited [Corporate Identification Number: L29224TN1954PLC000318] (hereinafter called “the Company”). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of Company’s books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, We hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on 31<sup>st</sup> March, 2017 complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on 31<sup>st</sup> March, 2017 according to the provisions of:

- (i) The Companies Act, 2013 (the Act) and the rules made thereunder and the Companies Act, 1956 to the extent applicable;
- (ii) The Securities Contracts (Regulation) Act, 1956 (‘SCRA’) and the rules made thereunder;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
- (iv) During the year under review the Company has complied with the provisions of Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Overseas Direct Investment. There is no Foreign Direct Investment and External Commercial Borrowings during the year under review;
- (v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 (‘SEBI Act’):-
  - (a) The Securities and Exchange Board of India

(Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

- (b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;
- (c) During the year under review, the Company has not issued any new securities mandating compliance of the provisions of the Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;
- (d) The Employee Stock Option Plan, 2016 approved under the Securities Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 and the Employee Stock Option Scheme, 2007 approved under the Securities Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999.
- (e) During the period under review, the Company has neither issued any debentures nor has any outstanding debentures to be redeemed and hence the compliance of the provisions of the Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 is not applicable;
- (f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;
- (g) During the year under review, the Company has not delisted its Securities from any of the Stock Exchanges in which it is listed and hence the compliance of the provisions of the Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009 is not applicable; and
- (h) The Company has not bought back any shares during the period under review and hence the provisions of compliance of the Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998 is not applicable;
- (vi) We have reviewed the systems and mechanisms established by the Company for ensuring compliances under the other applicable Acts, Rules, Regulations and Guidelines prescribed under various laws which are applicable to the Company and categorized under the following major heads/groups:
  1. Factories Act, 1948;
  2. Labour laws and other incidental laws related to labour and employees appointed by the Company

including those on contractual basis as relating to wages, gratuity, prevention of sexual harassment, dispute resolution, welfare, provident fund, insurance, compensation, etc.;

3. Industries (Development & Regulation) Act, 1991;
4. Acts relating to consumer protection including The Competition Act, 2002;
5. Acts and Rules prescribed under prevention and control of pollution;
6. Acts and Rules relating to Environmental protection and energy conservation;
7. Acts and Rules relating to hazardous substances and chemicals;
8. Acts and Rules relating to electricity, fire, petroleum, drugs, motor vehicles, explosives, boilers etc.;
9. Acts relating to mining activities;
10. Acts relating to protection of IPR;
11. The Information Technology Act, 2000;
12. Land revenue laws and
13. Other local laws as applicable to various plants and offices.

With respect to Fiscal laws such as Income Tax, Professional Tax, Central Sales Tax & Local Sales Tax, etc., based on the information and explanation provided to us by the management and officers of the Company and certificates placed before the Board of Directors, we report that adequate systems are in place to monitor and ensure compliance of fiscal laws as mentioned above.

We have also examined compliance with the applicable clauses / regulations of the following:

- (i) Secretarial Standards with respect to Meetings of Board of Directors (SS-1) and General Meetings (SS-2) issued by The Institute of Company Secretaries of India.
- (ii) The Uniform Listing Agreement entered into with BSE Limited and the National Stock Exchange of India Limited pursuant to the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. mentioned above.

#### **We further report that**

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The change in the composition of the Board of Directors that took place during the period under review was carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors before the schedule of

the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting. Agenda / notes on agenda which are circulated less than the specified period, the necessary compliances under the Companies Act, 2013 and Secretarial Standards on Board Meetings are complied with. There are certain businesses that can be transacted through Video Conferencing / Audio Visual means as provided for under the Companies Act, 2013 and the relevant Rules made there under. The Company has properly convened & recorded in compliance with Rule 3 of Companies (Meetings of Board and its Powers) Rules, 2014 businesses that have been transacted through Video Conferencing / Audio Visual means.

Based on the verification of the records and minutes, the decisions were carried out with the consent of the Board of Directors / Committee Members and no Director / Member dissented on the decisions taken at such Board / Committee Meetings. Further, in the minutes of the General Meeting including the resolutions passed through Postal Ballot, the number of votes cast against the resolutions has been recorded.

**We further report that** based on the review of compliance mechanism established by the Company, we are of the opinion that the management has adequate systems and processes commensurate with its size and operations, to monitor and ensure compliance with all applicable laws including labour laws, rules, regulations and guidelines.

**We further report that** during the audit period, the Company has obtained the approval of the Shareholders by way of Postal Ballot in respect of the following:

- a) Approval under Section 14 of the Act for amending the existing Articles of Association ('AOA') of the Company with the adoption of new set of AOA in alignment with the provisions of the Act.
- b) Approval under Section 62(1)(b) of the Act for the Carborundum Universal Limited Employee Stock Option Plan 2016 ('ESOP 2016') and grant of Stock Options to employees of the Company and its subsidiaries under the ESOP 2016.

**For R. Sridharan & Associates**  
Company Secretaries

**CS R.Sridharan**

CP No. 3239

FCS No. 4775

UIN : S2003TN063400

Chennai

May 9, 2017

# Corporate Governance Report

[Pursuant to Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015]

Corporate Governance refers to a system of rules, practices and processes by which a Company is directed and controlled. It provides the structure through which a Company sets its objectives and the framework within which these objectives are pursued in the context of the social, regulatory and market environment.

Governance essentially involves aligning the interests of the various stakeholders in a Company and encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosures.

## 1. CUMI'S CORPORATE GOVERNANCE PHILOSOPHY

Carborundum Universal Limited ("CUMI"), a constituent of the Murugappa Group, is committed to the highest standards of Corporate Governance in all its activities and processes. Key elements in Corporate Governance are transparency, internal controls, risk management, internal/external communications and good standards of safety, health, environment and quality. The Board recognises that governance expectations are constantly evolving and is committed to keeping its governance standards under continuous review to meet both letter and spirit of the law and its own demanding levels of business ethics. CUMI considers Corporate Governance as the cornerstone for sustained superior performance and for serving all its stakeholders. The Company's continuing contribution to the society through meaningful Corporate Social Responsibility initiatives, be it direct initiatives in the establishment and administration of CUMI Skill Development Centre or indirect initiatives through contributions to eligible implementing agencies in the core sectors of health & education, plays a significant role in its governance standards. The entire process begins with the functioning of the Board of Directors, with leading professionals and experts serving as Independent Directors and representing in various Board Committees.

The Company has always believed in and practices the highest standards of Corporate Governance since its inception and considers that sound governance practices are crucial for its smooth and efficient operations as well as its ability to attract investments, balancing the interests of all its stakeholders and providing shareholder value. The behaviour and ethics of an organisation are considered to be two defining characteristics of any Company critical to not only successful leadership but also in ensuring long term sustainability. CUMI's ethical and responsible behaviour complements its corporate culture which is guided by the following norm:

"The fundamental principle of economic activity is that no man you transact with will lose; then you shall not".

The Corporate Governance philosophy of the Company is driven by the fundamental principles of:

- Adhering to the governance standards beyond the letter of law;
- Maintaining transparency and high degree of disclosure levels;
- Maintaining clear distinction between personal and corporate interest;
- Having a transparent corporate structure driven by business needs; and
- Ensuring compliance with applicable laws.

The Company's constant endeavour for corporate excellence has been well recognised through incessant awards and accolades reiterating its commitment to governance standards.

## 2. BOARD OF DIRECTORS

The Board being aware of its fiduciary responsibilities, recognises its responsibilities towards all stakeholders and to uphold highest standards in all matters concerning the Company. It has empowered responsible persons to implement its broad policies and guidelines besides setting up adequate review processes.

The Board provides strategic guidance on affairs of the Company in addition to reviewing the performance and monitoring the implementation of plans periodically. The Independent Directors provide an objective judgement on matters placed before them.

The Company's day to day affairs are managed by the Managing Director, assisted by a competent Management team under the overall supervision of the Board. The Company's commitment to ethical and lawful business conduct is a fundamental shared value of the Board, Senior Management and all its employees.

Consistent with its Values and Beliefs represented by the Five Lights - spirit of the Murugappa Group, the Company has formulated a Code of Conduct applicable to the Board and Senior Management which is posted on the website of the Company at <https://www.cumi-murugappa.com/policies.html>. An annual declaration is obtained from every person covered by the Code of Conduct. A declaration to this effect signed by the Managing Director is annexed to this Report.

The Board is committed to representing the long-term interests of the stakeholders, providing effective governance over the Company's affairs and exercising reasonable business judgement on the affairs of the Company.

## 2.1 Composition

The Board has been constituted in an appropriate manner, to preserve its independence and to separate the Board functions of governance and management. The Board members are eminent persons and have collective experience in diverse fields of technology, engineering, banking, management, legal and compliance. The Directors are elected based on their qualification and experience in varied fields. The Board has formulated a

Board Diversity policy to ensure an optimum composition such that the talent of all members of the Board blend together to be as effective as possible. The Board has an appropriate mix of Executive/Non-Executive as well as Independent Directors including a Woman Director to ensure proper governance and management.

As at 31<sup>st</sup> March 2017, the Board comprises 9 members with a majority of them being Independent Directors.

The details of the Board members as on 31<sup>st</sup> March 2017 are as follows:

Name	Category	No. of Directorships/ (Chairmanships) in companies including CUMI <sup>(a)</sup>	No. of Committee memberships/ (Chairmanships) in companies including CUMI <sup>(b)</sup>	No. of Board meetings attended	Attendance at last AGM	Shares held in CUMI
M M Murugappan DIN - 00170478	Promoter & Non-Executive Director	10 (5)	9 (4)	5	Yes	696,340
T L Palani Kumar DIN - 00177014	Non-Executive & Independent Director	2	1 (1)	5	Yes	Nil
M Lakshminarayan DIN - 00064750	Non-Executive & Independent Director	8 (2)	4 (2)	5	Yes	Nil
Shobhan M Thakore DIN - 00031788	Non-Executive & Independent Director	10 (1)	10 (2)	5	Yes	Nil
Sanjay Jayavarthanavelu DIN - 00004505	Non-Executive & Independent Director	10 (4)	2	4	Yes	Nil
Aroon Raman DIN - 00201205	Non-Executive & Independent Director	4	3	4	Yes	Nil
Bharati Rao DIN - 01892516	Non-Executive & Independent Director	10	8 (1)	4	Yes	Nil
M A M Arunachalam DIN - 00202958	Promoter & Non-Executive Director	3	2 (1)	2*	NA	1,100,600
K Srinivasan DIN - 00088424	Managing Director	3	3	5	Yes	357,530

(a) Excluding Alternate Directorships and Directorships in Foreign companies, Private companies (which are not subsidiary or holding company of a Public company) and Section 8 companies;

(b) Only Audit & Stakeholders Relationship Committee of Public companies;

(c) Inter-se relationship between Directors - Nil

(d) Mr. P S Raghavan and Mr. Sujain S Talwar were appointed as Directors on 9<sup>th</sup> May 2017.

\* Appointed as an Additional Director w.e.f. 28<sup>th</sup> October 2016

## 2.2 Changes in Board composition during the financial year 2016-17

During the year ended 31<sup>st</sup> March 2017, there were no other changes in the Board composition other than as detailed below:

Name	Category	Nature of change	Remarks
M A M Arunachalam	Promoter & Non-Executive Director	Appointed as an Additional Director	Shareholders' approval for his appointment as a Director u/s 152 of the Companies Act, 2013 is being sought at the 63 <sup>rd</sup> AGM.

## 2.3 Board Meetings

The Board meets at regular intervals and has a formal schedule of matters reserved for its consideration and decision to ensure that it exercises full control over significant, strategic, financial, operational and compliance matters. These include setting performance targets, reviewing operational and financial performance against set targets, evolving strategy, approving investments, ensuring adequate availability of financial resources, overseeing risk management and reporting to the shareholders.

The Board is regularly briefed and updated on key business activities and is provided with presentations and information on the operations, financial performance and other matters concerning the Company. Besides, information on statutory compliance of applicable laws, minutes of meetings of the Committees of the Board, summary of decisions taken at the Board meetings of the subsidiary companies and information required under the Listing Regulations are provided to the Board on a quarterly basis. The Board periodically reviews the compliance of applicable laws and gives appropriate directions, wherever necessary. Timely and relevant information is provided by the Company to the Directors to facilitate effective participation and contribution during the meetings.

The Company has laid down procedures to inform the Board members about the risk assessment and minimisation procedures. The Board reviews the significant business risks identified by the Management and the mitigation process being undertaken.

The Board periodically reviews the matters required to be placed before it, monitors the overall performance of the Company and inter alia reviews and approves the quarterly financial statements, business plan, capital expenditure etc.

The dates of the Board meetings are fixed in advance for the full calendar year to enable maximum attendance from the Board members. During the year ended 31<sup>st</sup> March 2017, five Board meetings were held on 4<sup>th</sup> May 2016, 3<sup>rd</sup> August 2016, 28<sup>th</sup> October 2016, 4<sup>th</sup> February 2017 and 27<sup>th</sup> March 2017. As required under the Companies Act, 2013, the Company facilitates participation of a Director who is unable to attend the Board/Committee meetings physically, through video conference or other audio visual means in the manner prescribed under the relevant regulations.

During the year ended 31<sup>st</sup> March 2017, there was no Indian subsidiary Company which could be classified as material non-listed Indian subsidiary as per the terms of the

Listing Regulations i.e., whose net worth exceeds 20% of the consolidated net worth of the Company or which has generated more than 20% of the consolidated income of the Company in the preceding financial year. The Board reviews the significant transactions and arrangements of the unlisted subsidiary companies besides being apprised of their business plan and performance. The Company has also formulated a policy for determining 'material subsidiaries' in line with the requirements of the Listing Regulations. A copy of the policy is available on the website of the Company and the link is <https://www.cumi-murugappa.com/policies.html>.

In line with the Companies Act, 2013 and the Listing Regulations, the following policies have been duly adopted by the Board and posted on the website of the Company:

- Policy for determining 'materiality' for disclosure of events/informations to stock exchanges.
- Policy for preservation and archival of documents.
- Dividend Distribution Policy.

The Board periodically reviews the policies approved by it and during the year ended 31<sup>st</sup> March 2017, a consolidated review of the policies of the Company was conducted by it.

## 2.4 Separate Meeting of Independent Directors

Besides the formal Board meetings, the Independent Directors hold meetings without the participation of Non-Independent Directors and members of the Management. During the year, two meetings of the Independent Directors were held on 4<sup>th</sup> May 2016 and 27<sup>th</sup> March 2017. The Independent Directors at these meetings reviewed the performance of Non-Independent Directors and the Board as a whole, reviewed the performance of the Chairman taking into account views of the Executive and Non-Executive Directors and also assessed the quality, quantity and timeliness of flow of information between the Management and the Board.

## 2.5 Board familiarisation

The members of the Board are provided with many opportunities to familiarise themselves with the Company, its Management and operations. At the time of appointing a Director, a formal letter of appointment is given to him/her, along with a Directors' handbook which inter alia explains the role, function, duties and responsibilities expected of him/her as a Director of the Company. The handbook also enumerates the list of compliance obligations and other disclosures required from the Director under the Companies

Act, Listing Regulations and other relevant regulations. Newly inducted Audit Committee members are provided with an Audit Committee manual which broadly covers the regulatory scenario in India, current practices in the Company, Indian and Global best practices etc. These handbooks are updated periodically for regulatory as well as policy changes and updated copies of the handbooks are provided to all the Directors. Further, the Code of Conduct which includes the values, principles and beliefs guiding the Company and the duties and responsibilities of the Directors including an Independent Director is given to the Director at the time of induction as well as annually. In addition, the Board members have opportunity and access to interact with the Senior Management.

By way of an introduction to the Company, the newly inducted Director is presented with a corporate dossier which traces the Company's history over 60 years of its existence and gives a glimpse of value chain of its products. The Managing Director at the first Board meeting in which the new Director participates or at a mutually convenient time makes a detailed presentation on the Company, its various business segments and profile, manufacturing locations, organisation structure and other market related information. Exclusive plant visits are also organised for the new Director. Further, with a view to familiarise the existing Directors with the Company's operations on an ongoing basis, plant visits are periodically organised for the Directors. During the year, Mr. M A M Arunachalam visited the Tiruvottiyur facility and had interactions with the operating team at the facility. Further, Mr. T L Palani Kumar visited the Kalamassery, Cochin plant and participated in the inaugural function of the Electrominerals complex at Cochin during the year. In the backdrop of a dynamic regulatory scenario, regulatory changes impacting the Company is briefed at every meeting on a quarterly basis.

The above initiatives help the Directors to understand the Company, its businesses and the regulatory framework in which the Company operates, thus enabling him/her to effectively fulfil their role as a Director of the Company. The details of the familiarisation programme is also uploaded and is available on the Company's website at the following link <https://www.cumi-murugappa.com/policies.html>.

## 2.6 Board evaluation

During the year, the Board conducted an evaluation of its own performance, individual Directors as well as the working of the Committees as per the Board evaluation framework adopted by it. The manner and criteria for the evaluation of the Directors including the Independent Directors of the Company is detailed in the Directors' Report.

## 3. BOARD COMMITTEES

The Board has constituted various Committees for support in discharging its responsibilities. There are five Committees constituted by the Board - Audit Committee, Nomination and Remuneration Committee, Risk Management Committee, Stakeholders Relationship Committee and Corporate Social Responsibility Committee. The Company Secretary acts as the Secretary of the Committees of the Board.

The Board at the time of constitution of each Committee determines the terms of reference and also delegates further powers from time to time. Various recommendations of the Committees are submitted to the Board for consideration & approval and the minutes of all meetings of the Committees are circulated to the Board for information.

In addition to the above, the Board from time to time constitutes committees of Directors for specific purposes. During the year, no meetings of such Committees were held.

### 3.1 Audit Committee

#### Terms of Reference

The role of the Audit Committee includes overseeing the financial reporting process and disclosure of financial information, review of financial statements before submission to the Board, review of adequacy of internal control system, findings of internal audit, whistle blower mechanism, related party transactions, scrutiny of inter-corporate loans & investments, approval and review of related party transactions, valuation of assets/undertakings of the Company, appointment of registered valuers etc., besides recommending the appointment of Auditors and their remuneration to the Board as well as approval of payments to Statutory Auditors for non-audit services and review of effectiveness of audit process. The Audit Committee also reviews the financial statements of unlisted subsidiary companies, in particular, the investments made by them.

#### Composition & Meetings

The Audit Committee comprises entirely Independent Directors and all members of the Committee are financially literate. The Chairman of the Board, the Statutory Auditor, Internal Auditor and members of the Management Committee are invited to attend all meetings of the Committee. The Cost Auditor is invited to attend meetings in which the Cost Audit Report is being considered. Further, as a good Corporate Governance practice, a separate discussion of the Committee with the Statutory Auditors and the Internal Auditors without the presence of the Management team is held periodically.

During the year, the Committee had five meetings for reviewing the financial statements and considering the internal audit reports and audit plan. Composition and attendance of the Committee members at the meetings held during the year are given below:

Name of member*	No. of meetings attended (No. of meetings held)
T L Palani Kumar (Chairman)	5 (5)
M Lakshminarayan	4 (5)
Sanjay Jayavarthanavelu	4 (5)
Bharati Rao	4 (5)

\*Mr. Sujjain S Talwar was inducted as a member on 9<sup>th</sup> May 2017.

## 3.2 Nomination and Remuneration Committee

### Terms of Reference

The role of the Committee is to (a) recommend to the Board the appointment of Directors (b) recommend re-election of Directors retiring by rotation (c) recommend the remuneration including pension rights and periodic increments of the Managing/Wholetime Director(s) (d) determine the annual incentive of the Managing/Wholetime Director(s) (e) recommend to the Board, the commission payable annually to each of the Non-Wholetime Directors, within the limits fixed by shareholders (f) formulate, implement, administer and superintend the Employee Stock Option Plan/Scheme(s) of the Company (g) formulating criteria for appointment of Directors and Senior Management and identification of persons who may be qualified to be appointed in these positions (h) devise policy on Board diversity (i) formulate criteria for evaluation of Independent Directors/Board, evaluation of the Directors' performance (j) recommend Remuneration policy to the Board (k) ensuring Board Diversity etc.

The Committee has formulated the criteria for determining the qualifications, positive attributes and independence of a Director and the criteria for Senior Management positions in terms of Section 178(3) of the Companies Act, 2013 besides laying down the criteria for Board evaluation. The Board evaluation including that of the Independent Directors is done based on the evaluation framework detailed elsewhere in the Directors' Report. During the year under review, the Nomination and Remuneration Committee conducted a review of the existing evaluation framework in the background of the guidance note issued by SEBI in this regard. The Company also has in place a Board approved policy relating to the remuneration for Directors, Key Managerial Personnel and other employees which had been duly

recommended by the Committee. The policy is available in the link <https://www.cumi-murugappa.com/policies.html>.

### Board Diversity Policy

The Company recognises and embraces the benefits of having a diverse Board and the Board diversity policy sets out the approach in this regard. A truly diverse Board comprising of appropriately qualified people with a broad range of experience relevant to the business of the Company, is integral to its success and is also an essential element in maintaining a competitive advantage on a sustainable basis.

In line with the policy, the Board is balanced by members having complementary knowledge, expertise and skills in areas such as business strategy, finance, legal, marketing, manufacturing, technology and such other areas that the Board considers desirable.

### Criteria for Board Nomination

The Nomination and Remuneration Committee is responsible for identifying persons for initial nomination as Directors as well as evaluating incumbent Directors for their continued service. The Committee has formulated a criteria in terms of Section 178 of the Companies Act, 2013 and the Listing Regulations inter alia detailing the qualifications in terms of personal traits, experience & background, fit & proper, positive attributes and independence standards to be considered for nominating candidates for Board positions/re-appointment of Directors.

### Criteria for Senior Management

The Nomination and Remuneration Committee is also responsible for identifying persons who are qualified to be appointed in Senior Management. The Committee has formulated a criteria in terms of personal traits, competencies, experience & background, etc. to be considered for nominating candidates to Senior Management positions.

### Composition & Meetings

The Committee comprises three members with all of them being Independent Directors. The Committee met on four occasions during the year. The composition and attendance of Committee members are given below:

Name of member*	No. of meetings attended (No. of meetings held)
M Lakshminarayan (Chairman)	4 (4)
T L Palani Kumar	4 (4)
Shobhan M Thakore	3 (4)

\*Mr. Aroon Raman and Mr. Sanjay Jayavarthanavelu were inducted as members on 9<sup>th</sup> May 2017.

### 3.3 Risk Management Committee

#### Terms of Reference

The Board has constituted a Risk Management Committee for monitoring the risk management process in the Company.

The role of this Committee is to review the annual risk management framework to ensure that they are comprehensive & well developed, to periodically review the process for systematic identification and assessment of the business risks, to assess the critical risk exposures by specialised analysis and quality reviews and report to the Board the details of any significant developments relating to these and the steps being taken to manage the exposures, identify and make recommendations to the Board, to the extent necessary on resources action and staffing required for effective risk management.

#### Composition & Meetings

The Committee comprises an Independent Director who is the Chairman of the Committee and the Managing Director. The Management Committee members comprising the Senior Management executives are invited to the Committee meetings.

The Committee met on two occasions during the year. The composition and attendance of Committee members are given below:

Name of member*	No. of meetings attended (No. of meetings held)
M Lakshminarayan (Chairman)	2 (2)
K Srinivasan	2 (2)

\*Mr. Aroon Raman and Mr. P S Raghavan were inducted as members on 9<sup>th</sup> May 2017.

### 3.4 Stakeholders Relationship Committee

#### Terms of Reference

The terms of reference of this Committee includes formulation of investors' servicing policies, review of redressal of investors complaints and approval/overseeing of transfers, transmissions, transpositions, splitting, consolidation of securities, issue of certificates, demat/remat requests, finalisation of terms of issue of debt instruments including debentures, approval of their allotment, administering the unclaimed shares suspense account, authorising the terms of various borrowings & creating security in respect thereof, allotment of shares on exercise of options by employees under the Employees Stock Option Scheme and performing other functions as delegated to it by the Board from time to time.

#### Composition & Meetings

The Committee met on four occasions during the year.

The composition and attendance of Committee members are given below:

Name of member*	No. of meetings attended (No. of meetings held)
M M Murugappan (Chairman)	4 (4)
K Srinivasan	4 (4)

\*Mr. M A M Arunachalam was inducted as a member on 9<sup>th</sup> May 2017.

During the year, there were three investor service complaints. Two pertained to dividend servicing and one pertained to transmission of shares. All the three grievances were resolved to the satisfaction of the shareholders. There were no investor service complaints pending as at 31<sup>st</sup> March 2017.

Mrs. Rekha Surendhiran, Company Secretary continues to be the Compliance Officer for the purpose of compliance with the requirements of the Listing Regulations.

Karvy Computershare Private Limited, Hyderabad, is the Company's Registrar and Share Transfer Agent (RTA). The contact details are available in the General Shareholder Information section of the Report.

### 3.5 Corporate Social Responsibility Committee

#### Terms of Reference

The Board has constituted a Corporate Social Responsibility (CSR) Committee in line with the requirements of the Companies Act, 2013 for assisting the Board in discharging its corporate social responsibility. The Board has approved a CSR policy formulated and recommended by the Committee which is uploaded and available on the Company's website at the following link <https://www.cumi-murugappa.com/policies.html>. The functions of the Committee include recommending the amount of expenditure to be incurred on the CSR activities, monitoring the implementation of CSR activities as per the CSR policy of the Company from time to time etc.

#### Composition & Meetings

The Committee comprises two Independent Directors and the Managing Director as its members. The Management Committee members are invited to the Committee meetings.

The Committee met on two occasions during the year. The composition and attendance of Committee members are as follows:

Name of member*	No. of meetings attended (No. of meetings held)
Shobhan M Thakore (Chairman)	1 (2)
Aroon Raman	1 (2)
K Srinivasan	2 (2)

\*Mr. P S Raghavan was inducted as a member on 9<sup>th</sup> May 2017.

## 4. DIRECTORS' REMUNERATION

### 4.1 Policy

The ability to attract and retain talented and quality resources is a significant characteristic of any successful organisation. The Company's Remuneration policy formulated by the Nomination and Remuneration Committee provides the framework for remuneration of the Board members as well as all employees including the Key Managerial Personnel. This policy is guided by the principles and objectives as enumerated in Section 178 of the Companies Act, 2013 and Listing Regulations to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance of the Company.

The compensation of the Managing Director comprises a fixed component and a performance incentive based on certain pre-agreed parameters. The compensation is determined based on levels of responsibility and scales prevailing in the industry. The Managing Director is not paid sitting fees for any Board/Committee meetings attended by him. The Managing Director is also eligible for employee Stock Options.

Equity based compensation is considered to be an integral part of employee compensation across various sectors which enables alignment of personal goals of employees with organisational objectives. Under the Employee Stock Option Scheme 2007, the Managing Director was granted options, the summary of which is given in this report. No fresh grants were made under the scheme during the year. The Company with the approval of the shareholders through a postal ballot on 9<sup>th</sup> January 2017 has introduced and implemented a new Employee Stock Option Plan 2016, under which the Managing Director has been granted 370,400 options.

The compensation to the Non-Executive Directors takes the form of commission on profit. Though shareholders have approved payment of commission up to one per cent of net profit of the Company for each year, the actual commission paid to the Directors is restricted to a fixed sum within the above limit. This sum is reviewed periodically taking into consideration various factors such as performance of the Company, time spent by the Directors for attending to the affairs and business of the Company and extent of responsibilities cast on Directors under general law and other relevant factors.

In keeping with evolving trends in industry, the practice of paying differential commission to Directors based on time spent

by them has also been adopted. Given the size and nature of its operations and also the rich experience that the Chairman possesses in the field of engineering, a considerable amount of time is spent by him in connection with the operations of the Company. Apart from playing an active role in guiding and advising on matters connected with strategy and management, he spends considerable time on developing/managing relationships with the Company's business partners both in India and overseas. The Chairman also plays an active role in matters connected with CUMI's organisation culture which is critical for the Company to deliver superior performance besides devoting time for technology related issues impacting the Company. Further, the Chairman spends a lot of time participating in various events, conclaves and functions of Industry bodies, Academic Institutions and interactions with high level State Authorities representing the Company.

The Non-Executive Directors are also paid sitting fees within the limits prescribed under the Companies Act, 2013 for every Board/Committee meetings attended by them.

### 4.2 Remuneration for FY 2016-17

#### Non-Executive Directors ₹ million

Name	Sitting Fees	Commission <sup>@</sup>
M M Murugappan	0.19	10.00
T L Palani Kumar	0.31	0.75
M Lakshminarayan	0.32	0.75
Shobhan M Thakore	0.19	0.75
Sanjay Jayavarthanavelu	0.20	0.75
Aroon Raman	0.12	0.75
Bharati Rao	0.20	0.75
M A M Arunachalam	0.05	0.32
Total	1.56	14.82

@will be paid after adoption of accounts by shareholders at the 63<sup>rd</sup> Annual General Meeting.

#### Managing Director ₹ million

Name	K Srinivasan	
Fixed Component	Salary & Allowances	12.22
	Retirement benefits*	2.93
	Perquisites	0.03
Variable Component	Incentive <sup>(a)</sup>	3.98

\* includes contribution to National Pension System of PFRDA.

- (a) Represents incentive paid in financial year 2016-17 in respect of the financial year 2015-16
- (b) As per the terms of his remuneration, the Managing Director is eligible for an annual incentive based on a balanced scorecard which comprises Company financials, Company scorecard and personal objectives. For financial year 2016-17 a sum of ₹5.19 million has been provided in the accounts for this purpose.

The actual amount will be decided by the Nomination and Remuneration Committee in July 2017.

- (c) With respect to the employee Stock Options granted to the employees under the Employees Stock Option Scheme, 2007 and the Employee Stock Option Plan 2016, the Options are accounted based on fair value, as prescribed by the Indian Accounting Standards (IND AS). During the year, 370,400 Stock Options were granted to Mr. K Srinivasan under the Employee Stock Option Plan 2016. The Options are granted at the closing market price prior to the date of the grant. No Stock Options were granted to him under the Employee Stock Option Scheme, 2007 (grants discontinued since February 2012).

As required under Listing Regulations, the details of the Options granted to and held by Mr. K Srinivasan under Company's ESOP Scheme/Plan are given below:

Particulars	No. of Shares	
	Employee Stock Option Scheme, 2007 <sup>(i)</sup>	Employee Stock Option Plan 2016 <sup>(ii)</sup>
Options granted	443,800	370,400
Options vested	443,800	-
Options cancelled	66,570	-
Options lapsed	-	-
Options exercised	339,230	-
Options outstanding	38,000	370,400
Exercise Price	₹91.80/- being the market price prior to the date of grant	₹257.55/- being the market price prior to the date of grant

- (i) The first vesting is exercisable over a period of three years from the date of vesting. The second, third, and fourth vesting are exercisable over a period of 6 years from the date of vesting.
- (ii) Options which would vest under the Employee Stock Option Plan 2016 are exercisable over a period of five years from the date of vesting.

## 5. GENERAL BODY MEETINGS

### 5.1 Last three Annual General Meetings

Financial Year	Date	Time	Venue
2013-14	01.08.2014	3.00 PM	Tamil Isai Sangam, Rajah Annamalai Mandram, 5, Esplanade Road, Chennai - 600108
2014-15	03.08.2015	3.00 PM	TTK Auditorium, Music Academy, 168 (Old No.306) TTK Road, Royapettah, Chennai - 600014
2015-16	03.08.2016	3.00 PM	TTK Auditorium, Music Academy, 168 (Old No.306) TTK Road, Royapettah, Chennai 600014

### 5.2 Special Resolutions passed during the last three Annual General Meetings

Sl. No.	Item of business	Passed on
1.	Authorising the Board to borrow a sum of ₹5000 million over above the paid up capital and free reserves either by way of term loans, inter-corporate deposits, external commercial borrowings or by issue of debentures etc. as and when required.	01.08.2014
2.	Authorising the Board to create a mortgage/ charge on the movable and immovable properties of the Company in favour of the lenders/Trustees of the debentures, whenever the Company in the ordinary course of business resorts to borrowings.	01.08.2014
3.	Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis.	03.08.2015
4.	Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis.	03.08.2016

### 5.3 Postal Ballot

During the year, the approval of the shareholders was obtained through postal ballot in respect of three special resolutions (disclosed at the end of this section).

Mr. G Subramaniam of M/s. R Sridharan & Associates, Practising Company Secretaries, was the Scrutiniser for the postal ballot process including e-voting. The results were declared by the Chairman, Mr. M M Murugappan on 11<sup>th</sup> January 2017. The above mentioned resolutions were passed with requisite majority on 9<sup>th</sup> January 2017, being the last date for receipt of postal ballot forms by the scrutiniser. The voting results and the scrutiniser report is available at the Company's website [https://www.cumi-murugappa.com/postal\\_ballot\\_2016.html](https://www.cumi-murugappa.com/postal_ballot_2016.html).

Currently, there are no proposals to pass special resolutions through postal ballot except those requiring to be passed pursuant to the Companies Act, 2013 which will be done after providing adequate notice to the shareholders.

### Voting pattern of the Special Resolutions passed during the year 2016-17 through Postal Ballot:

Sl. No	Resolution	Votes cast in favour of the resolution		Votes cast against the resolution		Invalid votes	
		No.	%	No.	%	No.	%
1.	Approval for alteration of existing Articles of Association (AOA) of the Company by adopting a new set of AOA aligned with the Companies Act, 2013 pursuant to section 14 of the Companies Act, 2013.	127,070,019	99.98	26,248	0.02	82	0.00
2.	Approval of Carborundum Universal Limited Employee Stock Option Plan 2016 ('ESOP 2016') and grant of Stock Options to employees of the Company under the ESOP 2016 pursuant to section 62(1)(b) of the Companies Act, 2013.	123,713,496	99.16	1,048,192	0.84	82	0.00
3.	Approval to grant Stock Options to the employees of the Company's subsidiaries under the ESOP 2016 pursuant to section 62(1)(b) of the Companies Act, 2013.	123,707,393	99.15	1,054,295	0.85	82	0.00

## 6. WHISTLE BLOWER POLICY/VIGIL MECHANISM

The Company has established a whistle blower mechanism to provide an avenue to raise concerns, if any, in line with the Company's commitment to the high standards of ethical, moral and legal conduct of business. The mechanism also provides for adequate safeguards against victimisation of employees who avail of the mechanism and also for appointment of an Ombudsperson who will deal with the complaints received. The policy also lays down the process to be followed for dealing with complaints and in exceptional cases, also provides for direct appeal to the Chairperson of the Audit Committee. In line with the requirements of the Companies Act, 2013, the policy coverage extends to the Directors of the Company and the Ombudsman for dealing with any referrals made by Board members is the Chairman of the Audit Committee. The Whistle blower policy is available on the Company's website at the following link <https://www.cumi-murugappa.com/policies.html>. It is affirmed that during the year, no employee has been denied access to the Audit Committee.

## 7. PREVENTION OF INSIDER TRADING

The Company has adopted a Code of Conduct for Prevention of Insider Trading with a view to regulate trading in securities by the Directors and designated employees of the Company. During the year, the Code was reviewed and revised. The Code requires pre-clearance for dealing in the Company's shares for all transactions by Directors and designated employees (together called Designated Persons) and prohibits the purchase or sale of Company securities by Designated Persons while in possession of unpublished price sensitive information in relation to the Company. Further, trading in securities is also prohibited

for Designated Persons during the period when the Trading Window is closed. The Company Secretary is responsible for implementation of the Code. The Company also has in place a Code for practices and procedures for fair disclosure of unpublished price sensitive information which is hosted on the website of the Company.

## 8. DISCLOSURES

During the year, there were no material transactions with Related Parties. The Company has devised a policy on dealing with Related Party Transactions and the same is available in the website of the Company in the link <https://www.cumi-murugappa.com/policies.html>.

The disclosure of the commodity price risks/foreign exchange risk and hedging activities of the Company have been made in the Director's Report.

Further, the requirements of Regulation 17 to Regulation 27 of the Listing Regulations and clauses (b) to (i) of Regulation 46(2) to the extent applicable to the Company have been complied with as disclosed in this Report.

Further, there were no instances of non-compliance by the Company nor were there any penalties or strictures imposed on the Company by the stock exchange, SEBI or any statutory authority on any matter related to capital markets in the preceding three years.

## 9. MEANS OF COMMUNICATION

Your Company recognises the significance of dissemination of timely and relevant information to shareholders. In order to enable the stakeholders to understand the financial results in a

meaningful manner, the Company gives a press release along with the publication of quarterly/annual financial results.

The quarterly unaudited financial results and the annual audited financial results are normally published in Business Standard (in English) and Makkal Kural (in Tamil). Press releases are given to all important dailies. The financial results, press releases and presentations made to institutional investors/ analysts are posted on the Company's website i.e. [www.cumi-murugappa.com](http://www.cumi-murugappa.com).

## 10. MANAGEMENT DISCUSSION & ANALYSIS

In order to avoid duplication and overlap between the Directors Report and a separate Management Discussion & Analysis (MD&A), the information required to be provided in the MD&A has been given in the Directors' Report itself as permitted by the Listing Regulations.

## 11. NON-MANDATORY REQUIREMENTS

The quarterly financial results are published in leading financial newspapers, uploaded on the Company's website, and any major developments are conveyed in the press releases issued by the Company and posted on the Company's website. The Company therefore did not send the half yearly performance update individually to the shareholders of the Company.

The expenses incurred by the Chairman in performance of his duties are reimbursed.

As recommended in Part E of schedule II to Regulation 27(1) of the Listing Regulations, the post of Chairperson and Managing Director are held by separate persons.

During the year, the Internal Auditor has had separate discussions with the Audit Committee without the presence of the Management team.

Further, there are no qualifications or adverse remarks by the Company's Auditors in the Company's Financial Statements and the Secretarial Audit Report for the FY 2016-17.

Other non-mandatory requirements have not been adopted at present.

## 12. CEO/CFO CERTIFICATION

Mr. K Srinivasan, Managing Director and Mr. Sridharan Rangarajan, Chief Financial Officer have given a certificate to the Board on matters relating to financial reporting, compliance with relevant statutes and adequacy of internal control systems as contemplated in Regulation 17(8) read with Part B of Schedule II of the Listing Regulations.

## 13. AUDITOR'S CERTIFICATE ON CORPORATE GOVERNANCE

The Auditor's certificate on Corporate Governance is annexed.

## 14. GENERAL SHAREHOLDER INFORMATION

A separate section in this regard is annexed and forms part of this Report.

## 15. SHAREHOLDERS SATISFACTION SURVEY

An online survey is posted on the Company's website at the following link <https://www.cumi-murugappa.com/survey/index.php>. Shareholders who have not yet submitted the survey can go to the above link and take part in the survey. We request the shareholders who have not yet participated in the survey to use this link and provide us their valuable feedback.

## 16. INSTRUCTIONS TO SHAREHOLDERS

Shareholders holding shares in physical form are requested to address their communications regarding change in address/contact details by quoting their folio number to the Company's RTA or to the Company by e-mailing to [investorservices@cumi.murugappa.com](mailto:investorservices@cumi.murugappa.com). Shareholders holding shares in electronic form may send their communications regarding the above to their respective Depository Participants.

Shareholders are encouraged to avail nomination facility and approach RTA or their Depository Participant in this regard.

Shareholders are requested to register their e-mail ID with the RTA/Depository Participant to enable the Company to send communications electronically.

Members are advised to intimate the details of their bank account to enable electronic remittance of dividend or alternatively for being incorporated in the dividend warrants. This would help to avoid fraudulent encashment of dividend warrants.

In case of members holding shares in physical form, all intimations are to be sent to Karvy Computershare Private Limited, (Unit: Carborundum Universal Limited), Karvy Selenium Tower B, Plot 31-32, Gachibowli, Financial District, Nanakramguda, Hyderabad - 500 032 the Registrars and Share Transfer Agent (RTA) of the Company.

In case of members holding shares in demat form, all intimations are to be sent to their respective Depository Participants (DPs). Shareholders may contact the Secretarial team in case of any query regarding their holdings in the Company.

On behalf of the Board

Chennai  
May 9, 2017

**M M Murugappan**  
Chairman

## General Shareholder Information

### A. Corporate Information

#### 1. Registered office

“Parry House”, 43, Moore Street, Chennai 600 001;  
Tel No.: +91-44-30006161; Fax: +91-44-30006149;  
E-mail: cumigeneral@cumi.murugappa.com  
Website: www.cumi-murugappa.com

#### 2. Corporate Identity Number

L29224TN1954PLC000318

#### 3. Auditors

##### Statutory Auditor

Deloitte Haskins & Sells, Chennai  
Chartered Accountants  
No. 52, ASV N Ramana Towers,  
Venkatanarayana Road, T.Nagar, Chennai 600 017

##### Cost Auditor

S Mahadevan & Co., Chennai, Cost Accountants  
No.1 ‘Lakshmi Nivas’ K.V. Colony, Third Street  
West Mambalam, Chennai 600 033

##### Internal Auditor

Ernst & Young LLP Chartered Accountants  
6<sup>th</sup> & 7<sup>th</sup> Floor, A Block, Tidel Park,  
4, Rajiv Gandhi Salai, Taramani, Chennai 600 113

##### Secretarial Auditor (for the FY 2016-17)

R Sridharan & Associates, Company Secretaries  
New No. 5, (Old No. 12), Sivasailam Street,  
T Nagar, Chennai 600 017

#### 4. Address for correspondence

##### Compliance Officer

Rekha Surendhiran, Company Secretary,  
Carborundum Universal Limited  
“Parry House”, 43, Moore Street, Chennai 600 001  
Tel: +91-44-30006141; Fax: +91-44-30006149;  
E-mail: rekhas@cumi.murugappa.com

##### Investor Relationship Officer

P Arjun Raj  
Carborundum Universal Limited  
“Parry House”, 43, Moore Street, Chennai 600 001  
Tel: +91-44-30006142; Fax: +91-44-30006149;  
E-mail: investorservices@cumi.murugappa.com

#### 5. Registrar and Share Transfer Agent

Karvy Computershare Private Limited  
Unit: Carborundum Universal Limited  
Karvy Selenium Tower B, Plot 31-32, Gachibowli,  
Financial District, Nanakramguda, Hyderabad 500 032.  
Tel: +91-40-67162222; Fax: +91-040-23420814;  
Toll Free no.: 1800-345-4001;  
E-mail: einward.ris@karvy.com; Website: www.karvy.com;  
Contact Person: Mrs. Varalakshmi P - Asst. General Manager

#### 6. Financial Year

1<sup>st</sup> April to 31<sup>st</sup> March

#### 7. Dates of Book Closure

Monday, 24<sup>th</sup> July 2017 to Monday, 31<sup>st</sup> July 2017

#### 8. Cost Audit Report

The Cost Audit report for financial year 2015-16 had been duly filed on 30<sup>th</sup> August 2016 through XBRL mode as mandated by the Ministry of Corporate Affairs within the due date. The due date for filing of Cost Audit report for the financial year 2016-17 is 30<sup>th</sup> September 2017.

#### 9. Plant Locations

##### i) Plant locations of Carborundum Universal Limited

- (a) 655, Thiruvottiyur High Road, P B No. 2272, Thiruvottiyur, Chennai 600019 Tamil Nadu.
- (b) Plot No.48, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu.
- (c) Gopalpur Chandigarh, P.O. Ganga Nagar, Kolkata 700132, West Bengal.
- (d) C-4 & C-5, Kamarajar Salai, MMDA Industrial Complex, Maraimalai Nagar - 603209 Kancheepuram District, Tamil Nadu.
- (e) F-1/2, F2 - F5, SIPCOT Industrial Park, Pondur “A” Village, Sriperumbudur - 602105. Kanchipuram District, Tamil Nadu.
- (f) K3, ASAHI Industrial Estate, Latherdeva Hoon, Mangalore Jhabrera Road, PO Jhabrera Tehsil Roorkee, Hardwar District, Uttarkhand - 247667.
- (g) PB No.1 Kalamassery, Development Plot P.O, Kalamassery 683109, Ernakulam District, Kerala.
- (h) PB No.3 Nalukettu, Koratty 680308, Trichur District, Kerala.

- (i) Bhatia Mines, Bhatia Western Railway, Jamnagar District, Gujarat 361315.
- (j) P.B No.2 Okha Port P.O., Jamnagar District, Gujarat 361350.
- (k) Plot No.7 & 18, Cochin Special Economic Zone (CSEZ), Kakkanad 682037, Kochi, Kerala.
- (l) Maniyar Hydroelectric Works, Maniyar P.O. Vadasserikara, Pathanamthitta District, Kerala 689662.
- (m) Plot No.8, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala
- (n) Plot No.2 & 3, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala
- (o) Plot No.4, Carborundum Universal SEZ, K.D. Plot, Kochi, Kerala
- (p) Plot No.47, SIPCOT Industrial Complex, Hosur - 635126 Krishnagiri District, Tamil Nadu.
- (q) Super Refractories Division, Plot No.102 & 103, SIPCOT Industrial Complex (Phase II), Ranipet 632403, Tamil Nadu.
- (r) Super Refractories Division - Plant 2, Serkaddu Village, Vinnampalli Post, Katpadi Taluk, Vellore District - 632516, Tamil Nadu.
- (s) Plot nos. 35, 37, 48-51, Adhartal Industrial Estate, Jabalpur - 482004, Madhya Pradesh.
- (f) Volzhsky Abrasive Works, 404130 Volzhsky, Volgograd Region, Autodoroge 6,18, Russia.
- (g) Foskor Zirconia (Pty.) Ltd., PO Box.1, Phalaborwa, South Africa, 1390.
- (h) CUMI Australia Pty Ltd., 29 Gipps St, Carrington, NSW, 2294, Postal Address: PO Box 142, Carrington, NSW, 2294.
- (i) CUMI Australia Pty Ltd. 1/253 Beringarra Ave, Malaga, WA 6944, Postal Address: PO Box 2538, Malaga, WA 6944.
- (j) CUMI Australia Pty Ltd. 20, Waurm St, North Rockhampton, QLD 4701, Postal Address: PO Box 6494, Central QLD Mail Centre, Rockhampton, QLD 4702.
- (k) Wendt Grinding Technologies Ltd. 109/21 Moo 4, Eastern Seaboard Industrial Estate (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong 21140, Thailand.
- (l) Thukela Refractories Isithebe Pty Ltd., No. 1 Yellow Street, Isithebe, South Africa.

## ii) Plant locations of Subsidiaries/Joint Ventures

- (a) Sterling Abrasives Ltd., Plot No.45/46 & Plot No.501, G I D C Estate, Odhav Road, Ahmedabad - 382415, Gujarat, India.
- (b) Southern Energy Development Corporation Ltd., 29, Nallur PO, Aadichapuram, (Via) Mannargudi Taluk, Tiruvarur District - 614717, Tamil Nadu, India.
- (c) Murugappa Morgan Thermal Ceramics Ltd., Plot No.26 & 27, SIPCOT Industrial Complex, Ranipet - 632403, Tamil Nadu, India.
- (d) Murugappa Morgan Thermal Ceramics Ltd., Plot No.681, Moti Bhoyan Village, Sanand-Kalol Highway, Kalol Taluk, Gandhinagar, Dist., Gujarat - 382721, India.
- (e) Wendt (India) Ltd., 69/70, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu, India.

## B. STOCK MARKET INFORMATION

### 1. Listing on stock exchanges and stock code

Stock Exchange	Stock Code
National Stock Exchange of India Ltd., Exchange Plaza, Bandra-Kurla Complex, Bandra (E), Mumbai 400 051	CARBORUNIV
BSE Ltd., Phiroze Jeejeebhoy Towers, Dalal Steet, Mumbai 400 001	513375

Annual listing fees has been paid to the above stock exchanges.

The International Securities Identification Number (ISIN): INE120A01034

### 2. Depositories Connectivity

The Company has signed agreements with the following depositories to provide the facility of holding equity shares in dematerialised form:

National Securities Depository Ltd. (NSDL)	www.nsdl.co.in
Central Depository Services (India) Ltd. (CDSL)	www.cdslindia.com

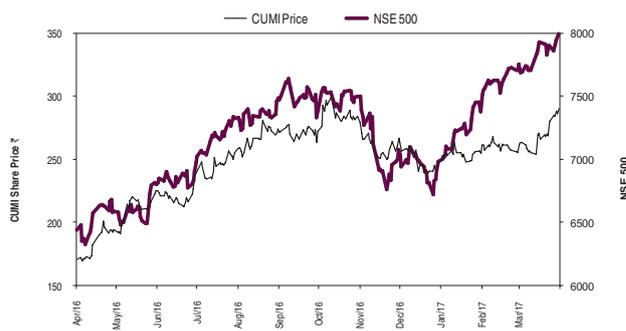
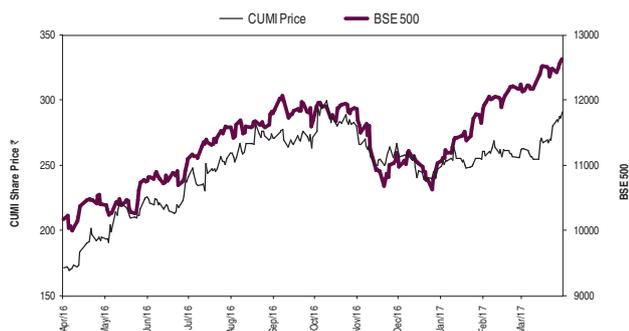
### 3. Share price information

#### a) Monthly market price data

Month	BSE Limited			National Stock Exchange of India Limited		
	High ₹	Low ₹	Traded Volume (No. of Shares)	High ₹	Low ₹	Traded Volume (No. of Shares)
April 2016	211.00	168.00	186491	211.00	166.00	916102
May 2016	227.00	189.50	507609	227.70	190.10	1501436
June 2016	245.55	207.55	251222	244.90	208.80	932565
July 2016	264.00	230.00	23273982	263.80	232.00	9131478
August 2016	284.30	250.10	1239449	284.80	250.00	5196953
September 2016	284.00	259.50	757713	284.70	256.60	2318856
October 2016	307.40	270.00	1275096	307.30	270.30	3671814
November 2016	287.40	228.00	1692816	287.60	233.00	3098512
December 2016	273.00	236.35	295800	273.00	236.30	1582486
January 2017	266.75	245.50	3082831	266.50	246.00	5265818
February 2017	272.80	251.45	532075	273.00	251.40	2254695
March 2017	296.00	252.50	3104947	295.00	252.00	4475170

#### b) Performance in comparison with BSE 500 and NSE 500

Stock market snapshot of CUMI Price v/s BSE 500 and NSE 500 during 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2017 is given below:



### C. OTHER INFORMATION

#### 1. Share Capital Details

##### a) Outstanding shares

The total number of outstanding shares as on 31<sup>st</sup> March 2017 is 188,658,090. All the shares have been fully paid up.

As on 31<sup>st</sup> March 2017, 185,328,065 equity shares constituting 98.23% of the total paid up capital of the Company have been dematerialised.

#### b) Shareholding Pattern/Distribution as on 31<sup>st</sup> March 2017

##### (i) Shareholding Pattern

Category	% to total paid up capital
Promoter/Promoter Group	43.76
Foreign Institutional Investors	5.34
Financial Institutions including Insurance Companies	2.89
Non-resident (NRIs/OCBs)	1.69
Mutual Funds	17.33
Banks	0.16
Others	28.83
<b>Total</b>	<b>100.00</b>

## (ii) Distribution of Shareholding

Sl. No	Category (Shares)	No. of holders	% to holders	No. of Shares	% to Equity
1	1 - 100	11641	43.63	473768	0.25
2	101 - 200	2807	10.52	496804	0.26
3	201 - 500	3792	14.21	1422879	0.75
4	501 - 1000	2828	10.60	2295819	1.22
5	1001 - 5000	4289	16.07	10676749	5.66
6	5001 - 10000	677	2.54	4960444	2.63
7	10001 and above	649	2.43	168331627	89.23
<b>Total</b>		<b>26683</b>	<b>100</b>	<b>188658090</b>	<b>100</b>

## 2. Outstanding GDR/ADR/Warrants etc.

Under the CUMI Employees Stock Option Scheme, 2007, the following Stock Options are outstanding as on 31<sup>st</sup> March 2017:

Sl. No.	Grant date	Exercise Price (In ₹)	Net Outstanding Options <sup>(a)</sup>	Likely impact on full exercise	
				Share Capital ₹ million	Share Premium ₹ million
1	29-Sep-07	91.80	188,616	0.19	17.13
2	24-Jul-08	61.40	3,876	0.00	0.23
3	27-Jan-11	125.08	322,828	0.32	40.06
4	27-Jan-11	125.08	161,940	0.16	20.09
5	05-Aug-11	146.00	190,080	0.19	27.56
6	04-Feb-12	155.00	77,787	0.08	11.98
<b>Total</b>			<b>945,127</b>	<b>0.94</b>	<b>117.05</b>

Employee Stock Option Scheme 2016 - New ESOP plan implemented during the year 2016-17. The Options have not vested and hence no exercise has been made. The Options granted under this plan is given below:

Sl. No.	Grant date	Exercise Price (In ₹)	Net Outstanding Options <sup>(a)</sup>	Likely impact on full exercise	
				Share Capital ₹ million	Share Premium ₹ million
1	04-Feb-17	257.55	914,900	0.91	234.72
<b>Total</b>			<b>914,900</b>	<b>0.91</b>	<b>234.72</b>

Note:

- In respect of the Options referred in serial number 4 above of the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1 each, within 3 years from the date of vesting, in respect of 50 per cent of the first tranche and 6 years from the date of vesting in respect of the remaining 50 per cent of the first tranche and all subsequent tranches. The vesting of Options granted, is based on the annual performance rating and as per the following schedule - 40% on expiry of the first year from the date of grant and 30% each on expiry of the second and third years from the date of grant.
- In respect of all other options granted under the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 3 years from the date of vesting in respect of the first tranche and 6 years from the date of vesting in respect of subsequent tranches. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

In respect of options granted under Employee Stock Option Plan 2016, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 5 years from the date of vesting. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

Other than the above, there are no outstanding GDRs or ADRs or convertible instruments.

## 3. Share Transfer Process

The applications for transfer of shares and other requests from shareholders holding shares in physical form are processed by Karvy Computershare Private Ltd., Company's Registrar and Share Transfer Agent.

The Board has delegated the power to approve transfers to the Stakeholders Relationship Committee. In respect of requests for transfer of shares upto 5000, the approving authority is the Managing Director and Company Secretary. In respect of transmission of shares, all requests are considered for approval by the Stakeholders Relationship Committee.

#### 4. Unclaimed Shares

Particulars	No. of Shareholders	No. of Shares
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the beginning of the year	536	7,95,310
Number of shareholders who approached the Company for transfer of shares from the Unclaimed Suspense Account during the year in response to the Company's reminders	15	49,060
Number of shareholders to whom shares were transferred from the Unclaimed Suspense Account during the year	14*	43,620
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the end of the year	521	746,250

\*One claim for 5,440 shares which was received during the year 2016-17 was transferred in April 2017.

Shareholders are entitled to claim these shares after complying with laid down procedures. On receipt of a claim, the Company will after verification, either credit the shares to the shareholder's demat account or deliver the physical certificate after re-materialising the same, as opted by the shareholder.

All corporate benefits in terms of securities accruing on these shares like bonus shares, sub-division, etc. will also be credited to the Unclaimed Suspense Account and the voting rights on these shares will remain frozen until the claim is made by the rightful owner.

#### 5. AGM & Dividend details

##### i) Forthcoming Annual General Meeting

Monday, the 31<sup>st</sup> July 2017 at 3.00 P.M. IST at TTK Auditorium, Music Academy, 168 (Old No. 306) TTK Road, Royapettah, Chennai 600 014. Proxies, to be valid, must be lodged at the registered office of the Company not later than 48 hours before commencement of the meeting.

##### ii) Dividend

The Board at its meeting held on 4<sup>th</sup> February 2017 had approved payment of an interim dividend on the equity shares of the Company at 100% i.e., ₹1.00 per equity share which was paid on 24<sup>th</sup> February 2017.

The Board at its meeting held on 9<sup>th</sup> May 2017 has further recommended payment of final dividend at 75% i.e.,

₹0.75 per equity share for the year ended 31<sup>st</sup> March 2017. The final dividend will be paid within 7 days upon declaration by the shareholders at the ensuing Annual General Meeting.

##### iii) Unclaimed Dividend

Dividends remaining unclaimed / unpaid for a period of 7 years shall be transferred to the Investor Education Protection Fund (IEPF). The details of dividend paid by the Company and the respective due dates of transfer of the unclaimed/unencashed dividend to the IEPF of the Central Government are as below:

Financial year to which dividend relates	Date of Declaration	Due date of transfer to IEPF
2009-10 (Final)	30-07-2010	05-09-2017
2010-11 (Interim)	03-02-2011	12-03-2018
2010-11 (Final)	05-08-2011	11-09-2018
2011-12 (Interim)	04-02-2012	12-03-2019
2011-12 (Final)	07-08-2012	13-09-2019
2012-13 (Interim)	05-02-2013	14-03-2020
2012-13 (Final)	30-07-2013	05-09-2020
2013-14 (Interim)	31-01-2014	09-03-2021
2013-14 (Final)	01-08-2014	07-09-2021
2014-15 (Interim)	29-01-2015	07-03-2022
2014-15 (Final)	03-08-2015	09-09-2022
2015-16 (Interim - I)	05-02-2016	13-03-2023
2015-16 (Interim - II)	11-03-2016	17-04-2023
2016-17 (Interim)	04-02-2017	13-03-2024

The Company has transferred unclaimed/ unencashed dividends up to FY 2008-09 to the IEPF during the year ended 31<sup>st</sup> March 2017. The Company has uploaded the details relating to unclaimed dividends on its website for the benefit of its shareholders.

##### iv) Shares to be transferred to IEPF

Pursuant to the notification of Section 124(6) of the Companies Act, 2013 and Investor Education and Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, the Company is required to transfer shares in respect of which dividend has not been paid or claimed for seven consecutive years or more. The Company has issued a notice to the shareholders concerned intimating them of the impending transfer of shares and has simultaneously published a notice in leading dailies. The Company has uploaded the details of the same on its website for the benefit of its shareholders. Further, the corresponding shares will be transferred as per the requirements of the IEPF Rules as notified by the Ministry of Corporate Affairs from time to time. Members are requested to verify their status with the Company in this regard.

On behalf of the Board

Chennai  
May 9, 2017

**M M Murugappan**  
Chairman

## Declaration on Code of Conduct

To

The Members of Carborundum Universal Limited

This is to confirm that that the Board has laid down a Code of Conduct for all Board members and Senior Management of Company.

It is further confirmed that all Directors and Senior Management personnel of the Company have affirmed compliance with the Code of Conduct of the Company as at 31<sup>st</sup> March 2017, as envisaged in regulation 34(3) read with Schedule V of the Listing Regulations.

Chennai

May 9, 2017

**K Srinivasan**

*Managing Director*

The Code of conduct is uploaded and available at the following link <http://www.cumi-murugappa.com/policies.html>.

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## Independent Auditor's Certificate on Corporate Governance

To

The Members of CARBORUNDUM UNIVERSAL LIMITED

1. This certificate is issued in accordance with the terms of our engagement letter referenceno. GS/CUMI/Audit/EL/2016-17 dated October 24, 2016.
2. We, Deloitte Haskins & Sells, Chartered Accountants, the Statutory Auditors of Carborundum Universal Limited ("the Company"), have examined the compliance of conditions of Corporate Governance by the Company, for the year ended on 31 March 2017, as stipulated in Regulations 17 to 27 and Clauses (b) to (i) of Regulation 46(2) and Para C and D of Schedule V of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (the Listing Regulations).

### Managements' Responsibility

3. The compliance of conditions of Corporate Governance is the responsibility of the Management. This responsibility includes the design, implementation and maintenance of internal control and procedures to ensure the compliance with the conditions of the Corporate Governance stipulated in Listing Regulations.

### Auditor's Responsibility

4. Our responsibility is limited to examining the procedures and implementation thereof, adopted by the Company for ensuring compliance with the conditions of the Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.
5. We have examined the books of account and other relevant records and documents maintained by the Company for the purposes of providing reasonable assurance on the compliance with Corporate Governance requirements by the Company.
6. We have carried out an examination of the relevant records of the Company in accordance with the Guidance Note

on Certification of Corporate Governance issued by the Institute of the Chartered Accountants of India (the ICAI), the Standards on Auditing specified under Section 143(10) of the Companies Act 2013, in so far as applicable for the purpose of this certificate and as per the Guidance Note on Reports or Certificates for Special Purposes issued by the ICAI which requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

7. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

### Opinion

8. Based on our examination of the relevant records and according to the information and explanations provided to us and the representations provided by the Management, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in Regulations 17 to 27 and Clauses (b) to (i) of Regulation 46(2) and Para C and D of Schedule V of the Listing Regulations during the year ended March 31, 2017.
9. We state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the Management has conducted the affairs of the Company.

For **Deloitte Haskins & Sells**  
Chartered Accountants  
(Firm's Registration No.008072S)

Chennai

May 9, 2017

GS/CUMI/002/2017-18

**Geetha Suryanarayanan**

Partner

(Membership No. 29519)

## Independent Auditor's Report

To

### The Members of Carborundum Universal Limited Report on the Consolidated Ind AS Financial Statements

We have audited the accompanying consolidated Ind AS financial statements of Carborundum Universal Limited (hereinafter referred to as "the Parent") and its subsidiaries (the Parent and its subsidiaries together referred to as "the Group") its associates and its joint ventures, comprising the Consolidated Balance Sheet as at 31<sup>st</sup> March, 2017, the Consolidated Statement of Profit and Loss including other comprehensive income, the Consolidated Cash Flow Statement, the Consolidated Statement of Changes in Equity, for the year then ended, and a summary of the significant accounting policies and other explanatory information (hereinafter referred to as "the consolidated Ind AS financial statements").

### Management's Responsibility for the Consolidated Ind AS Financial Statements

The Parent's Board of Directors is responsible for the preparation of these consolidated Ind AS financial statements in terms of the requirements of the Companies Act, 2013 (hereinafter referred to as "the Act") that give a true and fair view of the consolidated financial position, consolidated financial performance including other comprehensive income, consolidated cash flows and statement of changes in equity of the Group including its Associates and Joint ventures in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) prescribed under Section 133 of the Act. The respective Board of Directors of the companies included in the Group and of its associates and joint ventures are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Group and its associates and its joint ventures and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated Ind AS financial statements by the Directors of the Parent, as aforesaid.

### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated Ind AS financial statements based on our audit. In conducting

our audit, we have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated Ind AS financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the consolidated Ind AS financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Parent's preparation of the consolidated Ind AS financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Parent's Board of Directors, as well as evaluating the overall presentation of the consolidated Ind AS financial statements.

We believe that the audit evidence obtained by us and other auditors in terms of their reports referred to in sub-paragraphs (a) of the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the consolidated Ind AS financial statements.

### Opinion

In our opinion and to the best of our information and according to the explanations given to us and based on the consideration of reports of the other auditors on the subsidiaries, associate and the joint ventures referred to below in the Other Matters paragraph, the aforesaid consolidated Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group, its associate and joint ventures as at 31<sup>st</sup> March, 2017, and their consolidated profits, consolidated total comprehensive income, their consolidated cash flows and consolidated statement of changes in equity for the year ended on that date.

### Other Matters

(a) We did not audit the financial statements / financial information of eleven subsidiaries whose financial

## Independent Auditor's Report

statements / financial information reflect total assets of ₹11,744 Mio as at 31<sup>st</sup> March, 2017, total revenues of ₹8,443 Mio and net cash inflows amounting to ₹110 Mio for the year ended on that date, as considered in the consolidated Ind AS financial statements. The consolidated Ind AS financial statements also include the Group's share of net profit of ₹143 Mio for the year ended 31<sup>st</sup> March, 2017, as considered in the consolidated Ind AS financial statements, in respect of the two joint ventures, whose financial statements / financial information have not been audited by us. These financial statements / financial information have been audited by other auditors whose reports have been furnished to us by the Management and our opinion on the consolidated Ind AS financial statements, in so far as it relates to the amounts and disclosures included in respect of these subsidiaries and joint ventures, and our report in terms of sub-section (3) of Section 143 of the Act, in so far as it relates to the aforesaid subsidiaries and joint ventures is based solely on the reports of the other auditors. Of these, 8 subsidiaries are located outside India whose financial statements / other financial information have been prepared in accordance with accounting principles generally accepted in their respective countries and which have been audited by other auditors under generally accepted auditing standards applicable in their respective countries. The Parent company's management has converted the financial statements of such subsidiaries located outside India from accounting principles generally accepted in their respective countries to Ind AS. We have audited these conversion adjustments made by the Parent company's management. Our opinion in so far as it relates to the balances and affairs of such subsidiaries located outside India is based on the report of other auditors and the conversion adjustments prepared by the management of the Parent company and audited by us.

- (b) We did not audit the financial statements / financial information of one subsidiary, whose financial statements/ financial information reflect total assets of ₹1 Mio as at 31<sup>st</sup> March, 2017, total revenues of ₹3 Mio and net cash inflows amounting to ₹0 Mio for the year ended on that date, as considered in the consolidated Ind AS financial statements. These financial statements / financial information are unaudited and have been furnished to us by the Management and our opinion on the consolidated Ind AS financial statements, in so far as it relates to the amounts and disclosures included in respect of this subsidiary is based solely on such unaudited financial statements / financial information. In our opinion and according to the information and explanations given to us by the Management, these financial statements/ financial information are not material to the Group.

- (c) The comparative financial information for the year ended March 31, 2016 and the transition date opening balance sheet as at 1st April 2015 in respect of subsidiaries and joint ventures which are companies incorporated in India, included in this Statement and prepared in accordance with the Ind AS have been audited by other auditors and have been relied upon by us.
- (d) The financial information of 8 overseas subsidiaries audited by other auditors included in the previously issued financial statements / information of the Group for the year ended March 31, 2016, prepared in accordance with accounting principles generally accepted in their respective countries, have been restated to comply with Ind AS and included in this Statement as comparative financial information. These restatement adjustments to comply with Ind AS have been made by the management and audited by us.

Our opinion on the consolidated Ind AS financial statements above, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements certified by the Management.

### Report on Other Legal and Regulatory Requirements

As required by Section 143(3) of the Act, based on our audit and on the consideration of the report of the branch auditors and other auditors on separate financial statements and the other financial information of subsidiaries, associate and the joint ventures incorporated in India, referred in the Other Matters paragraph above we report, to the extent applicable, that:

- (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated Ind AS financial statements.
- (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated Ind AS financial statements have been kept so far as it appears from our examination of those books, returns and the reports of the other auditors.
- (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss (including Other Comprehensive Income), the Consolidated Cash Flow Statement and Consolidated Statement of Changes in Equity dealt with by this Report are in agreement with the relevant books of account maintained for the purpose of preparation of the consolidated Ind AS financial statements.
- (d) In our opinion, the aforesaid consolidated Ind AS financial statements comply with the Indian Accounting Standards prescribed under Section 133 of the Act.

## Independent Auditor's Report

- (e) On the basis of the written representations received from the directors of the Parent as on 31<sup>st</sup> March, 2017 taken on record by the Board of Directors of the Parent and the reports of the statutory auditors of its subsidiary companies, associate companies and joint venture companies incorporated in India, none of the directors of the Group companies, its associate companies and joint venture companies incorporated in India is disqualified as on 31<sup>st</sup> March 2017 from being appointed as a director in terms of Section 164 (2) of the Act.
- (f) With respect to the adequacy of the internal financial controls over financial reporting and the operating effectiveness of such controls, refer to our separate Report in "Annexure A", which is based on the auditors' reports of the Holding company, subsidiary companies, associate company and joint ventures incorporated in India. Our report expresses an unmodified opinion on the adequacy and operating effectiveness of the Parent's/ subsidiary company's / associate company's / joint ventures' incorporated in India internal financial controls over financial reporting.
- (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, as amended, in our opinion and to the best of our information and according to the explanations given to us:
- The consolidated Ind AS financial statements disclose the impact of pending litigations on the consolidated financial position of the Group, its associate and joint ventures. (Refer Note 34 to the consolidated financial statements)
  - Provision has been made in the consolidated Ind AS financial statements, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts.
- There has been no delay in transferring amounts required to be transferred, to the Investor Education and Protection Fund by the Parent and its subsidiary companies, associate company and joint ventures, incorporated in India.
  - The Parent has provided requisite disclosures in the consolidated Ind AS financial statements as regards the holding and dealings in Specified Bank Notes as defined in the Notification S.O. 3407(E) dated the 8<sup>th</sup> November, 2016 of the Ministry of Finance, during the period from 8<sup>th</sup> November, 2016 to 30<sup>th</sup> December, 2016 of the Company and the Group entities as applicable. Based on audit procedures performed and the representations provided to us by the management and the reports of the other auditors, we report that the disclosures are in accordance with the relevant books of accounts maintained by the Company / those entities for the purpose of preparation of the consolidated Ind AS financial statements and as produced to us and to the other auditors by the Management of the Company and the respective Group entities. (Refer Note 42 to the consolidated financial statements)

For **Deloitte Haskins & Sells**  
*Chartered Accountants*  
(Firm's Registration No.008072S)

**Geetha Suryanarayanan**  
*Partner*  
(Membership No. 29519)

Chennai  
May 9, 2017

## Annexure "A" to the Independent Auditor's Report

(Referred to in paragraph (f) under 'Report on Other Legal and Regulatory Requirements' of our report of even date)

### Report on the Internal Financial Controls Over Financial Reporting under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

In conjunction with our audit of the consolidated financial statements of the Company for the year ended March 31, 2017, we have audited the internal financial controls over financial reporting of Carborundum Universal Limited (hereinafter referred to as "the Holding Company"), its subsidiaries (the Holding Company and its subsidiaries together referred to as "the Group") and jointly controlled entities, which are companies incorporated in India, as of that date.

### Management's Responsibility for Internal Financial Controls

The respective Board of Directors of the Holding company, its

subsidiary companies, and jointly controlled companies, which are incorporated in India, are responsible for establishing and maintaining internal financial controls based on "the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India". These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

## Independent Auditor's Report

### Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India and the Standards on Auditing, prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing whether a risk of material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors of the subsidiary companies, associate and the joint ventures, which are companies incorporated in India, in terms of their reports referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

### Meaning of Internal Financial Controls over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made

only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

### Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### Opinion

In our opinion to the best of our information and according to the explanations given to us, the Holding Company, its subsidiary companies, associate and the joint ventures, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2017, based on "the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India".

### Other Matters

Our aforesaid report under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting insofar as it relates to subsidiary companies and joint ventures, which are companies incorporated in India, is based solely on the corresponding reports of the auditors of such companies incorporated in India.

Our opinion is not modified in respect of the above matters.

**For Deloitte Haskins & Sells**

*Chartered Accountants*  
(Firm's Registration No. 008072S)

**Geetha Suryanarayanan**

*Partner*

Chennai, May 9, 2017

(Membership No.: 29519)

# Consolidated Balance Sheet

(in Indian Rupees million, unless otherwise stated)

Particulars	Notes	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
<b>ASSETS</b>				
<b>Non-current assets</b>				
(a) Property, plant and equipment	4A	5817.73	5270.95	6057.55
(b) Capital work-in-progress	4B	725.64	841.77	402.13
(c) Goodwill	5A	1147.95	1214.51	1149.55
(d) Other Intangible assets	5B(i)	82.38	105.91	113.03
(e) Intangible assets under development	5B(ii)	0.34	3.59	6.56
(f) Financial assets				
(i) Investments				
(a) Investments in associate	6A	447.77	426.53	411.48
(b) Investments in joint ventures	6B	614.31	679.93	618.13
(c) Other Investments	6C(i)	132.85	186.21	151.02
(ii) Other financial assets	7A	110.80	101.28	94.03
(g) Deferred tax assets (net)	8A	89.98	75.71	97.85
(h) Other non-current assets	9A	342.87	405.86	361.05
<b>Total non-current assets</b>		<b>9512.62</b>	<b>9312.25</b>	<b>9462.38</b>
<b>Current assets</b>				
(a) Inventories	10	3866.97	3704.28	3742.32
(b) Financial assets				
(i) Other Investments	6C(ii)	49.64	17.42	24.78
(ii) Trade receivables	11	3805.83	3674.82	3438.61
(iii) Cash and Cash equivalents	12A	1248.39	1118.38	940.44
(iv) Bank balances other than (iii) above	12B	12.21	14.07	11.16
(v) Other Financial assets	7B	54.48	59.55	82.95
(c) Other Current assets	9B	672.08	495.27	425.75
(d) Assets classified as held for sale	13	-	280.30	-
<b>Total current assets</b>		<b>9709.60</b>	<b>9364.09</b>	<b>8666.01</b>
<b>Total Assets</b>		<b>19222.22</b>	<b>18676.34</b>	<b>18128.39</b>
<b>EQUITY AND LIABILITIES</b>				
<b>EQUITY</b>				
(a) Equity share capital	14	188.66	188.38	188.18
(b) Other equity	15	13639.20	11734.22	10817.44
<b>Equity attributable to owners of the Company</b>		<b>13827.86</b>	<b>11922.60</b>	<b>11005.62</b>
Non-controlling interests	16	656.63	621.61	577.89
<b>Total Equity</b>		<b>14484.49</b>	<b>12544.21</b>	<b>11583.51</b>
<b>LIABILITIES</b>				
<b>Non-current liabilities</b>				
(a) Financial liabilities				
Borrowings	17	66.81	362.42	566.75
(b) Provisions	18A	75.52	65.39	44.92
(c) Deferred tax liabilities (net)	8B	463.95	483.43	548.10
<b>Total non-current liabilities</b>		<b>606.28</b>	<b>911.24</b>	<b>1159.77</b>
<b>Current liabilities</b>				
(a) Financial liabilities				
(i) Borrowings	19	1424.47	2270.48	2201.56
(ii) Trade payables	20	1650.23	1340.80	1525.12
(iii) Other financial liabilities	21	670.81	1296.89	1321.10
(b) Provisions	18B	161.34	141.65	114.65
(c) Other current liabilities	22	224.60	171.07	222.68
<b>Total current liabilities</b>		<b>4131.45</b>	<b>5220.89</b>	<b>5385.11</b>
<b>Total Liabilities</b>		<b>4737.73</b>	<b>6132.13</b>	<b>6544.88</b>
<b>Total Equity and Liabilities</b>		<b>19222.22</b>	<b>18676.34</b>	<b>18128.39</b>

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**  
Chartered Accountants

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Geetha Suryanarayanan**  
Partner  
Chennai  
May 9, 2017

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

# Consolidated Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

S.No.	Particulars	Notes	For the year	
			2016-17	2015-16
I	Revenue from Operations	23	22323.45	20516.55
II	Other Income	24	228.00	295.21
III	<b>Total Income</b>		<b>22551.45</b>	<b>20811.76</b>
IV	<b>Expenses</b>			
	Cost of material consumed		6233.30	5691.76
	Purchase of stock-in-trade		1117.24	1111.01
	Changes in inventories of finished goods, stock-in-trade and work-in-progress	25	(2.39)	13.43
	Excise duty on sale of goods		1198.59	1076.74
	Employee benefit expense	26	2735.06	2519.23
	Finance costs	27	181.20	229.05
	Depreciation and amortisation expense	28	964.81	868.23
	Other expenses	29	7695.88	7091.34
	<b>Total expenses (IV)</b>		<b>20123.69</b>	<b>18600.79</b>
V	<b>Profit from operations before share of profit of equity accounted investees and income tax [III] - [IV]</b>		<b>2427.76</b>	<b>2210.97</b>
VI	Share of profit of associate (net of tax)	6A	48.05	43.06
VII	Share of profit of joint ventures (net of tax)	6B	142.83	114.65
VIII	<b>Profit before tax [V] +[VI]+[VII]</b>		<b>2618.64</b>	<b>2368.68</b>
IX	<b>Tax expense</b>			
	(1) Current tax	30A	810.61	857.58
	(2) Deferred tax	8	(29.77)	(43.52)
	<b>Total tax [IX]</b>		<b>780.84</b>	<b>814.06</b>
X	<b>Profit for the year [VIII]-[IX]</b>		<b>1837.80</b>	<b>1554.62</b>
XI	<b>Other Comprehensive Income [OCI]</b>			
A	(i) Items that will not be reclassified to profit or loss			
	(a) Remeasurement of the defined benefit plans		(28.39)	(3.46)
	(b) Equity instruments through other comprehensive income		(54.16)	34.99
	(c) Share of OCI in associate and joint ventures, to the extent not to be reclassified to profit or loss		(3.70)	(2.38)
	(ii) Income tax relating to items that will not be reclassified to profit or loss	30B	-	-
			<b>(86.25)</b>	<b>29.15</b>
B	(i) Items that will be reclassified to profit or loss			
	(a) Exchange differences in translating the financial statements of foreign operations		476.91	(205.75)
	(b) Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge		3.81	(0.42)
	(c) Share of OCI in associate and joint ventures, to the extent that will be reclassified to profit or loss		(0.07)	(2.04)
	(ii) Income tax relating to items that will be reclassified to profit or loss	30B	(1.26)	0.13
			<b>479.39</b>	<b>(208.08)</b>
	<b>Total Other Comprehensive Income [XI]</b>		<b>393.14</b>	<b>(178.93)</b>
XII	<b>Total Comprehensive Income [X]+[XI]</b>		<b>2230.94</b>	<b>1375.69</b>
	<b>Profit for the year attributable to: [X]</b>		1837.80	1554.62
	- Owners of the Company		1748.67	1441.01
	- Non-Controlling Interest		89.13	113.61
	<b>Other Comprehensive Income: [XI]</b>		393.14	(178.93)
	- Owners of the Company		392.87	(178.45)
	- Non-Controlling Interest		0.27	(0.48)
	<b>Total Comprehensive Income: [XII]</b>		2230.94	1375.69
	- Owners of the Company		2141.54	1262.56
	- Non-Controlling Interest		89.40	113.13
XIII	<b>Earnings per share (Re.1 each) on Profit for the year (X)</b>	31		
	- Basic		9.28	7.65
	- Diluted		9.25	7.64

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

On behalf of the Board

For Deloitte Haskins & Sells  
Chartered Accountants

M M Murugappan  
Chairman

K Srinivasan  
Managing Director

Geetha Suryanarayanan  
Partner  
Chennai  
May 9, 2017

Sridharan Rangarajan  
Chief Financial Officer

Rekha Surendhiran  
Company Secretary

## Consolidated Statement of changes in other equity

(in Indian Rupees million, unless otherwise stated)

### A. Equity share capital - Refer Note: 14

Balance as at April 01, 2015	188.18
Changes in equity share capital during the year	
Shares issued against ESOP scheme	0.20
<b>Balance as at March 31, 2016</b>	<b>188.38</b>
Changes in equity share capital during the year	
Shares issued against ESOP scheme	0.28
<b>Balance as at March 31, 2017</b>	<b>188.66</b>

### B. Statement of changes in other equity - Refer Note: 15 & 16

Particulars	Reserves and Surplus - Refer Note: 15A							Items of Other comprehensive income - Refer Note 15B				Attributable to owners of the parent - Refer Note: 15	Non-controlling interest [NCI] - Refer Note: 16	Total		
	Profit on Forfeiture of Shares /Warrants	Capital redemption reserve	Capital reserve on consolidation	Securities premium	General Reserve	Share options outstanding account	Retained Earnings	Reserve for equity instruments	Effective portion of Cash flow hedge	Foreign currency translation reserve	Revaluation surplus				Refer Note: 15	
															(a)	(b)
<b>Balance at the beginning of the year - April 01, 2015</b>	6.03	27.68	680.77	142.18	5230.94	10.48	4618.17	76.96	0.49	-	23.74	10817.44	577.89	11395.33		
Profit for the year							1441.01					1441.01	113.61	1554.62		
Other Comprehensive income for the year							(5.46)	34.99	(0.19)	(207.79)		(178.45)	(0.48)	(178.93)		
<b>Total Comprehensive income for the year</b>	-	-	-	-	-	-	<b>1435.55</b>	<b>34.99</b>	<b>(0.19)</b>	<b>(207.79)</b>	-	<b>1262.56</b>	<b>113.13</b>	<b>1375.69</b>		
Additions during the year			39.45	24.43		1.29						65.17		65.17		
Dividends - Final dividend paid during the year							(94.12)					(94.12)		(94.12)		
Interim dividend paid during the year							(282.56)					(282.56)		(282.56)		
Dividend tax paid during the year							(19.57)					(19.57)		(19.57)		
Dividend tax paid by subsidiaries and Joint ventures							(14.70)					(14.70)		(14.70)		
Transfer to retained earnings					500.00		(500.00)					-		-		
Dividend paid to NCI and its relevant tax												-	(68.38)	(68.38)		
Translation impact on foreign subsidiaries NCI portion												-	(1.03)	(1.03)		
<b>Balance at the end of the year - March 31, 2016</b>	<b>6.03</b>	<b>27.68</b>	<b>720.22</b>	<b>166.61</b>	<b>5730.94</b>	<b>11.77</b>	<b>5142.77</b>	<b>111.95</b>	<b>0.30</b>	<b>(207.79)</b>	<b>23.74</b>	<b>11734.22</b>	<b>621.61</b>	<b>12355.83</b>		
Profit for the year							1748.67					1748.67	89.13	1837.80		
Other Comprehensive income for the year							(31.33)	(54.16)	1.52	476.84		392.87	0.27	393.14		
<b>Total Comprehensive income for the year</b>	-	-	-	-	-	-	<b>1717.34</b>	<b>(54.16)</b>	<b>1.52</b>	<b>476.84</b>	-	<b>2141.54</b>	<b>89.40</b>	<b>2230.94</b>		
Additions during the year			(15.57)	27.54		4.31						16.28		16.28		
Interim dividend paid during the year							(188.63)					(188.63)		(188.63)		
Dividend tax paid during the year							(15.75)					(15.75)		(15.75)		
Dividend tax paid by subsidiaries and Joint ventures							(48.46)					(48.46)		(48.46)		
Transfer to retained earnings					500.00		(500.00)					-		-		
Dividend paid to NCI and its relevant tax												-	(68.38)	(68.38)		
Translation impact on foreign subsidiaries NCI portion												-	14.00	14.00		
<b>Balance at the end of the year - March 31, 2017</b>	<b>6.03</b>	<b>27.68</b>	<b>704.65</b>	<b>194.15</b>	<b>6230.94</b>	<b>16.08</b>	<b>6107.27</b>	<b>57.79</b>	<b>1.82</b>	<b>269.05</b>	<b>23.74</b>	<b>13639.20</b>	<b>656.63</b>	<b>14295.83</b>		

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner  
Chennai  
May 9, 2017

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

On behalf of the Board

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

## Consolidated Cash Flow Statement

(in Indian Rupees million, unless otherwise stated)

Particulars	2016-17		2015-16	
<b>Profit before tax</b>		<b>2618.64</b>		<b>2368.68</b>
<b>Adjustment for:</b>				
Share of profit of associate	(48.05)		(43.06)	
Share of profit of Joint ventures	(142.83)		(114.65)	
Fair value of Investment	(0.75)		(0.21)	
Depreciation and amortisation	964.81		868.23	
Finance costs	181.20		229.05	
Impairment on Non current assets	37.34		-	
Interest income	(32.97)		(45.17)	
Profit on sale of Investment	(0.38)		-	
Dividend income	(22.72)		(7.73)	
Impairment loss on financial assets (net)	1.36		0.68	
Allowance for doubtful receivable and advances	78.38		87.05	
Reversal of allowance for doubtful receivables and advances	(90.41)		(26.02)	
Provision for expenses no longer required written back	(40.63)		(23.22)	
Loss on sale of assets (net)	(9.81)		39.61	
Loss /(profit) on exchange fluctuation (net)	19.42	<b>893.96</b>	89.30	<b>1053.86</b>
<b>Operating profit before working capital changes</b>		<b>3512.60</b>		<b>3422.54</b>
<b>Movement in working capital</b>				
(Increase)/decrease in trade and other receivables	23.40		(505.35)	
(Increase)/decrease in Inventories	(23.32)		(49.22)	
(Increase)/decrease in Other financial asset	267.17		(262.62)	
(Increase)/decrease in Other assets	(180.66)		(9.98)	
Increase/(decrease) in Trade payables	195.27		(151.74)	
Increase/(decrease) in Provision & other current liabilities	61.28		8.63	
Increase/(decrease) in Other financial liabilities	(115.17)	<b>227.97</b>	162.59	<b>(807.69)</b>
<b>Cash generated from operations</b>		<b>3740.57</b>		<b>2614.85</b>
Income tax paid		(787.94)		(837.26)
<b>Net cash generated by operating activities</b>	<b>[A]</b>	<b>2952.63</b>		<b>1777.59</b>
<b>Cash flow from investing activities</b>				
Payments to acquire fixed asset	(1174.87)		(1485.74)	
Payments for Intangible asset	(10.58)		(27.64)	
Proceeds from sale of fixed assets	124.34		670.30	
Dividend income from Associate	19.93		19.93	
Dividend income from Joint ventures	172.39		43.62	
Proceeds / (Purchase) of Investments	0.35		-	
Interest income received	32.96		45.16	
Dividend income received	22.72		7.73	
<b>Net cash (used in)/generated by investing activities</b>	<b>[B]</b>	<b>(812.76)</b>		<b>(726.64)</b>

## Consolidated Cash Flow Statement

(in Indian Rupees million, unless otherwise stated)

Particulars	2016-17	2015-16
<b>Cash flow from financing activities</b>		
Proceeds from issue of equity shares	27.82	24.63
Repayment/proceeds from long term borrowings	(805.58)	(198.02)
Repayment/proceeds from borrowings	(825.86)	17.00
Finance costs paid	(181.20)	(229.05)
Dividend paid to Shareholder	(188.63)	(376.68)
Tax on Dividend	(15.75)	(19.56)
Dividend paid to Non Controlling interest and its related tax	(68.38)	(68.38)
Tax on Dividend - Subsidiaries	(13.37)	(5.83)
<b>Net cash used in financing activities</b> [C]	<b>(2070.95)</b>	<b>(855.89)</b>
<b>Net increase/(decrease) in cash and cash equivalents [A]+[B]+[C]</b>	<b>68.92</b>	<b>195.06</b>
<b>Add: Cash and Cash equivalents at the beginning of the year</b>	<b>1135.80</b>	<b>965.22</b>
Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies	93.31	(24.48)
<b>Cash and Cash equivalents at the end of the year</b>	<b>1298.03</b>	<b>1135.80</b>
<b>Reconciliation of Cash and cash equivalents with the Balance Sheet:</b>		
<b>Cash and cash equivalents at the beginning of the year</b>		
Cash and cash equivalents - Refer Note: 12A	1118.38	940.44
Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii)	17.42	24.78
	<b>1135.80</b>	<b>965.22</b>
<b>Cash and cash equivalents at the end of the year</b>		
Cash and cash equivalents - Refer Note: 12A	1248.39	1118.38
Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii)	49.64	17.42
	<b>1298.03</b>	<b>1135.80</b>

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 9, 2017

On behalf of the Board

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Consolidated Financial Statements

Ind AS No.	Description	Accounting policy No.	Note No.
2	Inventories	3.17	10
7	Statement of Cash flows	3.16	12
10	Event after the reporting period		45, 46
12	Income tax	3.10	30, 8
16	Property, plant and equipment	3.11	4, 28
17	Leases	3.24	4, 39
18	Revenue	3.4	23, 35
19	Employee benefits	3.8	26, 36
24	Related party disclosures		38
28	Investments in associates and joint ventures	3.2.3.2	6A, 6B
33	Earnings per share	3.25	31
36	Impairment of assets	3.14	4, 5
37	Provisions, Contingent liabilities and assets	3.18, 3.19	18, 34
38	Intangible assets	3.12	5, 28
101	First time adoption of Indian accounting standards	3.1, 3.13	43
102	Share based payments	3.9	26
103	Business combinations	3.12.3	5
105	Non current held for sale and discontinued operations	3.3	13
107	Financial instruments - Disclosures	3.20, 3.27, 3.28	11, 17, 20, 24, 33, 37
108	Operating segments	3.23	32
112	Disclosure of interest in other entities		6A, 6B, 16
113	Fair value measurements		37

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

## 1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The addresses of its registered office and place of business are disclosed in the annual report. The consolidated financial statements comprise the Company (CUMI - Parent company) and its subsidiaries (referred to collectively as the 'Group') and the Group's interest in associate and joint ventures.

CUMI Group manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals (Refer Note: 32).

## 2. Application of new and revised Ind AS

The financial statements have been prepared in accordance with Ind AS notified under the Companies (Indian Accounting Standards) Rules 2015.

## 3. Significant accounting policies

### 3.1. Statement of Compliances

Upto the year ended March 31, 2016, the Group has prepared its financial statements in accordance with the requirements of previous GAAP, which includes Standards notified under the Companies (Accounting Standards) Rules, 2006. These are the first Ind AS financial statements. The date of transition to Ind AS is April 1, 2015. Refer Note: 43 for the details of first-time adoption exemptions availed by the Group.

### 3.2.1 Basis of preparation and presentation

The consolidated financial statements are presented in Indian Rupees (INR), which is also the Parent company functional currency.

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or

- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The financial statements of all entities used for the purpose of consolidation are drawn up to same reporting date as that of the parent company, i.e., year ended on 31 March 2017. When the end of the reporting period of the parent is different from that of a subsidiary, the subsidiary prepares, for consolidation purposes, additional financial information as of the same date

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

as the financial statements of the parent to enable the parent to consolidate the financial information of the subsidiary, unless it is impracticable to do so.

## 3.2.2 Use of estimates and judgements

In preparing these Financial Statements, Management has made judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

**3.2.2.1 Estimates** and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

**3.2.2.2 Judgements** are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

**3.2.2.3 Assumptions** and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

S. No	Particulars	Note
I	Estimation of useful life of tangible and intangible asset	3.11 & 3.12
II	Impairment test of Goodwill: Key assumption underlying recoverable amounts	5A
III	Assessment of control over components and consolidation decisions and classification of Associate	6A
IV	Assessment of control over components and consolidation decisions and classification of joint arrangements	6B
V	Estimation of fair value of unlisted securities	6C
VI	Recognition of deferred tax assets: Availability of future taxable profit against which tax losses carried forward can be used.	8
VII	Impairment of Trade receivables: Expected credit loss	11
VIII	Recognition and measurement of provisions and contingencies ; key assumption about the likelihood and magnitude of an outflow of resources.	18 & 34
IX	Measurement of defined benefit obligation: Key actuarial assumptions.	36
X	Lease: Whether an arrangement contains a lease	39

## 3.2.3 Basis of consolidation

### 3.2.3.1 Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is acquired until the date on which control ceases to exist.

The acquisition method of accounting is used to account for business combinations by the Group. The Group combines the financial statements of the parent and its subsidiaries line by line adding together like items of assets, liabilities, equity, income and expenses. Inter-Group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit and loss, consolidated statement of changes in equity and balance sheet respectively.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed.

If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date.

If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entity recognises the gain directly in equity as capital reserve, without routing the same through OCI.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

### 3.2.3.2 Associates and Joint ventures

An **associate** is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A **joint venture** is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining whether significant influence or joint control are similar to those necessary to determine control over the subsidiaries.

The Group's investments in its associate and joint venture are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The statement of profit and loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the statement of profit and loss.

### 3.2.3.3 Foreign currency translation

The consolidated financial statements are presented in Indian Rupee, which is the CUMI's functional and presentation currency

and include the financial position and results in respect of foreign operations, initially measured using the currency of the primary economic environment in which the entity operates (i.e their functional currency) and translated as follows:

- assets and liabilities are translated at the closing rate at the date of that balance sheet;
- income and expenses are translated at average exchange rates;
- All resulting exchange differences are recognised in other comprehensive income;

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

### 3.3 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

### 3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

Based on the Educational Material on Ind AS 18 issued by the ICAI, the Group has assumed that recovery of excise duty flows to the Group on its own account. This is for the reason that it is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to the Group on its own account, revenue is recorded inclusive of excise duty.

However, sales tax/value added tax (VAT) is not received by the Group on its own account. Rather, it is tax collected on value added to the commodity by the seller on behalf of the government. Accordingly, it is excluded from revenue.

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

The specific recognition criteria described below must also be met before revenue is recognised.

## 3.4.1 Sale of goods

Sales are accounted on transfer of significant risks and rewards of ownership to the buyer which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales.

## 3.4.2 Rendering of services

The revenue from divisible contracts are recognised on the percentage completion method in respect of service contracts and in respect of supplies on dispatch. In respect of indivisible contracts, the revenues are recognised on a percentage completion method, synchronized to the billing schedules agreed by the customers.

In respect of maintenance service contracts, service income is recognised over the duration of the contract.

## 3.4.3 Other income

**Royalty income** is recognised on an accrual basis in accordance with the substance of the relevant agreement.

**Dividend income** from investments is recognised when the shareholder's right to receive payment has been established.

**Interest income** from a financial asset is recognised and accrued on time proportion basis.

**Rental income** is recognised on an accrual basis in accordance with the agreement.

## 3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the statement of profit and loss.

Foreign currency monetary items (other than derivative contracts) of the respective company, outstanding at the balance sheet date are restated at the year-end rates. Non-monetary items of the respective company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the respective company are recognised as income or expense in the Statement of Profit and Loss.

Premium / discount on forward exchange contracts are amortised over the period of the contracts if such contracts relate to

monetary items as at the balance sheet date. Any profit or loss arising on cancellation or renewal of such a forward exchange contract is recognised as income or as expense in the period in which such cancellation or renewal is made.

Refer Note: 3.27 and 3.28 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

## 3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets-Refer Note: 4 and 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

## 3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the balance sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

## 3.8 Employee benefits

### 3.8.1 Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and losses, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income;
- remeasurement

The Group presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and losses are accounted for as past service costs.

A liability for a termination benefit is recognised at the earlier of which the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

### 3.8.2 Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

### 3.8.3 Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue

### 3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 37 of Standalone financial statements.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

### 3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### 3.10.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differ from 'profit before tax' as reported in the statement of profit and loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). The current tax is calculated using tax rates that have been enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

#### 3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

### 3.10.3 CENVAT/Service Tax/VAT

CENVAT/VAT credit on materials purchased/services availed for production/Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/ utilising the credits. CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The CENVAT credits so taken are utilised for payment of excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised CENVAT/VAT credit is carried forward in the books.

### 3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the balance sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their

useful lives, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Building on lease hold land are depreciated over the lease period.

Individual asset costing less than ₹5000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

## 3.12 Intangible assets

### 3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

**3.12.2 Internally generated intangibles**, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

### 3.12.3. Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

### 3.12.4 Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from Derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

## 3.13 Deemed cost on transition to Ind AS

For transition to Ind AS, the Group has elected to continue with the carrying value of all of its Tangible and Intangible assets recognised as of April 01, 2015 (transition date) measured as per the previous GAAP and use that carrying value as its deemed cost as of transition date.

## 3.14 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amount of tangible and intangible assets to determine

whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

## 3.15 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

## 3.16 Cash flow statement

Cash flows are reported using the indirect method, whereby profit/(loss) before extraordinary items and tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

flows from operating, investing and financing activities of the Group are segregated based on the available information.

## 3.17 Inventories

Inventories are stated at the lower of cost and net-realizable value. Cost includes freight, taxes and duties net of CENVAT/VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts, cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realizable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

## 3.18 Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

## 3.19 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Group or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

## 3.20 Financial instruments

Financial assets and financial liabilities are recognised when the Group becomes a party to the contractual provision of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

## 3.21 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

### 3.21.1 Classification of financial assets

Debt instrument that meet the following condition are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note: 3.21.4.

### 3.21.2 Investment in equity instruments at FVTOCI

On initial recognition, the Group can make an irrevocable election (on an instrument-by-instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term.
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The Group has equity instrument in two entities, which are not held for trading. The Group has elected the FVTOCI irrevocable option for both of these investments (Refer Note: 6C ). Fair value is determined in the manner described in Note: 37.

Dividend on these investments are recognised in profit or loss when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, which does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss are included in 'Other income' line item.

### 3.21.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Group irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Refer Note: 3.21.2).

Debt instruments that do not meet the amortised cost criteria or FVTOCI Criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or losses on them on different bases. The Group has not designated any such debt instrument as at FVTPL.

Financial asset at FVTPL are measured at fair value at the end of each reporting period, with any gains or losses arising

on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the Group's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the Group which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

### 3.21.4 Impairment of financial assets

The Group applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost, debt instruments at FVTOCI, lease receivable, trade receivable, other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The Group estimates cash flows by considering all contractual terms of the financial instrument (for example, prepayments, extension, call and similar options) through the expected life of that financial instruments.

The Group measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over the 12 months.

If the Group measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the Group again measures the loss allowance based on 12 month expected credit losses.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the Group uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 11 and Ind AS 18, the Group always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Group has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in other comprehensive income and is not reduced from the carrying amount in the balance sheet.

### 3.21.5 Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for the amount it may have to pay.

If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On Derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the

consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On Derecognition of a financial asset other than its entirety (eg., when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

### 3.21.6 Foreign exchange gain and losses

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- for Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in other comprehensive income.
- For the purposes of recognising foreign exchange gain and losses, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in other comprehensive income.

## 3.22 Financial liabilities and equity instruments

### 3.22.1 Classification as debt or equity

Debt and equity instruments issued by a Group are classified as either financial liabilities or as equity in accordance with the

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

## 3.22.2 Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Group is recognised at the proceeds received, net of direct issue costs.

## 3.22.3 Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Group, and commitments issued by the Group to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below.

### 3.22.3.1 Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term ;or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a group of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance

with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'Other income' line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or losses on financial guarantee contract and loan commitments issued by the Group that are designated by the Group as at fair value through profit or loss are recognised in profit or loss.

Fair value is determined in the manner described in Note: 37

### 3.22.3.2 Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. Interest expenses that is not capitalised as part of cost of an asset is included in the 'Finance cost' line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

(including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

### 3.22.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contracts issued by a Group are initially measured at their fair value and, if not designated as at FVTPL, are subsequently measured at the higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and
- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 18.

### 3.22.3.4 Foreign exchange gain and losses

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and losses are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or losses and is recognised in profit or loss.

### 3.22.3.5 Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. An exchange between a lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### 3.23 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Group with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/ fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis have been included under "Un-allocated Corporate expenses".

### 3.24 Leases

Assets leased in its capacity as a lessee, where substantially all the risks and rewards of ownership vest are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

### 3.25 Earnings per share

Basic earnings per share is computed by dividing the profit/ (loss) after tax (including the post tax effect of extraordinary items, if any) attributable to the parent shareholder by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/ (loss) after tax (including the post tax effect of extraordinary items, if any) attributable to the parent shareholder as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

### 3.26 Research and Development

All revenue expenditure related to research and development are charged to the respective heads on the Statement of profit and loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Group.

### 3.27 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair values at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

### 3.28 Hedge accounting

The Group designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

Note: 37 sets out details of the fair values of the derivatives instruments used for hedging purposes.

#### 3.28.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the

hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

#### 3.28.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or losses are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Group has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e., Reserve for time value of options and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e.. not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition of a non-financial asset or non-financial liability. In other cases, the amount accumulated

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017

is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e., Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects other comprehensive income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Group makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

### 3.29 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/expected to be admitted and to the extent that the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

### 3.30 Operating cycle

Based on the nature of the products/activities of the Group and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Group has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 4. Property, plant and equipment

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Carrying amounts</b>			
Freehold land	105.10	104.54	96.35
Buildings	1823.17	1577.25	1883.54
Plant and equipment	3743.61	3447.53	3940.10
Furniture and fittings	66.55	59.07	61.79
Vehicles	57.63	60.99	59.19
Vehicles under finance lease	21.67	21.57	16.58
	<b>5817.73</b>	<b>5270.95</b>	<b>6057.55</b>
<b>B. Capital work-in-progress</b>	<b>725.64</b>	<b>841.77</b>	<b>402.13</b>

Cost	Freehold land	Buildings (b)	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
<b>Balance at April 1, 2015 (Deemed cost) (a)</b>	<b>96.35</b>	<b>1883.54</b>	<b>3940.10</b>	<b>61.79</b>	<b>59.19</b>	<b>16.58</b>	<b>6057.55</b>
Additions (c)	9.62	199.81	607.08	15.93	28.47	13.40	874.31
Disposals	(3.80)	(106.02)	(307.56)	(1.80)	(11.33)	(3.06)	(433.57)
Reclassified as held for sale	-	(283.23)	-	-	-	-	(283.23)
Translation differences	2.37	(45.37)	(85.05)	0.01	(1.02)	-	(129.06)
<b>Balance at March 31, 2016</b>	<b>104.54</b>	<b>1648.73</b>	<b>4154.57</b>	<b>75.93</b>	<b>75.31</b>	<b>26.92</b>	<b>6086.00</b>
Additions (c)	-	264.63	1108.97	31.93	10.69	8.68	1424.90
Disposals	-	(0.04)	(112.18)	(5.12)	(1.45)	(0.27)	(119.06)
Translation differences	0.56	66.09	130.64	0.34	4.16	-	201.79
<b>Balance at March 31, 2017</b>	<b>105.10</b>	<b>1979.41</b>	<b>5282.00</b>	<b>103.08</b>	<b>88.71</b>	<b>35.33</b>	<b>7593.63</b>

Accumulated depreciation and impairment	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
<b>Balance at April 1, 2015</b>	-	-	-	-	-	-	-
Depreciation expense	-	76.72	713.68	17.53	15.62	6.97	830.52
Eliminated on disposals	-	(1.85)	(1.59)	(0.66)	(1.14)	(1.62)	(6.86)
Reclassified as held for sale	-	(2.93)	-	-	-	-	(2.93)
Translation differences	-	(0.46)	(5.05)	(0.01)	(0.16)	-	(5.68)
<b>Balance at March 31, 2016</b>	-	<b>71.48</b>	<b>707.04</b>	<b>16.86</b>	<b>14.32</b>	<b>5.35</b>	<b>815.05</b>
Depreciation expense	-	81.51	800.86	20.47	15.86	8.58	927.28
Eliminated on disposals	-	-	(5.61)	(0.95)	(0.54)	(0.27)	(7.37)
Translation differences	-	3.25	36.10	0.15	1.44	-	40.94
<b>Balance at March 31, 2017</b>	-	<b>156.24</b>	<b>1538.39</b>	<b>36.53</b>	<b>31.08</b>	<b>13.66</b>	<b>1775.90</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Carrying amounts	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
<b>Balance at April 1, 2015</b>	<b>96.35</b>	<b>1883.54</b>	<b>3940.10</b>	<b>61.79</b>	<b>59.19</b>	<b>16.58</b>	<b>6057.55</b>
Additions	9.62	199.81	607.08	15.93	28.47	13.40	874.31
Depreciation expense	-	(76.72)	(713.68)	(17.53)	(15.62)	(6.97)	(830.52)
Disposals (net)	(3.80)	(104.17)	(305.97)	(1.14)	(10.19)	(1.44)	(426.71)
Reclassified as held for sale	-	(280.30)	-	-	-	-	(280.30)
Translation differences	2.37	(44.91)	(80.00)	0.02	(0.86)	-	(123.38)
<b>Balance at March 31, 2016</b>	<b>104.54</b>	<b>1577.25</b>	<b>3447.53</b>	<b>59.07</b>	<b>60.99</b>	<b>21.57</b>	<b>5270.95</b>
Additions	-	264.63	1108.97	31.93	10.69	8.68	1424.90
Depreciation expense	-	(81.51)	(800.86)	(20.47)	(15.86)	(8.58)	(927.28)
Disposals (net)	-	(0.04)	(106.57)	(4.17)	(0.91)	-	(111.69)
Translation differences	0.56	62.84	94.54	0.19	2.72	-	160.85
<b>Balance at March 31, 2017</b>	<b>105.10</b>	<b>1823.17</b>	<b>3743.61</b>	<b>66.55</b>	<b>57.63</b>	<b>21.67</b>	<b>5817.73</b>

Capital work in progress movement	Total
<b>Balance at April 1, 2015</b>	<b>402.13</b>
Addition during the year	1313.95
Capitalised during the year	(874.31)
<b>Balance at March 31, 2016</b>	<b>841.77</b>
Addition during the year	1308.77
Capitalised during the year	(1424.90)
<b>Balance at March 31, 2017</b>	<b>725.64</b>

**(a) Adoption of transitional provisions:**

In accordance with Ind AS transitional provisions, the Group has opted to consider previous GAAP carrying value of property, plant and equipment as deemed cost as at the transition date April 01, 2015.

**(b)** Includes ₹722.56 million ( Previous years as at 31.03.2016: ₹684.25 million and as at 01.04.2015: ₹559.31 million) being cost of building on leasehold land.

**(c)** Includes Research & Development capital expenditure of ₹11.45 million (Previous year 15-16: ₹14.96 million) - Refer Note: 41 on Research & Development expenditure

**(d) Capitalised borrowing cost**

Borrowing costs capitalised on property, plant and equipment during the year 2016-17 - ₹Nil (Previous year 2015-16: ₹Nil).

**(e) Assets pledged as security**

Immovable properties of the Parent carry pari-passu charge in favour of the consortium of bankers as security for banking facilities availed.

Plant & Machinery relating to a domestic subsidiary carry a charge in favour of a banker as security for the term loan availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

**(f) Contractual obligations:**

Refer Note: 34 for disclosure of Contractual commitments for the acquisition of property, plant and equipment.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 5A. Goodwill on Consolidation

Carrying amounts	As at		
	31.03.2017	31.03.2016	01.04.2015
Cost or deemed cost	1185.29	1214.51	1149.55
Accumulated Impairment losses	(37.34)	-	-
	<b>1147.95</b>	<b>1214.51</b>	<b>1149.55</b>

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	1214.51	1149.55
Add: Exchange difference during the year arising on translation of goodwill relating to foreign subsidiaries	(29.22)	64.96
Less: Impaired during the year	(37.34)	-
	<b>1147.95</b>	<b>1214.51</b>

Total carrying amount of recoverable goodwill is based upon value in use and not based on fair value less cost of disposal.

#### Accumulated Impairment losses

During the year, the Group decided to impair the Goodwill which was recognised at the time of acquiring the step down subsidiary, CUMI Abrasives & Ceramics Company Limited - China, to its recoverable value.

The impairment losses on non-current asset have been included in Profit or Loss under 'Other expenses' - Refer Note: 29

The carrying amount of goodwill as at the year ended March 31, 2017 comprise of the Goodwill initially recognised at the time of acquisition of Volzhsky Abrasives Works [VAW] & the balance relate to the goodwill recognised on acquisition of other subsidiaries.

#### (i) Goodwill recognised at the time of acquisition of Volzhsky Abrasives Works [VAW]

The Goodwill recognised at the time of acquisition of VAW represents the significant portion of the total Goodwill carried by the Group. This arose when VAW was acquired by the Group through its wholly owned subsidiary in FY 2007-08. The value in use is arrived at by discounting the cash flow projections using the financial budgets covering a period of three years, approved by the Board of directors of VAW and extrapolating it beyond three years using a growth rate of 5% p.a. The cash flows have been discounted using a rate of 15.1% p.a. This growth rate does not exceed the long term average growth rate. The Group believes that any reasonable further change in the key assumptions on which recoverable amount is based, would not cause the carrying amount to exceed its recoverable amount.

#### (ii) Goodwill recognised at the time of acquisition of other entities

This represents the goodwill recognised on the acquisition of other subsidiaries viz., Sterling Abrasives Ltd., Southern Energy Development Corporation Ltd and CUMI (Australia) Pty Ltd. The aggregate values of the same are not significant. The Group believes that the carrying amount of the Goodwill is recoverable.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 5B. Other Intangible assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>(i) Carrying amounts</b>			
Software	13.15	14.33	18.09
Technical know-how	69.23	91.58	94.94
<b>Total</b>	<b>82.38</b>	<b>105.91</b>	<b>113.03</b>
<b>(ii) Intangible assets under development</b>	<b>0.34</b>	<b>3.59</b>	<b>6.56</b>

Cost	Software	Technical know-how	Total
<b>Balance at April 1, 2015 - Deemed cost (a)</b>	<b>18.09</b>	<b>94.94</b>	<b>113.03</b>
Additions (b)	6.59	30.12	36.71
Disposals	-	(6.10)	(6.10)
Translation differences	-	(0.02)	(0.02)
<b>Balance at March 31, 2016</b>	<b>24.68</b>	<b>118.94</b>	<b>143.62</b>
Additions (b)	7.59	6.23	13.82
Disposals	(0.09)	-	(0.09)
Translation differences	-	0.18	0.18
<b>Balance at March 31, 2017</b>	<b>32.18</b>	<b>125.35</b>	<b>157.53</b>

Accumulated amortisation and impairment	Software	Technical know-how	Total
<b>Balance at April 1, 2015</b>	-	-	-
Amortisation expense	10.35	27.36	37.71
Translation differences	-	-	-
<b>Balance at March 31, 2016</b>	<b>10.35</b>	<b>27.36</b>	<b>37.71</b>
Amortisation expense	8.76	28.77	37.53
Disposals	(0.08)	-	(0.08)
Translation differences	-	(0.01)	(0.01)
<b>Balance at March 31, 2017</b>	<b>19.03</b>	<b>56.12</b>	<b>75.15</b>

Carrying amounts	Software	Technical know-how	Total
<b>Balance at April 1, 2015</b>	<b>18.09</b>	<b>94.94</b>	<b>113.03</b>
Additions	6.59	30.12	36.71
Amortisation expense	(10.35)	(27.36)	(37.71)
Disposals (net)	-	(6.10)	(6.10)
Translation differences	-	(0.02)	(0.02)
<b>Balance at March 31, 2016</b>	<b>14.33</b>	<b>91.58</b>	<b>105.91</b>
Additions	7.59	6.23	13.82
Amortisation expense	(8.76)	(28.77)	(37.53)
Disposals (net)	(0.01)	-	(0.01)
Translation differences	-	0.19	0.19
<b>Balance at March 31, 2017</b>	<b>13.15</b>	<b>69.23</b>	<b>82.38</b>

#### (a) Adoption of transitional provisions:

In accordance with Ind AS transitional provisions, the Group has opted to consider previous GAAP carrying value of intangible assets as deemed cost on transition date.

- (b) Includes Research & Development capital expenditure of ₹2.29 million (Previous year 15-16: ₹6.96 million) - Refer Note: 41 on Research & Development expenditure.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 6A. Investments in Associate

Particulars	As at					
	31.03.2017		31.03.2016		01.04.2015	
	No. of shares	Amount	No. of shares	Amount	No. of shares	Amount
Wendt (India) Ltd. [WENDT]	797,352	447.77	797,352	426.53	797,352	411.48
<b>Total Carrying value</b>	<b>797,352</b>	<b>447.77</b>	<b>797,352</b>	<b>426.53</b>	<b>797,352</b>	<b>411.48</b>
Book value of Quoted Investment		447.77		426.53		411.48
Market value of Quoted Investment		1511.98		1387.39		1357.65

Name of the Associate	Nature of business	Place of incorporation and principal place of business	Proportion of ownership's interest/ voting rights held by the Group		
			As at		
			31.03.2017	31.03.2016	01.04.2015
Wendt (India) Ltd.	Super abrasives	India	39.87%	39.87%	39.87%

The Group has consolidated the above Associate using equity method.

**Principal activities of the business:** A leading manufacturer of Super Abrasives (Diamond and Cubic Boron Nitride), Special purpose Grinding machine and tools, offering functionally superior products and services for grinding and machining "Hard - To - Process Materials".

Pursuant to shareholder agreement, the Parent has the right to cast 39.87% of the votes at shareholders' meeting of Wendt (India) Limited. The investment in this entity, is treated as an Associate, since in addition to the co-venturer ( who holds similar stake as CUMI), general public also holds the remaining portion of shares. Hence the Group has not treated this investment as Joint venture investment.

#### Summarised financial information of Associate

The summarised financial information given below represents amount shown in the Associate's consolidated financial statements prepared in accordance with Ind AS adjusted by the Group for equity accounting purposes.

Wendt (India) Limited Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Non-current assets	666.49	679.83	639.12
Current assets	788.06	755.73	711.26
Non-current liabilities	(79.62)	(68.47)	(66.39)
Current liabilities	(251.78)	(297.22)	(251.88)

Particulars	for the year	
	2016-17	2015-16
Revenue	1590.96	1467.63
Profit for the year	120.51	107.77
Other Comprehensive Income	(7.05)	(9.94)
Total Comprehensive Income	113.46	97.83
Dividend received from WENDT	19.93	19.93

Reconciliation of the above summarised financial information to the carrying amount of the interest in Wendt (India) limited recognised in consolidated financial statements is given below:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Net assets of WENDT	1123.15	1069.87	1032.11
Proportion of the Group's ownership interest in WENDT	39.87%	39.87%	39.87%
Carrying amount of the Group's interest in WENDT	447.77	426.53	411.48

Fair value of the Group's interest in Wendt (India) Limited, which is listed in the Stock exchange of India as on March 31, 2017 was ₹1511.98 million (as at March 31, 2016 ₹1387.39 million; as at April 1, 2015 ₹1357.65 million).

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>I. Contingent liabilities: Wendt (India) Limited</b>			
a. Directly incurred by the Group	-	-	-
b. Share of the Group which have been incurred with other investors	-	-	-
c. Group's share in relation to its interest in Associate	2.37	2.37	2.37
<b>II. Commitments - Capital: Wendt (India) Limited</b>			
a. Directly incurred by the Group	-	-	-
b. Share of the Group which have been incurred with other investors	-	-	-
c. Group's share in relation to its interest in Associate	14.69	25.30	12.75

### 6B. Investments in Joint Ventures

Name of the Joint Ventures	As at					
	31.03.2017		31.03.2016		01.04.2015	
	No. of shares	Amount	No. of shares	Amount	No. of shares	Amount
<b>Unquoted Investment - Equity shares</b>						
Murugappa Morgan Thermal Ceramics Ltd. [MMTCL]	1,430,793	530.64	1,430,793	614.53	1,430,793	548.63
Ciria India Ltd. [CIRIA]	59,998	83.67	59,998	65.40	59,998	69.50
<b>Total Carrying value</b>		<b>614.31</b>		<b>679.93</b>		<b>618.13</b>
Aggregate value of unquoted investments		614.31		679.93		618.13

Details of the Group's Joint Ventures at the end of the reporting period are as follows:

Name of the Joint Ventures	Nature of business	Place of incorporation and principal place of business	Proportion of ownership's interest/ voting rights held by the Group		
			31.03.2017	31.03.2016	01.04.2015
Murugappa Morgan Thermal Ceramics Ltd.	Ceramics	India	49%	49%	49%
Ciria India Ltd.	Ceramics	India	30%	30%	30%

#### Nature of Business:

- MMTCL: Manufacture of complete range of ceramics fiber products.
- CIRIA: Providing refractory engineering solutions and supply of refractory materials.

The Group has entered into Joint venture agreements with the co-venturer and hence the investment in the above entities are treated as Joint venture. Both the ventures have joint control on the entities. Accordingly, the Group has consolidated the above Joint ventures using equity method.

#### Summarised financial information of Joint Ventures:

The summarised financial information below represents the amount shown in the Joint venture's financial statements prepared in accordance with Ind AS adjusted by the Group for equity accounting purposes.

#### Murugappa Morgan Thermal Ceramics Ltd.

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Non-current assets	619.21	645.58	500.45
Current assets	727.85	875.83	861.06
Non-current liabilities	(27.09)	(24.69)	(16.14)
Current liabilities	(237.02)	(242.58)	(225.72)

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The above amount of assets and liabilities includes the following:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Cash and cash equivalents	28.64	25.13	13.99
Current financial liabilities (excluding trade payables and provisions)	-	-	-
Non-current financial liabilities (excluding trade payables and provisions)	-	-	-

Particulars	For the year	
	2016-17	2015-16
Revenue	1503.10	1458.23
Profit for the year	217.33	205.49
Other Comprehensive Income	(1.94)	(0.72)
Total Comprehensive Income	215.39	204.77
Dividend received from MMTCL	157.39	28.62

The above profit for the year includes the following:

Depreciation and amortisation	81.82	71.24
Interest income	0.69	0.56
Interest expense	-	0.04
Income tax expense	108.87	98.86

Reconciliation of the above summarised financial information to the carrying amount of the interest in Murugappa Morgan Thermal Ceramics Ltd. recognised in the consolidated financial statements is given below:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Net assets of MMTCL	1082.95	1254.14	1119.65
Proportion of the Group's ownership interest in MMTCL	49%	49%	49%
Carrying amount of the Group's interest in MMTCL	530.64	614.53	548.63

**Ciria India Ltd.**

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Non-current assets	41.77	41.21	44.51
Current assets	441.74	316.38	374.92
Non-current liabilities	(7.04)	(6.82)	(6.24)
Current liabilities	(197.56)	(132.76)	(181.53)

The above amount of assets and liabilities includes the following:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Cash and cash equivalents	55.62	31.68	52.67
Current financial liabilities (excluding trade payables and provisions)	-	-	-
Non-current financial liabilities (excluding trade payables and provisions)	-	-	-

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	For the year	
	2016-17	2015-16
Revenue	988.21	508.71
Profit for the year	121.14	46.53
Other Comprehensive Income	(0.06)	(0.01)
Total Comprehensive Income	121.08	46.52
Dividend received from CIRIA	15.00	15.00
<b>The above profit for the year includes the following:</b>		
Depreciation and amortisation	8.53	9.18
Interest income	0.00	-
Interest expenses	-	-
Income tax expenses (income)	63.19	36.63

Reconciliation of the above summarised financial information to the carrying amount of the interest in Ciria India Ltd. recognised in the consolidated financial statements is given below:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Net assets of CIRIA	278.91	218.01	231.66
Proportion of the Group's ownership interest in CIRIA	30%	30%	30%
Carrying amount of the Group's interest in CIRIA	83.67	65.40	69.50

### Unrecognised share of losses of Joint Ventures: MMTCL & CIRIA

Particulars	For the year	
	2016-17	2015-16
The unrecognised share of loss on Joint Ventures for the year	-	-
Cumulative unrecognised share of loss of Joint Ventures	-	-

The Joint ventures: Murugappa Morgan Thermal Ceramics Ltd. and Ciria India Ltd., cannot distribute its profits until it obtains the consent from both the venturers.

Particulars	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
	MMTCL	CIRIA	MMTCL	CIRIA	MMTCL	CIRIA
<b>I. Contingent liabilities</b>						
a. Directly incurred by the Group	-	-	-	-	-	-
b. Share of the Group which have been incurred along with other investors	-	-	-	-	-	-
c. Group's share in relation to its interest in Joint venture	9.01	0.65	4.93	0.65	4.14	0.65
<b>II. Commitments - Capital</b>						
a. Directly incurred by the Group	-	-	-	-	-	-
b. Share of the Group which have been incurred along with other investors	-	-	-	-	-	-
c. Group's share in relation to its interest in Joint venture	4.61	-	6.27	0.04	6.64	-

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 6C. Other Investments

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>(i) Non-current</b>			
<b>(a) Investment in Equity instruments at FVTOCI</b>			
<b>Quoted</b>			
Coromandel Engineering Co. Ltd.	118.22	172.38	137.39
<b>Unquoted</b>			
Murugappa Management services	11.30	11.30	11.30
<b>(b) Investments in Equity Instruments at FVTPL</b>			
Quoted	3.03	2.28	2.07
Unquoted	0.30	0.25	0.26
<b>Total (a+b)</b>	<b>132.85</b>	<b>186.21</b>	<b>151.02</b>
Aggregate book value of quoted investments	121.25	174.66	139.46
Aggregate market value of quoted investments	121.25	174.66	139.46
Aggregate carrying value of unquoted investments	11.60	11.55	11.56
Aggregate amount of impairment in value of investments	-	-	-
<b>(ii) Current</b>			
Investments in Liquid instruments	<b>49.64</b>	<b>17.42</b>	<b>24.78</b>
<b>Category wise other investments - as per Ind AS 109</b>			
Financial asset measured at FVTPL - Equity instruments & Others	52.97	19.95	27.11
Financial asset measured at FVTOCI - Equity instruments	129.52	183.68	148.69
	<b>182.49</b>	<b>203.63</b>	<b>175.80</b>

### 7. Other financial assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non-current</b>			
Security deposits	<b>110.80</b>	<b>101.28</b>	<b>94.03</b>
<b>B. Current</b>			
Deposits	0.03	8.19	24.21
Advances to employees	11.97	16.15	11.72
Other receivables			
Considered good	42.48	35.21	47.02
Considered doubtful	0.92	26.30	26.22
Less: Allowance for doubtful receivables	(0.92)	(26.30)	(26.22)
	<b>54.48</b>	<b>59.55</b>	<b>82.95</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 8. Deferred tax assets (net) and Deferred tax liabilities (net)

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
A. Deferred tax assets (net)	89.98	75.71	97.85
B. Deferred tax liabilities (net)	463.95	483.43	548.10

Particulars	2016-17				
	Balance as at 31.03.2016	Recognised in Profit or Loss	Recognised in OCI	Translation adjustment	Balance as at 31.03.2017
<b>A. Deferred tax assets (net)</b>					
Allowance for doubtful receivables and advances	-	0.68	-	-	0.68
Expenses allowed on payment /realisation basis	21.73	(0.83)	-	0.98	21.88
Accelerated depreciation for tax purposes	(18.00)	7.32	-	(1.82)	(12.50)
Tax losses	54.74	2.89	-	3.14	60.77
Tax on Unrealised profit on stock	17.24	1.91	-	-	19.15
<b>Total</b>	<b>75.71</b>	<b>11.97</b>	<b>-</b>	<b>2.30</b>	<b>89.98</b>
<b>B. Deferred tax liabilities (net)</b>					
Allowance for doubtful receivables and advances	(49.01)	23.09	-	(1.84)	(27.76)
Voluntary retirement scheme payments	(1.58)	1.15	-	-	(0.43)
Expenses allowed on payment /realisation basis	(52.63)	(0.62)	-	(1.31)	(54.56)
Principal portion of finance lease rentals	(0.92)	(0.77)	-	-	(1.69)
Cash flow hedges	0.24	-	1.26	-	1.50
Tax on undistributed profit	86.83	2.21	-	-	89.04
Accelerated depreciation for tax purposes	500.50	(42.86)	-	0.21	457.85
<b>Total</b>	<b>483.43</b>	<b>(17.80)</b>	<b>1.26</b>	<b>(2.94)</b>	<b>463.95</b>
<b>Movement during the year (B - A)</b>	<b>407.72</b>	<b>(29.77)</b>	<b>1.26</b>	<b>(5.24)</b>	<b>373.97</b>

Particulars	2015-16				
	Balance as at 01.04.2015	Recognised in Profit or Loss	Recognised in OCI	Translation adjustment	Balance as at 31.03.2016
<b>A. Deferred tax assets (net)</b>					
Allowance for doubtful receivables and advances	(0.18)	0.17	-	0.01	-
Expenses allowed on payment /realisation basis	26.77	(2.62)	-	(2.42)	21.73
Accelerated depreciation for tax purposes	(69.16)	44.19	-	6.97	(18.00)
Tax losses	133.86	(67.40)	-	(11.72)	54.74
Tax on Unrealised profit on stock	6.56	10.68	-	-	17.24
<b>Total</b>	<b>97.85</b>	<b>(14.98)</b>	<b>-</b>	<b>(7.16)</b>	<b>75.71</b>
<b>B. Deferred tax liabilities (net)</b>					
Allowance for doubtful receivables and advances	(36.10)	(13.69)	-	0.78	(49.01)
Voluntary retirement scheme payments	(0.41)	(1.17)	-	-	(1.58)
Expenses allowed on payment /realisation basis	(24.72)	(27.21)	-	(0.70)	(52.63)
Principal portion of finance lease rentals	(1.28)	0.36	-	-	(0.92)
Cash flow hedges	0.37	-	(0.13)	-	0.24
Tax on undistributed profit	80.33	6.50	-	-	86.83
Accelerated depreciation for tax purposes	529.91	(23.29)	-	(6.12)	500.50
<b>Total</b>	<b>548.10</b>	<b>(58.50)</b>	<b>(0.13)</b>	<b>(6.04)</b>	<b>483.43</b>
<b>Movement during the year (B - A)</b>	<b>450.25</b>	<b>(43.52)</b>	<b>(0.13)</b>	<b>1.12</b>	<b>407.72</b>

- (a) Tax losses in respect of subsidiaries where the foreseeable business profits are estimated reasonably in the near future is considered for recognition of deferred tax assets in respective entities in compliance with tax laws of the respective countries.
- (b) Deferred tax assets have not been recognised in respect of losses as they may not be used to offset taxable profit elsewhere in the Group, also they have arisen in subsidiaries that have been loss-making for some time and there are no other tax planning opportunities or other evidence of recoverability in the near future.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 9. Other assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non-current</b>			
Capital advances	104.17	155.44	25.15
Prepayments	138.81	140.80	217.57
Deposits paid under protest relating to disputed Sales tax, Central excise and Service tax demands	19.59	14.55	14.93
Taxation ( net of provisions)	80.30	95.07	103.40
	<b>342.87</b>	<b>405.86</b>	<b>361.05</b>
<b>B. Current</b>			
Prepayments	101.84	80.33	79.37
Recoverable from Electricity Board - Banked power	74.61	44.82	-
Trade advance to Supplier	223.48	168.63	166.31
Balances with Statutory authorities	272.15	201.49	180.07
	<b>672.08</b>	<b>495.27</b>	<b>425.75</b>

### 10. Inventories

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Raw materials	982.91	950.78	945.91
Raw materials in transit	68.95	78.15	106.75
Work-in-progress	887.74	916.06	729.64
Stock-in-trade	629.01	694.74	601.64
Stock-in-trade in transit	37.74	33.52	43.58
Finished goods	815.08	722.86	1005.75
Stores and spares	445.54	308.17	309.05
	<b>3866.97</b>	<b>3704.28</b>	<b>3742.32</b>

- a The mode of valuation of inventories has been stated in Note: 3.17
- b The cost of inventories recognised as an expense (consumption) during the year 2016-17 was ₹8098.65 million (previous year 2015-16: ₹7496.09 million) and such expense includes ₹14.60 million towards reversal of write-down of inventory to net realisable value (the corresponding amount for 2015-16, was an expense of ₹35.46 million). The write-down of inventory to net realisable value made in earlier years were reversed in current year as a result of increased realisations in certain markets/segments.
- c All the above inventories are expected to be recovered within twelve months.

### 11. Trade receivables (Unsecured)

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Current</b>			
Considered good	3805.83	3674.82	3438.61
Doubtful	101.57	146.65	87.53
Allowance for doubtful receivables (expected credit loss allowance)	(101.57)	(146.65)	(87.53)
	<b>3805.83</b>	<b>3674.82</b>	<b>3438.61</b>

- a Trade receivables are generally due between 30 to 60 days. The Group's term includes charging of interest for delayed payment beyond agreed credit days. However, the entities under the Group exercises charging of interest after considering the historical trend, business prospects, reason for delay, market conditions etc.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

- b Credit risk is managed at the respective entity level . The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The entities under the Group may consider credit rating when needed. The credit limit and the credit period are reviewed regularly at periodical intervals.
- c Concentration risk considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant due to the fact that the customer base is large and diversified.

The respective entities under the Group have used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward looking information.

### d Movement in the expected credit loss allowance

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	146.65	87.53
Movement in the expected credit loss allowance on trade receivables calculated at life time expected credit losses	(45.08)	59.12
	<b>101.57</b>	<b>146.65</b>

## 12A. Cash and cash equivalents

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Balances with banks	1165.27	1109.84	937.74
Deposit account	81.62	7.05	1.06
Cash on hand	1.50	1.49	1.64
	<b>1248.39</b>	<b>1118.38</b>	<b>940.44</b>

### Non-cash transactions:

During the year, the Company has not entered into any non-cash transactions on investing and financing activities.

## 12B. Bank balances other than above

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Earmarked funds	12.21	14.07	11.16

## 13. Assets classified as held for sale

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Buildings	-	206.90	-
Land	-	73.40	-
	-	<b>280.30</b>	-

In the year 2015-16, the Group intended to sell land and buildings belonging to a step down subsidiary in China and accordingly shown under "Assets classified as held for sale" as at March 31, 2016. During the current year, the sale was concluded.

The assets held for sale relates to Abrasives segment reportable under Ind AS 108 Operating segments.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 14. Equity Share Capital

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Authorised share capital:</b>			
387,250,000 (as at March 31, 2016: 387,250,000 & as at April 01, 2015: 387,250,000) equity shares of ₹1 each	387.25	387.25	387.25
<b>Issued, Subscribed and Paid-up</b>			
188,658,090 (as at March 31, 2016: 188,379,560 & as at April 01, 2015: 188,179,042) equity shares of ₹1 each fully paid	188.66	188.38	188.18

#### a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2017		As at 31.03.2016	
	No. of Shares	Value of Shares	No. of Shares	Value of Shares
At the beginning of the year	188,379,560	188.38	188,179,042	188.18
Add: Shares issued against ESOP scheme	278,530	0.28	200,518	0.20
At the end of the year	188,658,090	188.66	188,379,560	188.38

#### b) Terms / Rights attached to Equity Shares

The Company has only one class of Equity shares having a par value of Re.1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital will be in proportion to the number of equity shares held.

#### c) Dividend details

An interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 04, 2017 and the same has been paid (previous year an interim dividend of ₹1/- per share & ₹0.50 per share were declared at the meetings of the Board of Directors held on February 5, 2016 & March 11, 2016 respectively and paid).

Final dividend of ₹0.75 per share is proposed for the year ended March 31, 2017. The dividends proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

#### d) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of Shareholder	As at					
	31.03.2017		31.03.2016		01.04.2015	
	No. of Shares held	% of holding	No. of Shares held	% of holding	No. of Shares held	% of holding
Murugappa Holdings Limited	55,432,284	29.38%	55,432,284	29.43%	55,432,284	29.46%
Nalanda India Fund Limited	-	-	16,793,362	8.91%	16,793,362	8.92%
HDFC Trustee Company Ltd - a/c HDFC Mid-Cap Opportunities fund	9,991,550	5.30%	9,973,000	5.29%	9,068,000	4.82%

#### e) Share options granted under the Company's Employee Share Option Plan

Share options granted under the Company's employee share option plan pending exercise by option holders carry no rights to dividends and no voting rights. Further details of the employee share option plan are provided in Note: 37 of standalone financial statements.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 15. Other equity

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Reserves and Surplus:</b>			
a. Profit on Forfeiture of Shares / Warrants	6.03	6.03	6.03
b. Capital redemption reserve	27.68	27.68	27.68
c. Capital reserve on consolidation	704.65	720.22	680.77
d. Securities premium	194.15	166.61	142.18
e. General reserve	6230.94	5730.94	5230.94
f. Share options outstanding account	16.08	11.77	10.48
g. Retained earnings	6107.27	5142.77	4618.17
<b>B. Items of Other Comprehensive Income</b>			
h. Reserve for equity instruments	57.79	111.95	76.96
i. Effective portion of Cash flow Hedge	1.82	0.30	0.49
j. Foreign currency translation reserve	269.05	(207.79)	-
k. Revaluation surplus	23.74	23.74	23.74
<b>Total Other equity</b>	<b>13639.20</b>	<b>11734.22</b>	<b>10817.44</b>

#### a. Profit on forfeiture of shares/warrants

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	6.03	6.03
Movements	-	-
<b>Balance at end of the year</b>	<b>6.03</b>	<b>6.03</b>

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares in the Parent Company. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Parent company.

#### b. Capital redemption reserve

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	27.68	27.68
Movements	-	-
<b>Balance at end of the year</b>	<b>27.68</b>	<b>27.68</b>

During the year 2000-01, the Parent company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Parent company.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### c. Capital reserve on consolidation

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	720.22	680.77
Movements due to translation impact	(15.57)	39.45
<b>Balance at end of the year</b>	<b>704.65</b>	<b>720.22</b>

Capital reserve on consolidation was created on account of acquisition of step down subsidiary: Thukela Refractories Isithebe Pty Ltd.; Joint ventures: MMTCL & CIRIA ; and Associate: WENDT, since the consideration paid was lower than the net worth of the acquiring Company on the date of acquisition. The balance in this reserve will get transferred at the time of disposal of the relevant investment.

### d. Securities premium

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	166.61	142.18
Movements	27.54	24.43
<b>Balance at end of the year</b>	<b>194.15</b>	<b>166.61</b>

The Securities premium received during the year represents the premium received towards allotment of 278,530 shares of Parent company. Cumulatively 1,950,090 equity shares were allotted during the period FY 2009-10 to FY 2016-17 under ESOP scheme 2007 (Refer Note: 37 of standalone financial statements towards details of the scheme).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission / discount expenses on issue of shares / debentures, premium payable on redemption of redeemable preference shares / debentures and buy back of its own shares / securities under Section 68 of the Companies Act.

### e. General reserve

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	5730.94	5230.94
Movements: Transfer from retained earning	500.00	500.00
<b>Balance at end of the year</b>	<b>6230.94</b>	<b>5730.94</b>

The general reserve is a free reserve, retained from Group's profits and can be utilized upon fulfilling certain conditions in accordance with statute of the relevant Act.

### f. Share options outstanding account

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	11.77	10.48
Movements	4.31	1.29
<b>Balance at end of the year</b>	<b>16.08</b>	<b>11.77</b>

Under Ind AS 102, fair value of the options granted by the parent is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Stock options granted but not vested as on the transition date were valued for expired period, calculated from the grant date till date of transition, aggregating to ₹10.48 million and were credited to Share options outstanding account by debiting Retained earnings - Refer Note: 37 of standalone financial statements. In respect of balance unexpired period from the transition date till expiry of the vesting period, the amount is charged to Profit and Loss and credited to Share option outstanding account.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### g. Retained earnings

Particulars	As at	
	31.03.2017	31.03.2016
Opening Balance	5142.77	4618.17
Add: Profits for the year	1748.67	1441.01
Less: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax	(31.33)	(5.46)
Less: Transfer to General reserve	(500.00)	(500.00)
Less: Final dividend paid during the year including dividend tax	-	(94.12)
Less: Interim dividend	(188.63)	(282.56)
Less: Dividend tax on Interim dividend	(15.75)	(19.57)
Less: Dividend tax on Subsidiaries & Joint ventures	(48.46)	(14.70)
	<b>6107.27</b>	<b>5142.77</b>

The amount that can be distributed by the Group as dividends to its equity shareholders is determined based on the financial position and dividend policy of the Group and in compliance with the applicable statutes. Thus, the amounts reported above are not distributable in its entirety.

### h. Reserve for equity instruments

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	111.95	76.96
Movements	(54.16)	34.99
<b>Balance at end of the year</b>	<b>57.79</b>	<b>111.95</b>

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through other comprehensive income (Refer Note: 6C(i)), which will be reclassified to retained earnings when those assets are disposed off.

### i. Effective portion of Cash flow Hedge

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	0.30	0.49
Movements	1.52	(0.19)
<b>Balance at end of the year</b>	<b>1.82</b>	<b>0.30</b>

The hedging reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of designated portion of hedging instruments entered into for cash flow hedges. The reserve will be reclassified to profit or loss when the hedged transaction impacts the profit or loss, or included as a basis adjustment to the non-financial hedged item.

### j. Foreign currency translation reserve

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	(207.79)	-
Movements	476.84	(207.79)
<b>Balance at end of the year</b>	<b>269.05</b>	<b>(207.79)</b>

Exchange differences relating to the translation of the results and net assets of the Group's foreign subsidiaries from their functional currencies to the Group's presentation currency (ie., Indian Rupees) are recognised directly in Other Comprehensive Income and accumulated in the foreign currency translation reserve. Exchange differences accumulated in the foreign currency translation reserve are reclassified to Profit or Loss at the time of disposal of respective foreign operation.

The Group elected to reset the balances appearing in the foreign currency translation as at April 01, 2015 to zero, using transitional provisions. Accordingly, translation reserve balance under previous GAAP of ₹1574.59 million has been debited to retained earnings. There is no impact on total equity after this adjustment.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### k. Revaluation surplus

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	23.74	23.74
Movements	-	-
<b>Balance at end of the year</b>	<b>23.74</b>	<b>23.74</b>

Land & Building of the Parent company added upto 31<sup>st</sup> August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion were recouped every year from this reserve upto March 31, 2015 under previous GAAP.

### 16. Non-Controlling Interest [NCI]

Particulars	As at	
	31.03.2017	31.03.2016
<b>Balance at beginning of the year</b>	621.61	577.89
Share of Profit	89.13	113.61
Share of Other Comprehensive Income	0.27	(0.48)
Dividend paid to Non-Controlling Interest and its relevant tax thereon	(68.38)	(68.38)
Translation impact on Non-Controlling Interest of foreign subsidiaries	14.00	(1.03)
<b>Balance as at the end of the year</b>	<b>656.63</b>	<b>621.61</b>

#### Details of Non-Controlling Interests

The table below shows details relating to Non-Controlling Interest in the entities which are not wholly owned by the Group:

Name of the Subsidiary	Place of incorporation and principal place of business	Proportion of ownership interests and voting rights held by Non-Controlling Interests		
		31.03.2017	31.03.2016	01.04.2015
Southern Energy Development Corporation Ltd	India	15.24%	15.24%	15.24%
Sterling Abrasives Ltd	India	40%	40%	40%
CUMI (Australia) Pty Ltd	Australia	48.78%	48.78%	48.78%
Volzhsky Abrasives Works	Russia	2.56%	2.56%	2.56%
Foskor Zirconia (Pty) Ltd	South Africa	49%	49%	49%

Name of the Subsidiary	Accumulated Non-Controlling Interest			Profit / (Loss) allocated to Non-Controlling Interest		Other Comprehensive Income allocated to Non-Controlling Interest	
	As at			For the year		For the year	
	31.03.2017	31.03.2016	01.04.2015	2016-17	2015-16	2016-17	2015-16
Southern Energy Development Corporation Ltd	35.23	31.92	28.37	9.38	3.54	(0.17)	-
Sterling Abrasives Ltd	171.33	152.44	150.83	26.43	20.71	0.60	(0.14)
CUMI (Australia) Pty Ltd	277.79	279.35	265.20	48.95	42.48	-	-
Volzhsky Abrasives Works	88.65	69.57	62.45	15.93	17.96	-	-
Foskor Zirconia (Pty) Ltd	83.63	88.33	71.04	(11.56)	28.92	(0.16)	(0.34)
<b>Total</b>	<b>656.63</b>	<b>621.61</b>	<b>577.89</b>	<b>89.13</b>	<b>113.61</b>	<b>0.27</b>	<b>(0.48)</b>

Summarised financial information in respect of each of the Group's subsidiaries is set out below. The information below represents amounts before intragroup eliminations.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	Southern Energy Development Corporation Ltd			Sterling Abrasives Ltd			CUMI (Australia) Pty Ltd		
	As at			As at			As at		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
Non-Current assets *	156.81	190.18	228.63	366.48	371.28	359.76	120.13	121.34	101.04
Current assets	83.80	30.10	47.10	288.98	265.81	282.27	557.19	578.32	589.33
Non-Current liabilities	(0.19)	(0.02)	(4.08)	(29.73)	(58.01)	(73.44)	(3.50)	(7.56)	(6.43)
Current liabilities	(9.25)	(10.82)	(85.47)	(197.39)	(197.98)	(191.52)	(89.60)	(104.68)	(125.52)
<b>Equity attributable to owners of the Company</b>	<b>195.94</b>	<b>177.52</b>	<b>157.81</b>	<b>257.01</b>	<b>228.66</b>	<b>226.24</b>	<b>306.43</b>	<b>308.07</b>	<b>293.22</b>
<b>Non-Controlling Interest</b>	<b>35.23</b>	<b>31.92</b>	<b>28.37</b>	<b>171.33</b>	<b>152.44</b>	<b>150.83</b>	<b>277.79</b>	<b>279.35</b>	<b>265.20</b>

\* Southern Energy Corporation Limited: Non current assets excludes fair valuation of the Parent company's shares held by it.

Particulars	Southern Energy Development Corporation Ltd		Sterling Abrasives Ltd		CUMI (Australia) Pty Ltd	
	For the year		For the year		For the year	
	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16
Revenue	271.07	225.26	722.35	680.59	837.80	800.99
Expenses	(209.48)	(202.00)	(656.28)	(628.82)	(737.46)	(713.91)
<b>Profit/(Loss) for the year</b>	<b>61.59</b>	<b>23.26</b>	<b>66.07</b>	<b>51.77</b>	<b>100.34</b>	<b>87.08</b>
Profit/(Loss) attributable to owners of the Company	52.21	19.72	39.64	31.06	51.39	44.60
Profit/(Loss) attributable to the Non-Controlling Interest of the Company	9.38	3.54	26.43	20.71	48.95	42.48
<b>Profit/(Loss) for the year</b>	<b>61.59</b>	<b>23.26</b>	<b>66.07</b>	<b>51.77</b>	<b>100.34</b>	<b>87.08</b>
Other Comprehensive Income attributable to owners of the Company	(0.93)	-	0.89	(0.21)	-	-
Other Comprehensive Income attributable to Non-Controlling Interest of the Company	(0.17)	-	0.60	(0.14)	-	-
<b>Other Comprehensive Income for the year</b>	<b>(1.10)</b>	<b>-</b>	<b>1.49</b>	<b>(0.35)</b>	<b>-</b>	<b>-</b>
Total Comprehensive Income attributable to owners of the Company	51.28	19.72	40.53	30.85	51.39	44.60
Total Comprehensive Income attributable to Non-Controlling Interest of the Company	9.21	3.54	27.03	20.57	48.95	42.48
<b>Total Comprehensive Income for the year</b>	<b>60.49</b>	<b>23.26</b>	<b>67.56</b>	<b>51.42</b>	<b>100.34</b>	<b>87.08</b>
<b>Dividend paid to Non-Controlling Interests (including relevant tax thereon)</b>	<b>(5.91)</b>	<b>-</b>	<b>(8.12)</b>	<b>(18.96)</b>	<b>(43.87)</b>	<b>(44.99)</b>
Net cash inflow/(outflow) from Operating activities	79.54	62.83	98.46	106.75	109.98	95.46
Net cash inflow/(outflow) from Investing activities	(40.53)	14.54	(26.40)	(44.21)	(5.27)	(25.03)
Net cash inflow/(outflow) from Financing activities	(38.76)	(75.74)	(74.03)	(62.72)	(91.37)	(87.46)
<b>Net cash inflow/(outflow)</b>	<b>0.25</b>	<b>1.63</b>	<b>(1.97)</b>	<b>(0.18)</b>	<b>13.34</b>	<b>(17.03)</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	Volzhsky Abrasives Works			Foskor Zirconia (Pty) Ltd		
	As at			As at		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
Non-Current assets	1376.13	1048.57	854.23	176.37	149.69	214.53
Current assets	2495.56	1982.00	1875.41	521.40	628.75	983.88
Non-Current liabilities	(61.61)	(43.96)	(47.92)	(241.22)	(290.07)	(25.36)
Current liabilities	(352.71)	(273.12)	(245.84)	(285.87)	(308.11)	(1028.07)
<b>Equity attributable to owners of the Company</b>	<b>3368.72</b>	<b>2643.92</b>	<b>2373.43</b>	<b>87.05</b>	<b>91.93</b>	<b>73.94</b>
<b>Non-Controlling Interest</b>	<b>88.65</b>	<b>69.57</b>	<b>62.45</b>	<b>83.63</b>	<b>88.33</b>	<b>71.04</b>

Particulars	Volzhsky Abrasives Works		Foskor Zirconia (Pty) Ltd	
	for the year		for the year	
	2016-17	2015-16	2016-17	2015-16
Revenue	4736.04	4592.96	933.84	979.11
Expenses	(4114.61)	(3892.28)	(957.43)	(920.10)
<b>Profit/(Loss) for the year</b>	<b>621.43</b>	<b>700.68</b>	<b>(23.59)</b>	<b>59.01</b>
Profit/(Loss) attributable to owners of the Company	605.50	682.72	(12.03)	30.09
Profit/(Loss) attributable to the Non-Controlling Interest of the Company	15.93	17.96	(11.56)	28.92
<b>Profit/(Loss) for the year</b>	<b>621.43</b>	<b>700.68</b>	<b>(23.59)</b>	<b>59.01</b>
Other Comprehensive Income attributable to owners of the Company	-	-	(0.17)	(0.35)
Other Comprehensive Income attributable to Non-Controlling Interest of the Company	-	-	(0.16)	(0.34)
<b>Other Comprehensive Income for the year</b>	<b>-</b>	<b>-</b>	<b>(0.33)</b>	<b>(0.69)</b>
Total Comprehensive Income attributable to owners of the Company	605.50	682.72	(12.20)	29.74
Total Comprehensive Income attributable to Non-Controlling Interest of the Company	15.93	17.96	(11.72)	28.58
<b>Total Comprehensive Income for the year</b>	<b>621.43</b>	<b>700.68</b>	<b>(23.92)</b>	<b>58.32</b>
<b>Dividend paid to Non-Controlling Interests (including relevant tax thereon)</b>	<b>(10.48)</b>	<b>(4.43)</b>	<b>-</b>	<b>-</b>
Net cash inflow/(outflow) from Operating activities	805.84	735.16	108.00	(204.26)
Net cash inflow/(outflow) from Investing activities	(339.28)	(343.59)	(27.98)	311.39
Net cash inflow/(outflow) from Financing activities	(409.41)	(172.59)	(72.59)	(178.91)
<b>Net cash inflow/(outflow)</b>	<b>57.15</b>	<b>218.98</b>	<b>7.43</b>	<b>(71.78)</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 17. Borrowings - Non Current

Particulars	Maturity date	Repayment terms	Interest rate	As at	
				31.03.2017	31.03.2016 01.04.2015
<b>Secured - at amortised cost</b>					
Long term maturities of Finance lease obligations (consisting of multiple contracts with varied maturities) (a)	Ranging from 2015 to 2021	Monthly installments		26.18	19.81
Term loan from Bank (b)	Year 2018	Payable in 40 monthly installments	9.9%	36.21	92.67
Long term Buyer's Credit (c)	Oct-15	Final installment repaid in Oct 15	9.1%	-	70.67
<b>Unsecured - at amortised cost</b>					
Term loan - 1 from Bank (d)	Oct-16	Bullet	9.8%	-	500.00
Term loan - 2 from Bank (e)	Jul-18	Bullet	8.9%	-	241.50
Term loan from Bank - Subsidiary (f)	Aug-18	Quarterly	SA Prime rate less 30 bps	-	518.60
Redeemable Preference Share obligations (f) & (g)	Year 2023	On or before maturity date	12.7%	72.61	-
				<b>135.00</b>	<b>1201.75</b>
<b>Less: Current maturities of: (Refer Note: 21)</b>					
- Term loans				35.76	557.15
- Finance lease obligations				8.23	7.18
- Long term Buyer's credit				-	70.67
- Redeemable Preference Share obligations				24.20	-
<b>Total Non - Current Borrowings</b>				<b>66.81</b>	<b>362.42</b>
					<b>566.75</b>

- a Secured by the vehicles acquired under the finance lease arrangement - Refer Note: 39.
- b Represents the loan availed by a domestic subsidiary. This funding was secured by a charge on hypothecation of Current assets and Equitable Mortgage of Fixed assets (both movable & immovable properties) relating to various manufacturing locations of that subsidiary.
- c Relates to the loan availed by a domestic subsidiary towards purchase of capital equipment. This funding was secured by a charge on the purchased equipment, which was subsequently released upon settlement of loan.
- d During the year 2016-17, the obligation towards the borrowing was met on the due date.
- e During the year 2016-17, the obligation towards the borrowing was repaid earlier to the agreed due date.
- f During the year 2015-16, a foreign subsidiary settled its loan obligation in full using the funds received through restructuring of business as well as funds infused by its shareholders in Redeemable Preference Share Capital.
- g During the year 2016-17, one - fourth of preference share obligation was redeemed.
- h Loan covenants: All the stipulated covenants under the respective loan arrangement have been fully complied with.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 18. Provision

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non-current</b>			
Employee benefits	75.52	65.39	44.92
<b>B. Current</b>			
Employee benefits	161.34	141.65	114.65

The movement represents the provision created for the year arising out of the valuation after considering the actual settlements made during the year.

### 19. Borrowings - Current

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Unsecured - at amortised cost</b>			
Buyer's credit and other loans	-	136.13	119.90
Other borrowings	879.23	965.98	974.16
Cash credit (repayable on demand)	454.26	886.52	837.01
<b>Secured - at amortised cost (a)</b>			
Cash credit (repayable on demand)	90.98	281.85	143.81
Packing credit facility	-	-	126.68
	<b>1424.47</b>	<b>2270.48</b>	<b>2201.56</b>

(a) The Parent Company's portion of the funding facilities are secured by a pari-passu first charge on the current assets and a pari-passu second charge on immovable properties of Parent Company - both present and future; The funding facility availed by one of the domestic subsidiary is secured by its current assets.

### 20. Trade payables

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Total outstanding dues to Micro and Small enterprises	18.15	14.88	21.84
<b>Other Trade payables:</b>			
- Acceptances	-	-	35.52
- Other than Acceptances	1632.08	1325.92	1467.76
	<b>1650.23</b>	<b>1340.80</b>	<b>1525.12</b>

a Trade payables are non-interest bearing and are normally settled within the agreed due dates, generally ranging from 30 to 60 days.

b All the payables are settled within the credit period as per pre-agreed terms. The entities in the Group has financial risk management policies in place to ensure that the payments are made within agreed period.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 21. Other financial liabilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Current</b>			
<b>Secured</b>			
Current maturities of Long term loan (Refer Note: 17)	35.76	537.52	557.15
Current maturities of Finance lease obligations (Refer Note: 17)	8.23	5.83	7.18
<b>Unsecured</b>			
Current maturities of Long term Buyer's credit (Refer Note: 17)	-	-	70.67
Current maturities of Redeemable Preference Share obligation (Refer Note: 17)	24.20	22.36	
Unpaid dividends	17.59	17.86	15.95
Remuneration payable to directors	21.44	19.93	15.65
Deposits	37.98	34.11	36.27
Payable relating to Capital expenditure	82.54	58.24	56.73
Other payables	443.07	601.04	561.50
	<b>670.81</b>	<b>1296.89</b>	<b>1321.10</b>

### 22. Other current liabilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Advances from Customers	74.11	42.49	64.90
Statutory liabilities	150.49	128.58	157.78
	<b>224.60</b>	<b>171.07</b>	<b>222.68</b>

### 23. Revenue from operations

Particulars	For the year	
	2016-17	2015-16
<b>a. Gross Sales / Income from Operations</b>		
Sale of products (including Excise duty of ₹1198.59 million for the year 2016-17 and ₹1076.74 million for the year 2015-16) - Refer Note: 32 "Segmental Disclosure" for breakup of sales.	21597.22	19916.71
Sale of services/ Income from Contracts	401.80	327.67
	<b>21999.02</b>	<b>20244.38</b>
<b>b. Other operating income</b>		
Service income	88.43	78.99
Commission income	1.49	0.99
Scrap Sales	115.39	98.53
Miscellaneous income	119.12	93.66
	<b>324.43</b>	<b>272.17</b>
<b>Total Revenue from operations ( a + b )</b>	<b>22323.45</b>	<b>20516.55</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 24. Other Income

Particulars	For the year	
	2016-17	2015-16
<b>(a) Dividend Income</b>		
Dividend Income from Long term Investments	2.48	4.87
Dividend Income from Current Investments	20.24	2.86
	<b>22.72</b>	<b>7.73</b>
<b>(b) Interest Income earned on financial assets that are not designated as at fair value through profit or loss [FVTPL]</b>		
Interest Income		
from banks	25.39	40.25
from others	7.58	4.92
	<b>32.97</b>	<b>45.17</b>
<b>(c) Net gain/(loss) arising on financial assets mandatorily measured at FVTPL</b> (Refer Note: 6C (i) & (ii) investment schedule)	<b>0.75</b>	<b>0.21</b>
<b>(d) Other non-operating income</b>		
Profit on sale of assets	19.97	24.79
Profit on sale of Investments (net)	0.38	-
Profit on exchange fluctuation (net)	-	149.02
Provision for expenses no longer required written back	40.63	23.22
Reversal of impairment losses on financial assets	90.41	26.02
Rental income	1.92	1.60
Miscellaneous income	18.25	17.45
	<b>171.56</b>	<b>242.10</b>
<b>Total Other Income (a + b + c + d)</b>	<b>228.00</b>	<b>295.21</b>

### 25. Changes in inventories of finished goods, stock-in-trade and work in progress

Particulars	For the year	
	2016-17	2015-16
Opening stock		
Work-in-progress	916.06	729.64
Stock-in-trade (includes in-transit)	728.26	645.22
Finished goods	722.86	1005.75
	<b>(A) 2367.18</b>	<b>2380.61</b>
Less: Closing stock		
Work-in-progress	887.74	916.06
Stock-in-trade (includes in-transit)	666.75	728.26
Finished goods	815.08	722.86
	<b>(B) 2369.57</b>	<b>2367.18</b>
<b>(Accretion) / Decretion to stock (A) - (B)</b>	<b>(2.39)</b>	<b>13.43</b>

### 26. Employee benefit expense

Particulars	For the year	
	2016-17	2015-16
Salaries, wages and bonus	2148.06	2006.07
Contribution to provident and other funds	159.01	138.97
Voluntary retirement compensation	0.90	0.40
Share based payments to employees (ESOPs) - Refer Note: 37 of Standalone Financial Statements	4.31	1.29
Remuneration to Managing Director	19.99	17.44
Welfare expenses	402.79	355.06
	<b>2735.06</b>	<b>2519.23</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 27. Finance costs

Particulars	For the year	
	2016-17	2015-16
Interest costs		
- on Fixed loans	104.43	133.71
- on Others	69.93	89.56
Other borrowing costs	6.84	5.78
	<b>181.20</b>	<b>229.05</b>

### 28. Depreciation and amortisation expenses

Particulars	For the year	
	2016-17	2015-16
Depreciation of property, plant and equipment - Refer 4A	927.28	830.52
Amortisation of intangible assets - Refer 5B(i)	37.53	37.71
	<b>964.81</b>	<b>868.23</b>

### 29. Other expenses

Particulars	For the year	
	2016-17	2015-16
Consumption of stores and spares	750.03	679.88
Power and fuel (a)	2525.16	2421.19
Rent	78.05	101.19
Excise duty on stock differential (b)	7.85	(7.62)
Rates and taxes	145.67	180.04
Insurance	40.78	45.23
Repairs to: (c)		
- Buildings	126.69	119.01
- Machinery	748.91	671.21
- Others	8.46	9.27
Data Processing Charges	123.61	104.55
Technical Fee / Royalty	83.03	72.15
Directors' sitting fees	1.57	1.88
Commission to Non-wholetime Directors	14.82	14.50
Auditors' remuneration	14.19	14.16
Travel and Conveyance	230.49	209.41
Freight, delivery and shipping charges	642.41	645.30
Selling commission	90.65	59.71
Advertisement and publicity	78.87	77.27
Printing, stationery and communication	61.83	60.35
Professional fees	187.21	170.62
Impairment loss on financial assets	59.80	2.50
Less: Provision adjusted	(58.44)	(1.82)
	1.36	0.68
Allowance for doubtful receivables and advances	78.38	87.05
Services outsourced	1161.95	1026.51
Loss on sale of assets	10.16	64.40
Impairment of Non current assets	37.34	-
Loss on exchange fluctuation (net)	194.37	-
Miscellaneous expenses	252.04	263.40
	<b>7695.88</b>	<b>7091.34</b>

(a) Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹74.61 million (Previous year ₹44.82 million) - Refer Note: 9B

(b) Represents the difference between the excise duty on opening and closing stock of finished goods.

(c) Repairs includes consumption of stores and spares amounting to ₹246.38 million (Previous year: ₹221.54 million)

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 30. Income tax expense

Particulars	For the year		
	2016-17	2015-16	
<b>A. Income tax expense recognised in Profit and loss:</b>			
<b>a. Current tax</b>			
In respect of the current year	810.61	857.58	
	<b>810.61</b>	<b>857.58</b>	
<b>b. Deferred tax</b>			
In respect of the current year	(29.76)	(51.35)	
Adjustment to deferred tax attributable to changes in tax rates and laws	(0.01)	7.83	
	<b>(29.77)</b>	<b>(43.52)</b>	
<b>Total Income tax expense recognised during the year (net)</b>	<b>780.84</b>	<b>814.06</b>	
<b>Income tax reconciliation:</b>			
<b>Profit before tax</b>	A	<b>2618.64</b>	<b>2368.68</b>
Less: Share of Profit from Associate and Joint ventures	B	190.88	157.71
<b>Profit from operations before share of profit of equity accounted investees and income tax</b>	C= (A-B)	<b>2427.76</b>	<b>2210.97</b>
Applied tax rate as per Parent jurisdiction	D	34.608%	34.608%
Income tax expense calculated at the tax rate of 34.608%, applicable to the Parent Company	E = C x D	840.20	765.17
Total Tax expenses charged in Profit and Loss for the year	F	780.84	814.06
<b>Differential tax impact</b>	G = (E-F)	<b>(59.36)</b>	<b>48.89</b>
<b>Differential tax impact due to the following (tax benefit)/tax expenses</b>			
Effect of Income that is exempt from taxation net of disallowances		(7.07)	(2.13)
Effect of expenses that are not deductible in determining taxable profit		45.73	67.76
Claim of weighted benefit relating to In-house Research & Development facilities		(17.76)	(11.95)
Area based tax incentives		(7.12)	(7.26)
Effect of increase in applicable tax rate in India		(0.01)	7.83
Deferred tax benefit not recognised on the losses of Subsidiaries		29.65	53.26
Effect of tax rate differentials in respect of subsidiaries operating in other jurisdictions		(102.78)	(58.62)
<b>Total</b>	G	<b>(59.36)</b>	<b>48.89</b>

### B. Income tax recognised in Other Comprehensive Income:

Particulars	For the year	
	2016-17	2015-16
Net gain on designated portion of hedging instruments in cash flow hedges	(1.26)	0.13
<b>Total income tax recognised in Other Comprehensive Income</b>	<b>(1.26)</b>	<b>0.13</b>
Bifurcation of the income tax recognised in Other Comprehensive Income into:		
Items that will not be reclassified to profit or loss	-	-
Items that will be reclassified to profit or loss	(1.26)	0.13

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 31. Earnings per share

Particulars	For the year	
	2016-17	2015-16
Basic earnings per share (₹)	9.28	7.65
Diluted earnings per share (₹)	9.25	7.64
The calculation of the Basic and Diluted Earnings per share is based on the following data:		
Consolidated Net Profit for the year after taxes	1748.67	1441.01
Weighted average number of equity shares outstanding during the year		
- Basic	188,513,561	188,276,270
- Dilutive	189,030,648	188,669,852

The weighted average number of equity shares: for the purpose of diluted earnings per share reconciles with the basic earnings per share as given below:

Particulars	For the year	
	2016-17	2015-16
Weighted average number of equity shares used in the calculation of basic earnings per share	188,513,561	188,276,270
Shares deemed to be issued for no consideration in respect of:		
- Employee Stock Option Plan	517,087	393,582
Weighted average number of equity shares used in the calculation of diluted earnings per share	189,030,648	188,669,852

### 32. Segment information

The Group provides solutions majorly for five industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals.

The Business Group Management Committee headed by Managing Director (CODM) consists of Chief Financial Officer, Leaders of Strategic Business Units and Human resources reviews the performance of the Company and has identified three core reportable business segments organised using differences in products and services.

- Surface engineering (material removal, cutting, polishing ) known as Abrasives. Abrasive segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, specialty minerals and captive power generation from hydel power plant.

Besides the above three core segments, the Group has power generation entity to serve its power requirements of the core business segments. The Group also has an IT services company which provides IT infrastructure Facility management services, software application development services, remote infrastructure management services and IT security management services.

The Business Group Management Committee monitors the operating results of its business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives		Ceramics		Electrominerals		Power		IT Services		Eliminations		Total	
	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16
<b>Revenue</b>														
External Sales - Gross	10149.19	9200.77	4595.34	3967.45	6711.83	6668.49	68.44	47.72	72.42	32.27	-	-	21597.22	19916.70
Income from Contracts	-	-	103.15	84.86	-	-	-	-	298.65	242.81	-	-	401.80	327.67
Inter segment sales	13.55	16.41	25.89	32.93	981.67	817.97	196.91	171.32	22.73	20.69	(1240.75)	(1059.32)	-	-
	<b>10162.74</b>	<b>9217.18</b>	<b>4724.38</b>	<b>4085.24</b>	<b>7693.50</b>	<b>7486.46</b>	<b>265.35</b>	<b>219.04</b>	<b>393.80</b>	<b>295.77</b>	<b>(1240.75)</b>	<b>(1059.32)</b>	<b>21999.02</b>	<b>20244.37</b>
<b>Results</b>														
Segment result - EBITDA	1400.48	1106.28	982.21	761.42	1253.39	1575.59	125.20	70.00	42.37	33.99	-	-	3803.65	3547.28
Depreciation/amortisation	(279.44)	(271.57)	(277.89)	(257.75)	(342.77)	(275.47)	(40.73)	(40.71)	(9.29)	(9.45)	-	-	(950.12)	(854.95)
Profit on sale of Fixed Assets (Net)	1.93	(3.42)	(0.21)	(2.78)	(2.07)	(30.57)	-	-	0.01	-	-	-	9.66	(36.77)
Unallocated corporate expenses													(311.06)	(268.65)
Interest expense													(181.20)	(229.05)
Profit form Associate													48.05	43.06
Profit form Joint ventures													142.83	114.65
Interest and dividend income													55.70	52.90
Fair valuation of investment													0.75	0.21
Profit on investment (net)													0.38	-
<b>Profit before tax</b>	<b>1132.97</b>	<b>831.29</b>	<b>704.11</b>	<b>500.89</b>	<b>908.55</b>	<b>1269.55</b>	<b>84.47</b>	<b>29.29</b>	<b>33.09</b>	<b>24.54</b>	<b>-</b>	<b>-</b>	<b>2618.64</b>	<b>2368.68</b>
Less: Income taxes													780.84	814.06
<b>Net profit after taxes</b>													<b>1837.80</b>	<b>1554.62</b>
Less: Non controlling interest													89.13	113.61
<b>Profit for the year attributable to Owners of the Company</b>													<b>1748.67</b>	<b>1441.01</b>
<b>Other information:</b>														
Segment assets	5830.80	5795.39	4191.91	3971.48	6236.96	5696.07	134.28	170.59	156.05	90.67	-	-	16550.00	15724.20
Unallocated corporate assets *													2672.22	2952.14
<b>Total assets</b>	<b>5830.80</b>	<b>5795.39</b>	<b>4191.91</b>	<b>3971.48</b>	<b>6236.96</b>	<b>5696.07</b>	<b>134.28</b>	<b>170.59</b>	<b>156.05</b>	<b>90.67</b>	<b>-</b>	<b>-</b>	<b>19222.22</b>	<b>18676.34</b>
Segment liabilities	1201.44	1075.71	497.78	413.39	722.92	669.94	9.45	10.84	81.14	56.88	-	-	2252.73	2226.76
Unallocated corporate liabilities													2225.00	3905.37
<b>Total liabilities</b>	<b>1201.44</b>	<b>1075.71</b>	<b>497.78</b>	<b>413.39</b>	<b>722.92</b>	<b>669.94</b>	<b>9.45</b>	<b>10.84</b>	<b>81.14</b>	<b>56.88</b>	<b>-</b>	<b>-</b>	<b>4737.73</b>	<b>6132.13</b>
Addition to Non - current assets	356.86	230.93	290.93	419.38	581.89	805.87	1.20	-	24.00	6.78	13.49	16.72	1268.37	1479.68
Depreciation & Amortization	279.44	271.57	277.89	257.75	342.77	275.47	40.73	40.71	9.29	9.45	14.69	13.28	964.81	888.23
Non-cash items other than depreciation and amortisation	44.02	27.65	18.22	20.39	17.07	38.73	-	-	0.43	0.96	-	-	79.74	87.73
Impairment on Non - Current asset	37.34	-	-	-	-	-	-	-	-	-	-	-	37.34	-

\* includes Goodwill of ₹ 1147.95 million (Previous year: ₹ 1214.51 million), Investment in Associate and Joint Ventures under equity method - ₹ 1062.08 million (Previous year: ₹ 1106.46 million)

Sales between operating segments are carried out at arm's length basis and are eliminated at Group level consolidation.

The accounting policies of the reportable segments are same as that of Group's accounting policies described in Note: 3.23. Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Segment assets and liabilities

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets are allocated to reportable segments other than investments, loans, current and deferred tax assets, unallocable current and non-current assets.
2. All liabilities are allocated to reportable segments other than borrowings, current and deferred tax liabilities, and unallocable current and non-current liabilities.

### Geographical information

The Parent Company is domiciled in India. The amount of its revenue from external customers are broken down by location of those customers and information about its non-current assets other than investment, other financial instruments and deferred tax assets are given below:

	Revenue from external customers		Non-current assets		
	For the year		As at		
	2016-17	2015-16	31.03.2017	31.03.2016	01.04.2015
India	12669.31	11732.20	5394.77	5305.54	4970.59
Rest of the world	9329.71	8512.17	2722.14	2537.05	3119.28
	21999.02	20244.37	8116.91	7842.59	8089.87

Information about major customers

No single customer contributed 10% or more to the Group's revenue during the years 2016-17 and 2015-16 respectively.

### 33. Subsidiaries

Name of Subsidiary	Nature of Business	Place of incorporation and operation	Proportion of ownership interest and voting power held by the Group		
			As at		
			31.03.2017	31.03.2016	01.04.2015
Net Access India Ltd	IT services	India	100%	100%	100%
Southern Energy Development Corporation Ltd	Power generation	India	84.76%	84.76%	84.76%
Sterling Abrasives Ltd	Manufacture/Trading of Abrasives products	India	60%	60%	60%
CUMI (Australia) Pty Ltd	Manufacture/Trading of Ceramics products & its related services	Australia	51.22%	51.22%	51.22%
CUMI International Ltd	Investment Company	Cyprus	100%	100%	100%
<b>Holdings through Subsidiary:</b>					
Volzhsky Abrasive Works	Manufacture of Abrasives, Electrominerals and Ceramics products	Volgograd, Russia	97.44%	97.44%	97.44%
Foskor Zirconia (Pty) Ltd	Manufacture of Electromineral products	South Africa	51%	51%	51%
CUMI America Inc	Trading of Abrasives & Ceramic products	USA	100%	100%	100%
CUMI Canada Inc (a)	Trading of Abrasives & Ceramic products	Canada	-	-	100%
CUMI Middleeast FZE	Trading of Abrasives & Ceramic products	Ras Al Khaimah, UAE	100%	100%	100%
CUMI Abrasives & Ceramics Company Ltd	Manufacture / Trading of Abrasives & Ceramic products	China	100%	100%	100%
Thukela Refractories Isithebe Pty Limited	Manufacture of Ceramics & Electromineral products	South Africa	100%	100%	100%
CUMI Europe s.r.o	Trading of Electromineral products	Czech Republic	100%	100%	100%

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Composition of the Group:

Principal activity	Place of incorporation and operation	Number of wholly-owned subsidiaries		
		As at		
		31.03.2017	31.03.2016	01.04.2015
Manufacture & Trading of Abrasives products	India, America, Middle East, Canada	3	3	4
Manufacture & Trading of Electrominerals products	South Africa, Czezh Republic	2	2	2
IT services provided	India	1	1	1
Investment company	Cyprus	1	1	1
		<b>7</b>	<b>7</b>	<b>8</b>

Principal activity	Place of incorporation and operation	Number of non wholly-owned subsidiaries		
		As at		
		31.03.2017	31.03.2016	01.04.2015
Manufacture & Trading of Abrasives products	India	1	1	1
Manufacture & Trading of Ceramics products	Australia	1	1	1
Manufacture & Trading of Electrominerals products	South Africa, Russia	2	2	2
Power generation	India	1	1	1
		<b>5</b>	<b>5</b>	<b>5</b>

Details of the Non-Controlling Interest relating to non-wholly owned subsidiary to the Group are disclosed in Note: 16

#### (a) Changes in the Group's ownership interest in a subsidiary

During the year 2015-16, the Company's step down subsidiary in Canada was legally wound up on 22<sup>nd</sup> May 2015, consequent to shifting of Canadian operations to another step down subsidiary in America.

### 34. Contingent Liabilities and Commitments in respect of which no provision is considered necessary

S.No	Particulars	As at		
		31.03.2017	31.03.2016	01.04.2015
<b>A.</b>	<b>Contingent Liabilities:</b>			
(a)	Outstanding letters of credit	88.01	108.54	90.06
(b)	Disputed income tax, sales tax, excise duty, service tax and customs duty demands which are under various stages of appeal proceedings.	343.98	232.87	240.62
(c)	Claims against the Company not acknowledged as debts:			
i.	Disputed demands by Electricity Board	43.34	41.96	48.27
ii.	Contested Provident fund and ESI demands	0.21	0.21	0.21
iii.	Others	86.40	67.83	67.23
		<b>129.95</b>	<b>110.00</b>	<b>115.71</b>
(d)	Employees demands pending before Labour Courts - quantum not ascertainable at present			
	In respect of the above demands disputed by the Companies in the Group, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the respective Company's rights for future appeals. No reimbursements are expected.			
<b>B.</b>	<b>Commitments:</b>			
	Estimated amount of contracts remaining to be executed and not provided for:			
	- Towards capital account	<b>169.20</b>	<b>218.44</b>	<b>86.50</b>
<b>C.</b>	The Group did not have any long term contracts and there were no losses on the derivative contracts.			

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 35. Disclosure relating to Contracts

Particulars	For the year	
	2016-17	2015-16
Contract revenue recognised during the year	103.15	80.73
Retentions	2.96	2.69
Receivables (net of retention)	37.09	25.76

### 36. Employee Benefits

#### Defined contribution plans:

The Group operates defined contribution retirement benefit plans under various jurisdictions for all qualifying employees. The assets of the plans are held separately from those of respective company under the control of trustees/Government organisations. Where employees leave the plans prior to full vesting of the contributions, the contributions payable by the respective companies in the Group are reduced by the amount of forfeited contributions.

Particulars	For the year	
	2016-17	2015-16
Contribution to Provident fund and Other funds recognised in Profit and Loss	133.07	113.58
Amounts outstanding as at the end of the respective year and paid subsequently	14.27	13.00

#### Defined benefit plans:

The Group sponsors defined benefit plans for qualifying employees of the Company and its subsidiaries, where ever applicable. The defined benefit plans are administered by an independent Fund that is legally separated from the respective entities.

Under the plans applicable to the Company and its domestic subsidiaries, the employees are entitled to post-retirement yearly instalments amounting to 57.69% of final salary for each year of service until the retirement age of 58.

#### These plans typically expose the Company to actuarial risks such as: Investment, Interest rate, longevity and salary escalation risk:

**Investment risk:** The present value of the defined benefit plan liability (denominated in Indian Rupee) is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds. Currently, the investments are made in accordance with the guidelines under the applicable statutes.

**Interest risk:** A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.

**Longevity risk:** The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

**Salary escalation risk:** The present value of the defined benefit plan liability is calculated with reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

In respect of the subsidiary in South Africa, the defined benefit plans provided to the employees are post retirement health benefits and long service awards. The liability is ascertained using actuarial valuation and is accounted accordingly. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

In respect of the subsidiary in United Arab Emirates, the end of service benefits is accounted on time basis in full for every employee in the service of that entity in accordance with the provisions of the applicable labour laws of that country. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

No other post-retirement benefits are provided, other than specified above.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The actuarial valuation of the plan assets and the present value of the defined benefit obligations of the Parent Company and its subsidiaries in India were carried out as at March 31, 2017 by certified actuaries. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

### Assumptions:

The principal assumptions used for the purposes of the actuarial valuations are given below:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Discount rate	6.3% to 8%	7.7% to 8%	8%
Expected rate of return	6.3% to 8%	7.7% to 8%	8%
Expected salary escalation	5% to 10%	5% to 9%	5%
Mortality table used	Indian Assured Lives Mortality (2006-08) Ultimate		

Estimates of future salary increase takes into account: inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.

The details of actuarial valuation in respect of Gratuity liability are given below:

Particulars	As at	
	31.03.2017	31.03.2016
i. Projected benefit obligation as at beginning of the year	262.70	236.34
Service cost	25.34	23.65
Interest cost	20.25	18.01
Remeasurement (gain)/loss:		
Actuarial (gain)/loss arising from experience adjustments	10.48	5.20
Benefits paid	(18.22)	(20.50)
<b>Projected benefit obligation as at end of the year</b>	<b>300.55</b>	<b>262.70</b>
ii. Fair value of plan assets as at beginning of the year	237.71	214.83
Expected return on plan assets	19.34	18.10
Contributions	25.75	22.88
Benefits paid	(17.76)	(19.84)
Remeasurement gain/ (loss):		
Actuarial Gain /(losses) on plan assets	(17.91)	1.74
<b>Fair value of plan assets as at end of the year</b>	<b>247.13</b>	<b>237.71</b>
iii. Amount recognised in the balance sheet:		
Projected benefit obligation at the end of the year	300.55	262.70
Fair value of the plan assets at the end of the year	247.13	237.71
<b>(Liability) / Asset recognised in the Balance Sheet - net</b>	<b>(53.42)</b>	<b>(24.99)</b>
iv. Cost of the defined benefit plan for the year:		
Current service cost	25.34	23.65
Interest on obligation	20.25	18.01
Expected return on plan assets	(19.34)	(18.10)
<b>Components of defined benefit cost recognised in the Statement of Profit and Loss</b>	<b>26.25</b>	<b>23.56</b>
(included in Note: 26 Contribution to Provident and other funds)		
Remeasurement on the net defined benefit liability:		
Actuarial gain/loss arising from changes in demographic assumptions	10.48	5.20
Actuarial gain/loss arising from changes in financial assumptions	17.91	(1.74)
<b>Components of defined benefit costs recognised in Other Comprehensive Income</b>	<b>28.39</b>	<b>3.46</b>
<b>Total cost of the defined benefit plan for the year</b>	<b>54.64</b>	<b>27.02</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### v. Experience Adjustment

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Present value of defined benefit obligation	300.55	262.70	236.34
Fair value of plan assets	247.13	237.71	214.83
Balance Sheet (Liability)/ Asset	(53.42)	(24.99)	(21.51)

Particulars	For the year	
	2016-17	2015-16
Profit and Loss	26.25	23.56
Experience adjustment on plan liabilities (gain) / loss	10.48	5.20
Experience adjustment on plan assets gain / (loss)	17.91	(1.74)

In the absence of the relevant information, the above details does not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹19.34 million (for the year ended March 31, 2016: ₹20.05 million).

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation is given below:

Particulars	As at	
	31.03.2017	31.03.2016
Discount rate - 100 basis point higher	(277.62)	(232.95)
Discount rate - 100 basis point lower	321.02	270.01
Salary escalation rate - 100 basis point higher	319.61	269.56
Salary escalation rate - 100 basis point lower	(262.83)	(233.53)
Life expectancy rate - 100 basis point higher	301.04	254.12
Life expectancy rate - 100 basis point lower	(294.40)	(246.17)

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability.

The weighted average duration of the benefit obligation as at March 31, 2017 is 15 years (as at March 31, 2016: 15 years).

The Group expects to make a contribution of ₹53.42 million (as at March 31, 2016: ₹ 24.99 million) to the defined benefit plans during the next financial year.

## 37. Financial Instruments

### (i) Capital management

For the purpose of the Group's capital management, capital includes issued equity capital, share premium and all other equity reserves attributable to the equity holders of the parent. The primary objective of the Group's capital management is to maximise the shareholder value.

The Group's objective when managing capital are to:

- Safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and
- Maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares, or sell non-core assets to reduce the debt.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Debt to Equity ratio

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Debt (Long term borrowings, Short term borrowings & Current maturities of Long term borrowings)	1559.47	3198.61	3403.31
Equity	13827.86	11922.60	11005.62
Debt to Equity ratio	11.28%	26.83%	30.92%

### Loan covenants:

As on March 31, 2017, the current maturities of the long term borrowing in relation to a domestic subsidiary amounts to ₹34.98 million. The covenants relating to the said borrowing have been complied with.

### (ii) Categories of financial instruments

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Financial assets</b>			
<b>Measured at fair value through profit or loss (FVTPL):</b>			
Mandatorily measured:			
- Equity and other investments	52.97	19.95	27.11
<b>Measured at amortised cost</b>			
- Cash and bank balances	1260.60	1132.45	951.60
- Other financial assets	3971.11	3835.65	3615.59
<b>Measured at fair value through Other Comprehensive Income (FVTOCI)</b>			
- Investments in equity instruments designated upon initial recognition	129.52	183.68	148.69
<b>B. Financial liabilities</b>			
<b>Measured at amortised cost (including trade payable balances)</b>	3812.32	5270.59	5614.53

### (iii) Financial risk management objectives

The Group's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the Group is exposed to and how the Group manages the risk.

Risk	Exposure arising from	Measurement	Management
a. Credit risk	Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost	Aging analysis Credit ratings Financial analysis	Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment
b. Market risk			
i. Market risk - foreign exchange	Future commercial transactions Recognised financial assets and liabilities not denominated in Indian rupee (INR)	Cash flow forecasting Sensitivity analysis	Forward foreign exchange contracts
ii. Market risk - interest rate	Long-term borrowings at variable rates	Sensitivity analysis	Market trends, Interest rate swaps
iii. Market risk - Price risk	Investment in securities	Sensitivity analysis	Portfolio diversification
c. Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availability of sanctioned credit lines and borrowing facilities

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The risk management is governed by policies developed in accordance with the Group guidelines and approved by the Board of Directors of the respective companies in the Group. They identify, evaluate and hedge financial risks in close co-ordination with their operating units.

### a. Credit risk:

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

#### a (i). Trade receivables

Customer credit risk is managed by respective companies under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on that credit limit & credit terms are decided. Outstanding customer receivables are regularly monitored through credit lock and release to effectively manage the exposure.

An impairment analysis is performed at each reporting date on an individual basis for all the customers. The impairment is based on expected credit model considering the historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 11.

The Group has low concentration of risk with respect to trade receivables, as its customers are located in various geographies and belong to diversified industries and operate in largely independent markets.

#### a (ii). Financial instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by the respective Companies in accordance with their policy. Group recommends investments of surplus funds in short-term liquid funds and deposits with banks. The Investment limits are set out and are reviewed by the Board of Directors of the respective company on a quarterly basis.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 6 & 12

### b. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change to the Groups exposure to market risks or the manner in which these risks are being measured and managed.

#### b (i). Foreign currency risk management

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters developed under guidelines of the Group and approved by Board of Directors of the respective companies. The Group recommends to its operating entities to perform, to the extent it is possible, their transactions in their functional currencies. Where this is not possible, the transactional currency risk may be hedged on an individual basis by currency forwards. The Group recommends hedging of around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per respective Company's policy at the time of commitment.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period are as under:

Currency	Liabilities			Assets		
	As at			As at		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
US Dollar (USD)	209.51	154.94	140.15	968.24	979.05	856.74
Euro (EUR)	37.17	32.11	19.34	546.59	343.60	168.74
Great British Pound (GBP)	0.61	3.99	-	12.19	12.99	16.27
Australian Dollar (AUD)	-	0.37	-	-	-	-
Chinese Yuan (CNY)	-	4.28	-	-	-	-
South African Rand (ZAR)	-	2.81	-	-	-	-
Russian Rouble (RUB)	7.90	-	-	-	-	-

Quantum of Forward contract (derivatives) (all of which identified as hedges) outstanding as at the end of the year (notional principal amount) on:

The details of outstanding forward exchange contracts taken towards hedging the trade exposures as on the reporting date are given as under:

Currency	Liabilities			Assets		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
USD	19.35	13.28	21.97	72.93	74.62	64.16
EUR	-	-	-	-	-	6.75

As at 31<sup>st</sup> March 2017 the outstanding forward exchange contracts were USD 1.12 million taken for receivable position and USD 0.3 million taken for payable position.

The value of the contracts outstanding currency wise is given below in the table:

Contracts booked for	Currency	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
		Number of contracts	value	Number of contracts	value	Number of contracts	value
Loan	USD		-	1	40.05	4	239.69
Export receivable	EUR		-	-	-	2	6.75
Export receivable	USD	9	72.93	9	74.62	14	64.16
Import payment	USD	3	19.35	2	13.28	4	21.97

### Foreign currency sensitivity analysis

The Group is mainly exposed to US Dollar and Euro. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

Currency impact in (₹ million) relating to the foreign currencies of:	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
	Profit or loss	Equity	Profit or loss	Equity	Profit or loss	Equity
US Dollar (USD)	70.51	75.05	76.28	76.98	67.44	70.04
Euro (EUR)	50.94	50.94	31.15	31.15	14.27	14.30
Great British Pound (GBP)	1.16	1.16	0.90	0.90	1.63	1.63
Australian Dollar (AUD)	-	-	(0.04)	(0.04)	-	-
Chinese Yuan (CNY)	-	-	(0.43)	(0.43)	-	-
South African Rand (ZAR)	-	-	(0.28)	(0.28)	-	-
Russian Rouble (RUB)	(0.79)	(0.79)	-	-	-	-
<b>Total</b>	<b>121.82</b>	<b>126.36</b>	<b>107.58</b>	<b>108.28</b>	<b>83.34</b>	<b>85.97</b>

The Company's sensitivity impact to foreign currency has increased during the current year mainly due to the increase in the value of exposure in Euro as at the end of the reporting period.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### b (ii). Interest rate risk Management

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Group has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107.

Classification of borrowings by nature of interest rate	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Borrowings at variable interest rate</b>			
- Non-Current	-	276.42	36.00
- Current	1459.63	2206.10	2523.51
<b>Borrowings at fixed interest rate</b>			
- Non-Current	66.83	51.09	513.92
- Current	33.01	665.00	329.88
<b>Total Borrowings</b>	<b>1559.47</b>	<b>3198.61</b>	<b>3403.31</b>

Current borrowings at variable interest rate represents cash-credit and term loan. The foreign currency term loans are benchmarked to USD 6 months LIBOR.

The outstanding position of Non - current borrowings at variable interest rate along with proportion of total loans is given below:

Variable loans	As at 31.03.2017			As at 31.03.2016			As at 01.04.2015		
	Weighted average rate	Balance	% of total loans	Weighted average rate	Balance	% of total loans	Weighted average rate	Balance	% of total loans
Non-Current	-	-	-	9.03%	276.42	9%	10.75%	36.00	1.06%

The exposures relating to the non-current borrowing taken at variable interest rate was mitigated by prepayment of the same within one year.

### Sensitivity of interest rate change on Non-current loan availed at variable interest rate:

Particulars	Impact of profit after tax		Impact on other component of equity	
	FY 2016-17	FY 2015-16	FY 2016-17	FY 2015-16
Interest rate - increase by 50 basis points	-	(0.88)	-	(0.12)
Interest rate - decrease by 50 basis points	-	0.88	-	0.12

### b (iii). Price risks

The Group is exposed to equity price risks arising from equity investments. Certain of the Company's equity investments are held for strategic rather than trading purposes. The Group also holds certain other equity investments for trading purposes.

#### Equity price sensitivity analysis

The significant value of the equity investment which are held for strategic purpose and designated at Fair value through Other Comprehensive Income as at 31<sup>st</sup> March 2017 is ₹57.79 million (31<sup>st</sup> March 2016: ₹111.95 million). The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decrease by 5%, the impact to Other Comprehensive Income and equity is given below:

Movement of equity price	Impact to Other Comprehensive Income / equity	
	As at March 31, 2017	As at March 31, 2016
Increase by 5%	5.91	8.62
Decrease by 5%	(5.91)	(8.62)

The impact of change in equity price on non current investment of shares assigned in profit or loss and other are not significant.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### c. Liquidity risk management

The Group has established a liquidity risk management framework. The Group manages liquidity risk through cash generation from business and by having adequate banking facilities. The Group continuously monitors forecasts and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

#### Contractual maturities of financial liabilities

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31<sup>st</sup> March 2017:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Borrowings and interest thereon*	48.86		67.40			67.40
Finance lease liability	17.95		17.33	5.42		22.75
<b>Current financial liabilities</b>						
Borrowings and interest thereon*	1424.47	1485.16				1485.16
Trade payables	1650.23	1650.23				1650.23
Finance lease liability	8.23	11.63				11.63
Maturities of long term borrowing	59.96	65.99				65.99
Other financial liabilities	602.62	602.62				602.62

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31<sup>st</sup> March 2016:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Borrowings and interest thereon*	342.65		395.12			395.12
Finance lease liability	19.77		19.15	5.25		24.40
<b>Current financial liabilities</b>						
Borrowings and interest thereon*	2270.48	2404.66				2404.66
Trade payables	1340.80	1340.80				1340.80
Finance lease liability	5.83	9.97				9.97
Maturities of long term borrowing	559.88	592.94				592.94
Other financial liabilities	731.18	731.18				731.18

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 1<sup>st</sup> April 2015:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Borrowings and interest thereon*	554.12		635.58			635.58
Finance lease liability	12.63		10.93	4.09		15.02
<b>Current financial liabilities</b>						
Borrowings and interest thereon*	2201.56	2344.67				2344.67
Trade payables	1525.12	1525.12				1525.12
Finance lease liability	7.18	10.06				10.06
Maturities of long term borrowing	627.82	661.51				661.51
Other financial liabilities	686.10	686.10				686.10

\*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Contractual maturities of financial assets

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31<sup>st</sup> March 2017:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	110.80				110.80	110.80
<b>Current financial assets</b>						
Trade receivables	3805.83	3805.83				3805.83
Advance to employees	11.97	11.97				11.97
Other financial assets	42.51	42.51				42.51

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31<sup>st</sup> March 2016:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	101.28				101.28	101.28
<b>Current financial assets</b>						
Trade receivables	3674.82	3674.82				3674.82
Advance to employees	16.15	16.15				16.15
Other financial assets	43.40	43.40				43.40

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 1<sup>st</sup> April 2015:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	94.03				94.03	94.03
<b>Current financial assets</b>						
Trade receivables	3438.61	3438.61				3438.61
Advance to employees	11.72	11.72				11.72
Other financial assets	71.23	71.23				71.23

### Maturity analysis of Derivative financial instruments

The following table details the Company's maturity analysis for its derivative financial instruments. The table has been drawn up based on the undiscounted estimated cash flows determined by reference to the projected market rates at the end of the reporting period. A positive amount represents an anticipated cash inflow and a negative amount represents an anticipated cash outflow.

Currency	Contracts booked for	As at 31.03.2017			As at 31.03.2016			As at 01.04.2015		
		Carrying amount	Less than 1 year	1-3 years	Carrying amount	Less than 1 year	1-3 years	Carrying amount	Less than 1 year	1-3 years
USD	Loan	-	-	-	40.05	40.05	-	239.69	239.69	-
EURO	Export receivable	-	-	-	-	-	-	6.75	6.75	-
USD	Export receivable	72.93	72.93	-	74.62	74.62	-	64.16	64.16	-
USD	Import payment	19.35	19.35	-	13.28	13.28	-	21.97	21.97	-

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The note below sets out details of additional undrawn facilities that the Company has at its disposal to further reduce liquidity risk.

### Financing facilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Unsecured term loan from bank:</b>			
Amount used	879.24	1707.37	1475.80
Amount unused	64.83	258.50	375.54
	<b>944.07</b>	<b>1965.87</b>	<b>1851.34</b>
<b>Unsecured cash credit and other borrowings facility:</b>			
Amount used	454.25	1022.76	1473.87
Amount unused	924.47	917.92	997.90
	<b>1378.72</b>	<b>1940.68</b>	<b>2471.77</b>
<b>Secured Borrowings from bank:</b>			
Amount used	36.21	71.59	163.34
Amount unused	85.02	48.41	31.97
	<b>121.23</b>	<b>120.00</b>	<b>195.31</b>
<b>Secured cash credit and other borrowings facility:</b>			
Amount used	90.98	281.85	270.49
Amount unused	1519.02	1328.15	1339.51
	<b>1610.00</b>	<b>1610.00</b>	<b>1610.00</b>
<b>Total</b>			
Amount used	1460.68	3083.57	3383.50
Amount unused	2593.34	2552.98	2744.92
	<b>4054.02</b>	<b>5636.55</b>	<b>6128.42</b>

### Fair value measurements

This note provides information about how the Company determines fair value of various financial assets and financial liabilities.

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Company's financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used)

Financial assets/financial liabilities	Fair Value as at			Fair value hierarchy	Valuation techniques & key inputs used
	31.03.2017	31.03.2016	01.04.2015		
Investments in quoted equity instruments at FVTOCI	118.22	172.38	137.39	Level 1	Quoted bid price in an active market <b>(a)</b>
Investments in quoted instruments at FVTPL	3.03	2.28	2.07	Level 1	Quoted bid price in an active market
Investments in unquoted instruments at FVTPL	0.30	0.25	0.26	Level 3	Fair valuation - <b>(b)</b>
Investments in unquoted instruments at OCI	11.30	11.30	11.30	Level 3	Fair valuation - <b>(b)</b>

There were no changes in the fair value hierarchy Levels in the above periods.

- (a) These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of Ind AS 109, the Company has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.
- (b) These investment in equity are not significant in value and hence additional disclosures are not presented.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)

Particulars	Fair value hierarchy	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
		Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial assets at amortised cost:</b>							
<b>Non-current financial assets</b>							
<b>Other financial assets</b>							
Security deposit	Level 3	110.80	95.57	101.28	87.37	94.03	81.12
<b>Current financial assets</b>							
Trade receivable	Level 2	3805.83	3805.83	3674.82	3674.82	3438.61	3438.61
Advances to employees	Level 3	11.97	11.97	16.15	16.15	11.72	11.72
Other advances	Level 3	42.51	42.51	43.40	43.40	71.23	71.23
<b>Financial liabilities held at amortised cost:</b>							
<b>Non-current financial liabilities</b>							
Borrowings and interest thereon	Level 2	48.86	44.87	342.65	314.66	554.12	514.97
Finance lease and interest thereon	Level 2	17.95	17.95	19.77	19.77	12.63	12.63
<b>Current financial liabilities</b>							
Borrowings and interest thereon	Level 2	1424.47	1362.22	2270.48	2143.78	2201.56	2067.20
Trade payables	Level 2	1650.23	1650.23	1340.80	1340.80	1525.12	1525.12
Finance lease and interest thereon	Level 2	8.23	8.23	5.83	5.83	7.18	7.18
Current maturities of long term	Level 2	59.96	57.05	559.88	528.61	627.82	583.18
Others financial liabilities	Level 3	602.62	602.92	731.18	731.21	686.10	692.78

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

### 38. Related Party Disclosures

#### List of Related parties

Related party relationships are as identified by the Management and relied upon by the Auditors.

#### Joint ventures

Murugappa Morgan Thermal Ceramics Ltd.  
Ciria India Ltd.

[MMTCL]  
[Ciria]

#### Associate and its subsidiaries

Wendt (India) Ltd.  
Wendt Grinding Technologies Limited, Thailand  
Wendt (Middle East) FZE

[Wendt]  
[WGTL]  
[WME]

#### Key Management Personnel

Mr. K Srinivasan, Managing Director

#### Other Related parties

Murugappa Holdings Limited (Holding company through associate)  
Ambadi Investments P Ltd (Holding company of MHL)  
Parry Enterprises India Limited (Fellow Subsidiary of MHL)  
Ambadi Holdings P Ltd ( fellow subs of MHL)  
Parry Agro Industries Limited (fellow subsidiary of MHL)  
Carborundum Universal Employees Provident Fund  
Retiral funds of Joint Ventures, Associate and Other related parties

[MHL]  
[AIL]  
[PEIL]  
[AHL]  
[PAL]  
[CUEPF]

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### A. Transactions during FY 2016-17

Related Party	Income from Sales & Services	Dividend income	Reimbursement of employee cost	Purchase of goods	Expenditure on other services	Rental expenses	Managerial remuneration	Contribution to Provident Fund
<b>Joint Ventures</b>								
MMTCL	23.94	157.39		9.53				
Ciria	148.74	15.00						
<b>Total</b>	<b>172.68</b>	<b>172.39</b>	<b>-</b>	<b>9.53</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Associate &amp; its subsidiaries</b>								
Wendt	27.70	19.93	0.06	18.66	2.42	1.54		
WGTL	51.70							
WME	2.97							
<b>Total</b>	<b>82.37</b>	<b>19.93</b>	<b>0.06</b>	<b>18.66</b>	<b>2.42</b>	<b>1.54</b>	<b>-</b>	<b>-</b>
<b>Other related parties</b>								
PEIL					39.68			
CUEPF								106.26
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>39.68</b>	<b>-</b>	<b>-</b>	<b>106.26</b>
KMP							20.02	
<b>Grand Total</b>	<b>255.05</b>	<b>192.32</b>	<b>0.06</b>	<b>28.19</b>	<b>42.10</b>	<b>1.54</b>	<b>20.02</b>	<b>106.26</b>

### B. Transactions during FY 2015-16

Related Party	Income from Sales & Services	Dividend income	Reimbursement of employee cost	Purchase of goods	Expenditure on other services	Rental expenses	Managerial remuneration	Contribution to Provident Fund
<b>Joint Ventures</b>								
MMTCL	17.11	28.62		7.48	-	-	-	
Ciria	75.42	15.00		-	-	-	-	
<b>Total</b>	<b>92.53</b>	<b>43.62</b>	<b>-</b>	<b>7.48</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Associate &amp; its subsidiaries</b>								
Wendt	25.40	19.93	0.12	14.51	2.65	1.50	-	
WGTL	65.08							
WME	2.29							
<b>Total</b>	<b>92.77</b>	<b>19.93</b>	<b>0.12</b>	<b>14.51</b>	<b>2.65</b>	<b>1.50</b>	<b>-</b>	<b>-</b>
<b>Other related parties</b>								
PEIL					24.37			
PAL				0.07				
CUEPF	95.91							95.91
<b>Total</b>	<b>95.91</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>24.37</b>	<b>-</b>	<b>-</b>	<b>95.91</b>
KMP							17.47	
<b>Grand Total</b>	<b>281.21</b>	<b>63.55</b>	<b>0.12</b>	<b>22.06</b>	<b>27.02</b>	<b>1.50</b>	<b>17.47</b>	<b>95.91</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### C. Outstandings

Related Party	As at 31.03.2017			As at 31.03.2016			As at 01.04.2015		
	Trade and other receivable	Deposit out-standing	Payables	Trade and other receivable	Deposit out-standing	Payables	Trade and other receivable	Deposit out-standing	Payables
<b>Joint Ventures</b>									
MMTCL	0.04		1.68	17.54		1.69	8.08		0.27
Ciria	8.90			39.13			11.13		
<b>Total</b>	<b>8.94</b>	<b>-</b>	<b>1.68</b>	<b>56.67</b>	<b>-</b>	<b>1.69</b>	<b>19.21</b>	<b>-</b>	<b>0.27</b>
<b>Associate &amp; its subsidiaries</b>									
Wendt	2.39	1.00	3.79	25.45	1.00	4.77	15.55	1.00	2.62
WGTL	3.46			15.26					
WME	0.96			13.90					
<b>Total</b>	<b>6.81</b>	<b>1.00</b>	<b>3.79</b>	<b>54.61</b>	<b>1.00</b>	<b>4.77</b>	<b>15.55</b>	<b>1.00</b>	<b>2.62</b>
<b>Other related parties</b>									
PEIL			1.19			0.84			1.52
CUEPF			9.09			8.38			7.08
<b>Total</b>	<b>-</b>	<b>-</b>	<b>10.28</b>	<b>-</b>	<b>-</b>	<b>9.22</b>	<b>-</b>	<b>-</b>	<b>8.60</b>
<b>Grand Total</b>	<b>15.75</b>	<b>1.00</b>	<b>15.75</b>	<b>111.28</b>	<b>1.00</b>	<b>15.68</b>	<b>34.76</b>	<b>1.00</b>	<b>11.49</b>

Transactions with related parties in the nature of sale of goods, rendering of services, purchase of goods, procurement of services are at arm's length price.

### Compensation to Key Management Personnel

The remuneration to Key Management Personnel for the years is given below:

Particulars	As at	
	31.03.2017	31.03.2016
Short term benefits	17.41	15.22
Post employment benefits	2.58	2.22
Other benefits	0.03	0.03
	<b>20.02</b>	<b>17.47</b>

The Remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

### 39. Notes relating to Leases

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
a. Cost of Leased Assets Vehicles	40.28	32.43	36.66
Deemed cost as per Fixed Assets Schedule. -Refer Note: 4A	35.33	26.92	16.58
b. Net Carrying amount	21.67	21.57	16.58
c. Reconciliation between Total Minimum Lease payments and their Present value:			
Total Minimum Lease Payments	34.38	34.37	25.08
Less: Future Liability on Interest account	(8.20)	(8.77)	(5.27)
Present value of Lease payments - Refer Note: 17	26.18	25.60	19.81

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

d. Yearwise Future Minimum lease rental payments:

Particulars	Total Minimum Lease Payments as on 31.03.2017	Present value of Lease payments as on 31.03.2017	Total Minimum Lease Payments as on 31.03.2016	Present value of Lease payments as on 31.03.2016	Total Minimum Lease Payments as on 01.04.2015	Present value of Lease payments as on 01.04.2015
(i) Not later than one year	11.63	8.23	9.97	5.83	10.06	7.18
(ii) Later than one year and not later than three years	17.33	13.28	19.15	14.93	10.93	8.85
(iii) Later than three years and not later then five years	5.42	4.67	5.25	4.84	4.09	3.78
(iv) Later than five years	-	-	-	-	-	-
<b>Total</b>	<b>34.38</b>	<b>26.18</b>	<b>34.37</b>	<b>25.60</b>	<b>25.08</b>	<b>19.81</b>

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard has been made.

f. The subsidiary in America has entered into non cancellable operating leases upto five years to the value of the minimum lease rentals aggregating to ₹31.77 million.

**40.** Dividend Tax on the Interim Dividend has been paid after availing the credit amounting to ₹22.65 million (Previous year - ₹28.89 million) in respect of the tax paid on the dividends received from three domestic subsidiaries and an overseas subsidiary. Dividend tax payable on the proposed final dividend is eligible for credit amounting to ₹14.05 million (Previous year - NIL) available for set off in respect of dividend tax payable on dividends to be distributed by two domestic subsidiaries and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income tax Act.

### 41. Research and Development expenditure incurred during the year is given below:

a) Revenue Expenditure (disclosed under respective heads of expenditure)

Particulars	For the year	
	2016-17	2015-16
Direct Material, Supplies and Consumables	57.66	29.26
Employee Benefit Expense	44.12	29.25
Repair & Maintenance	3.40	2.28
Other Expenses	18.60	12.93
Depreciation	10.53	8.27
<b>Total Revenue Expenditure</b>	<b>134.31</b>	<b>81.99</b>

b) Capital Expenditure

Particulars	For the year	
	2016-17	2015-16
<b>Property, plant and equipments</b>		
Buildings	2.49	4.62
Plant & Machinery	7.11	6.90
Furniture & Fixtures	1.85	3.44
	11.45	14.96
<b>Intangibles</b>	2.29	6.96
<b>Total</b>	<b>13.74</b>	<b>21.92</b>
Capital Work-in-Progress	-	1.24
<b>Total Capital Expenditure (including CWIP)</b>	<b>13.74</b>	<b>23.16</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 42. Disclosure relating to Specified Bank Notes (SBN)

Particulars	SBN	Other Denomination Notes	Total
<b>Closing Cash in hand as on 08.11.2016</b>	0.99	0.58	1.57
Add: Permitted Receipts	-	3.37	3.37
Deduct: Permitted Payments	-	3.15	3.15
Deduct: Amount deposited in Banks	0.99	-	0.99
<b>Closing Cash in hand as on 30.12.2016</b>	-	0.80	0.80

### 43. Transition to Ind AS

These financial statements, for the year ended 31 March 2017, are the first financial statements the Group has prepared in accordance with Ind AS. For periods up to and including the year ended 31 March 2016, the Group prepared its financial statements in accordance with accounting standards notified under Section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP).

Accordingly, the Group has prepared financial statements which comply with Ind AS applicable for periods ending on 31 March 2017, together with the comparative period data as at and for the year ended 31 March 2016, as described in the summary of significant accounting policies. In preparing these financial statements, the Group opening balance sheet was prepared as at 1 April 2015, the Group's date of transition to Ind AS. An explanation of how the transition from previous GAAP to Ind AS has affected the Group's financial position, financial performance and cash flows is set out below:

- (i) Transition election
- (ii) Reconciliation of Other equity as previously reported under previous GAAP to Ind AS
- (iii) Reconciliation of Profits as previously reported under previous GAAP to Ind AS
- (iv) Reconciliation of Balance Sheet as previously reported under previous GAAP to Ind AS
- (v) Reconciliation of Statement of Profit and Loss account as previously reported under previous GAAP to Ind AS
- (vi) Adjustments to the Statement of Cash Flows

#### (i) Transition election

The Group in applying Ind AS principle for measurement of recognised assets and liabilities is subject to certain optional exemptions, apart from mandatory exceptions, availed by the Group as detailed below.

Particulars	Notes
Deemed Cost of for property, plant and equipment, investment property, and intangible assets	I
Share-based payment transactions	II
Designation of previously recognised financial instruments	III
Business combinations	IV
Accounting for joint ventures	V
Fair value measurement of financial assets or financial liabilities at initial recognition	VI
Leases	VII
Cumulative translation adjustment	VIII

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

I. Deemed Cost of for property, plant and equipment, investment property, and intangible assets:

Ind AS 101 permits a first-time adopter to elect to continue with the carrying value for all of its property, plant and equipment as recognised in the financial statements as at the date of transition to Ind AS, measured as per the previous GAAP and use that as its deemed cost as at the date of transition after making necessary adjustments for de-commissioning liabilities. This exemption can also be used for intangible assets covered by Ind AS 38 Intangible Assets.

Accordingly, the Group has elected to measure all of its property, plant & equipment and intangible assets at their previous GAAP carrying value.

II. Share-based payment transactions:

A first-time adopter is encouraged, but not required, to apply Ind AS 102 Share-based Payment to equity instruments that were granted on or before the date of transition to Ind AS. However, if a first-time adopter elects to apply Ind AS 102 to such equity instruments, it may do so only if the entity has disclosed publicly the fair value of those equity instruments determined at the measurement date as defined in Ind AS 102. The Group has used this option and not applied Ind AS 102 share based payment that have vested before Ind AS transition date. Refer Note: 37(h) of standalone financial statements for shares vested before transition date.

III. Designation of previously recognised financial instruments:

An entity may designate an investment in an equity instrument as at fair value through Other Comprehensive Income in accordance with Ind AS 109 on the basis of the facts and circumstances that exist at the date of transition to Ind AS.

As per Ind AS 109, an entity can make an irrevocable election to present in Other Comprehensive Income subsequent changes in the fair value of an investment in an equity instrument that is not held for trading.

In accordance with Ind AS transition provision, the parent company has designated the equity investment in Coromandel Engineering Limited and Murugappa Management Services Limited as fair value through OCI.

IV. Business combinations:

In accordance with Ind AS transitional provisions, the Group has elected to apply Ind AS relating to business combinations prospectively from April 1, 2015. As such, Indian GAAP balances relating to business combinations entered into before that date, including goodwill, have been carried forward without adjustment.

V. Accounting for Joint Ventures:

The following Joint Ventures of the Group were accounted for using the proportionate consolidation method under previous GAAP whereas it needs to be accounted using the equity method under Ind AS:

- a) MMTCL    b) CIRIA    c) WENDT

Therefore, in accordance with the Ind AS 101, the Group has availed this option due to its operational convenience, i.e.:-

- On the transition date, recognised investment in Joint Ventures by measuring it at the aggregate of the carrying amount of the assets and liabilities that the Group had proportionately consolidated under previous GAAP as of the transition date;
- This investment amount has been deemed to be the cost of investment at initial recognition;
- The Group has tested the investment in Joint Ventures for impairment as of the transition date;
- After initial recognition at the transition date, the Group has accounted for Joint Ventures using the equity method in accordance with Ind AS 28.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The break-down of the assets and liabilities of Joint Ventures that have been aggregated into the single line investment balance at the transition date is below:

Particulars	As at 1 April 2015 (Date of transition) (amounts as reported in previous GAAP)		
	MMTCL	CIRIA	WENDT
<b>Non-Current liabilities</b>			
Deferred tax liabilities (Net)	4.86	-	21.18
Long term provision	-	1.87	3.51
<b>Total Non current Liabilities</b>	<b>4.86</b>	<b>1.87</b>	<b>24.69</b>
<b>Current liabilities</b>			
Trade payables	74.56	38.36	70.30
<b>Other current liabilities</b>	<b>28.75</b>	<b>15.35</b>	<b>20.48</b>
Short- term provisions	5.45	0.15	2.76
<b>Total Current Liabilities</b>	<b>108.76</b>	<b>53.86</b>	<b>93.54</b>
<b>Total Liabilities</b>	<b>113.62</b>	<b>55.73</b>	<b>118.23</b>
<b>Non current assets</b>			
Fixed Assets	238.13	8.71	235.80
Deferred Tax Assets (net)	-	2.48	-
Non current investments	-	6.00	-
Long -term loans and advances	4.05	1.57	10.42
<b>Total Non current assets</b>	<b>242.18</b>	<b>18.76</b>	<b>246.22</b>
<b>Current assets</b>			
Current Investments	206.31	19.36	82.80
Inventories	65.83	0.40	74.78
Trade receivables	111.97	59.98	92.34
Cash and cash equivalents	6.86	15.80	17.39
Short- term loans and advances	20.98	8.64	16.09
<b>Total Current assets</b>	<b>411.95</b>	<b>104.18</b>	<b>283.40</b>
<b>Total Assets</b>	<b>654.13</b>	<b>122.94</b>	<b>529.62</b>

VI. Fair value measurement of financial assets or financial liabilities at initial recognition:

In accordance with Ind AS transitional provisions, the Group opted to apply the provisions of day one gain or loss provisions retrospectively on transactions occurring on or after the date of transition to Ind AS.

VII. Leases:

Appendix C to Ind AS 17 requires an entity to assess whether a contract or arrangement contains a lease. In accordance with Ind AS 17, this assessment should be carried out at the inception of the contract or arrangement. Ind AS 101 provides an option to make this assessment on the basis of facts and circumstances existing at the date of transition to Ind AS, except where the effect is expected to be not material.

The entity in the Group has elected to apply this exemption for such contracts/arrangements.

VIII. Cumulative translation adjustment:

In accordance with Ind AS transitional provisions, the Group opted to reset the balance of foreign currency translation reserve (FCTR) at the date of transition as Nil.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Mandatory exceptions	Notes
Estimates	I
De-recognition of financial assets and liabilities	II
Classification and measurement of financial assets	III
Hedge accounting	IV
Impairment of financial assets	V

I. Estimates:

Group estimates in accordance with Ind AS at the date of transition to Ind AS shall be consistent with estimates made for the same date in accordance with previous GAAP.

Ind AS estimates as at 1 April 2015 are consistent with the estimates as at the same date made in conformity with previous GAAP. The Group made estimates for following items in accordance with Ind AS at the date of transition as these were not required under previous GAAP:

- Investment in equity instruments carried at FVOCI;
- Investment in equity instruments carried at FVPL;
- Investment in debt instruments carried at FVPL; and
- Impairment of financial assets based on expected credit loss model.

II. De-recognition of financial assets and liabilities:

Ind AS 101 requires a first-time adopter to apply the de-recognition provisions of Ind AS 109 prospectively for transactions occurring on or after the date of transition to Ind AS. However, Ind AS 101 allows a first-time adopter to apply the de-recognition requirements in Ind AS 109 retrospectively from a date of the choosing, provided that the information needed to apply Ind AS 109 to financial assets and financial liabilities derecognised as a result of past transactions was obtained at the time of initially accounting for those transactions.

The Group has elected to apply the de-recognition provisions of Ind AS 109 prospectively from the date of transition to Ind AS.

III. Classification and measurement of financial assets:

Ind AS 101 requires an entity to assess classification and measurement of financial assets (investment in debt instruments) on the basis of the facts and circumstances that exist at the date of transition to Ind AS.

IV. Hedge accounting:

Hedge accounting can only be applied prospectively from the transition date, to the transactions that satisfy the hedge accounting criteria in Ind AS 109, at that date. Hedging relationships cannot be designated retrospectively, and the supporting documentation cannot be created retrospectively. As a result, only hedging relationships that satisfied the hedge accounting criteria as of 1 April 2015 are reflected as hedges in the Group's results under Ind AS.

The Group had designated various hedging relationships as cash flow hedges under the previous GAAP. On date of transition to Ind AS, the Group had assessed that all the designated hedging relationship qualifies for hedge accounting as per Ind AS 109. Consequently, the Group continues to apply hedge accounting on and after the date of transition to Ind AS.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### V. Impairment of financial assets:

The Group has applied the impairment requirements of Ind AS 109 retrospectively; however, as permitted by Ind AS 101, it has used reasonable and supportable information that is available without undue cost or effort to determine the credit risk at the date that financial instruments were initially recognised in order to compare it with the credit risk at the transition date.

### (ii) Reconciliation of Other equity as previously reported under previous GAAP to Ind AS

Particulars	Notes	As at	
		31.03.2016	01.04.2015
<b>Reserves and surplus as reported under Previous GAAP</b>		11670.50	10692.45*
a) Ind AS adjustments that lead to increase in equity			
Proposed dividend	(i)	-	109.48
Recognition of deferred tax on unrealised profit on stock	(ii)	17.24	6.56
Share of joint venture/associate - adjustments net of tax	(iii)	16.65	10.51
Fair valuation of equity investment	(iv)	114.21	79.01
Others	(v)	0.38	-
b) Ind AS adjustments that lead to decrease in equity			
Deferred tax on Hedging reserve	(vi)	(0.15)	(0.24)
Recognition of deferred tax on undistributed profit of associate	(vii)	(84.61)	(80.33)
<b>Other equity as reported under Ind AS</b>		<b>11734.22</b>	<b>10817.44</b>

\* Equity reported under Previous GAAP as adjusted for the impact of merger

### (iii) Reconciliation of Profits as previously reported under previous GAAP to Ind AS

Particulars	Note	For the year 2016-17
<b>Profit for the year after tax and non-controlling interest as per Previous GAAP</b>		1427.91
<b>Increase(decrease) in net income (net of taxes and non-controlling interest)</b>		
Share of joint ventures/associate Ind AS transitional impact	(iii)	8.32
Fair value of investment	(iv)	0.21
Effect of measuring ESOPs at fair value	(viii)	(1.29)
Actuarial loss booked under staff welfare, now moved to OCI	(ix)	3.08
Deferred tax on unrealised profits on stock held	(ii)	10.68
Tax on profits of associate	(vii)	(8.28)
Others	(v)	0.38
<b>Profit as reported under Ind AS</b>		<b>1441.01</b>

# Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

## (iv) Reconciliation of Consolidated Balance Sheet as previously reported under previous GAAP to Ind AS

Particulars	Notes	As at 31.03.2016			As at 01.04.2015		
		Previous GAAP	Effect of transition to Ind AS	As per Ind AS Balance Sheet	Previous GAAP	Effect of transition to Ind AS	As per Ind AS Balance Sheet
<b>ASSETS</b>							
<b>Non-current assets</b>							
(a) Property, plant and equipment	(xi),(xii)	5913.72	(642.77)	5270.95	6657.73	(600.18)	6057.55
(b) Capital work-in-progress	(xi),(xiii)	898.19	(56.42)	841.77	433.17	(31.04)	402.13
(c) Goodwill		1214.51	-	1214.51	1149.55	-	1149.55
(d) Intangible assets	(xi),(xiii)	118.00	(12.09)	105.91	113.44	(0.41)	113.03
(e) Intangible assets under development		-	3.59	3.59	-	6.56	6.56
(f) Financial assets							
(i) Investments							
(a) Investments in associate	(xi)	-	426.53	426.53	-	411.48	411.48
(b) Investments in joint ventures	(xi)	-	679.93	679.93	-	618.13	618.13
(c) Other Investments	(iv),(xi)	85.50	100.71	186.21	78.01	73.01	151.02
(ii) Other financial assets	(xi)	103.21	(1.93)	101.28	96.08	(2.05)	94.03
(g) Deferred tax assets (net)	(xi),(ii)	61.18	14.53	75.71	93.77	4.08	97.85
(h) Other non-current assets	(xi),(xii)	284.74	121.12	405.86	157.48	203.57	361.05
<b>Total non-current assets</b>		<b>8679.05</b>	<b>633.20</b>	<b>9312.25</b>	<b>8779.23</b>	<b>683.15</b>	<b>9462.38</b>
<b>Current assets</b>							
(a) Inventories	(xi)	3866.38	(162.10)	3704.28	3883.31	(140.99)	3742.32
(b) Financial assets							
(i) Other Investments	(xi)	285.42	(268.00)	17.42	333.25	(308.47)	24.78
(ii) Trade receivables	(xi)	3947.56	(272.74)	3674.82	3702.88	(264.27)	3438.61
(iii) Cash and Cash equivalents	(xi)	1158.03	(39.65)	1118.38	979.29	(38.85)	940.44
(iv) Bank balances other than (iii) above	(xi)	15.19	(1.12)	14.07	12.36	(1.20)	11.16
(v) Other Financial assets	(xi)	111.81	(52.26)	59.55	91.71	(8.76)	82.95
(c) Other Current assets	(xi),(xii)	492.17	3.10	495.27	461.83	(36.08)	425.75
(d) Assets classified as held for sale		280.30	-	280.30	-	-	-
<b>Total current assets</b>		<b>10156.86</b>	<b>(792.77)</b>	<b>9364.09</b>	<b>9464.63</b>	<b>(798.62)</b>	<b>8666.01</b>
<b>Total assets</b>		<b>18835.91</b>	<b>(159.57)</b>	<b>18676.34</b>	<b>18243.86</b>	<b>(115.47)</b>	<b>18128.39</b>
<b>EQUITY AND LIABILITIES</b>							
<b>Equity</b>							
(a) Equity share capital		188.38	-	188.38	188.18	-	188.18
(b) Other equity	(i) to (vii)	11670.50	63.72	11734.22	10692.45	124.99	10817.44
Equity attributable to owners of the Company		11858.88	63.72	11922.60	10880.63	124.99	11005.62
Non-controlling interests	(v),(xiv)	713.39	(91.78)	621.61	578.03	(0.14)	577.89
<b>Total equity</b>		<b>12572.27</b>	<b>(28.06)</b>	<b>12544.21</b>	<b>11458.66</b>	<b>124.85</b>	<b>11583.51</b>
<b>Non-current liabilities</b>							
(a) Financial liabilities							
Borrowings	(v)	295.33	67.09	362.42	566.75	-	566.75
(b) Provisions	(xi)	72.58	(7.19)	65.39	50.31	(5.39)	44.92
(c) Deferred tax liabilities (net)	(vii),(xi)	429.42	54.01	483.43	493.43	54.67	548.10
<b>Total non-current liabilities</b>		<b>797.33</b>	<b>113.91</b>	<b>911.24</b>	<b>1110.49</b>	<b>49.28</b>	<b>1159.77</b>
<b>Current liabilities</b>							
(a) Financial liabilities							
(i) Borrowings	(xv)	2270.33	0.15	2270.48	2201.05	0.51	2201.56
(ii) Trade payables	(xi)	1527.93	(187.13)	1340.80	1708.29	(183.17)	1525.12
(iii) Other financial liabilities	(v),(xi),(xv)	1315.90	(19.01)	1296.89	1276.86	44.24	1321.10
(b) Provisions	(i),(xi)	151.99	(10.34)	141.65	232.49	(117.84)	114.65
(c) Other current liabilities	(xi)	200.16	(29.09)	171.07	256.02	(33.34)	222.68
<b>Total current liabilities</b>		<b>5466.31</b>	<b>(245.42)</b>	<b>5220.89</b>	<b>5674.71</b>	<b>(289.60)</b>	<b>5385.11</b>
<b>Total liabilities</b>		<b>6263.64</b>	<b>(131.51)</b>	<b>6132.13</b>	<b>6785.20</b>	<b>(240.32)</b>	<b>6544.88</b>
<b>Total equity and liabilities</b>		<b>18835.91</b>	<b>(159.57)</b>	<b>18676.34</b>	<b>18243.86</b>	<b>(115.47)</b>	<b>18128.39</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (v) Reconciliation of Consolidated statement of Profit and Loss account as previously reported under previous GAAP to Ind AS

Particulars	Notes	For the year 2015-16		
		Previous GAAP	Effect of transition to Ind AS	As per Ind AS
<b>I</b> Revenue from operations	(xi),(xvi),(xvii)	20843.41	(326.86)	20516.55
<b>II</b> Other Income	(xi),(iv)	331.36	(36.15)	295.21
<b>III Total Income</b>		<b>21174.77</b>	<b>(363.01)</b>	<b>20811.76</b>
<b>IV Expenses</b>				
Cost of material consumed	(xi)	6041.41	(349.65)	5691.76
Purchase of stock-in-trade	(xi)	1186.86	(75.85)	1111.01
Changes in inventories of finished goods, stock-in-trade and work-in-progress	(xi)	(0.84)	14.27	13.43
Excise duty on sale of goods	(xvi)	-	1076.74	1076.74
Employee benefit expense	(xi),(viii),(ix)	2715.21	(195.98)	2519.23
Finance costs	(v)	227.26	1.79	229.05
Depreciation and amortisation expense	(xi),(xii)	944.35	(76.12)	868.23
Other expenses	(xi),(xii),(xvii)	7621.72	(530.38)	7091.34
<b>Total expenses (IV)</b>		<b>18735.97</b>	<b>(135.18)</b>	<b>18600.79</b>
<b>V Profit from operations before share of profit of equity accounted investees and income tax [III] - [IV]</b>		<b>2438.80</b>	<b>(227.83)</b>	<b>2210.97</b>
<b>VI</b> Share of profit of associate (net of tax)	(iii),(xi)	-	43.06	43.06
<b>VII</b> Share of profit of joint ventures (net of tax)	(iii),(xi)	-	114.65	114.65
<b>VIII Profit before tax [V]+[VI]+[VII]</b>		<b>2438.80</b>	<b>(70.12)</b>	<b>2368.68</b>
<b>IX Tax expense</b>				
(1) Current tax	(xi)	931.85	(74.27)	857.58
(2) Deferred tax	(ii),(vii),(xi)	(36.55)	(6.97)	(43.52)
<b>Total tax (IX)</b>		<b>895.30</b>	<b>(81.24)</b>	<b>814.06</b>
<b>X Profit for the period [VIII]-[IX]</b>		<b>1543.50</b>	<b>11.12</b>	<b>1554.62</b>
Less: Minority Interest	(xiv)	115.59	(1.98)	113.61
<b>Net profit after tax and minority interest</b>		<b>1427.91</b>	<b>13.10</b>	<b>1441.01</b>
<b>XI Other Comprehensive income</b>				
<b>A</b> (i) Items that will not be reclassified to profit or loss				
(a) Remeasurement of the defined benefit plans	(ix)		(3.46)	(3.46)
(b) Equity instruments through other comprehensive income	(iv)		34.99	34.99
(c) Share of OCI in associates and joint ventures, to the extent not to be reclassified to profit or loss	(xi)		(2.38)	(2.38)
(ii) Income tax relating to items that will not be reclassified to profit or loss				-
			<b>29.15</b>	<b>29.15</b>
<b>B</b> (i) Items that may be reclassified to profit or loss				
(a) Exchange differences in translating the financial statements of foreign operations	(xviii)		(205.75)	(205.75)
(b) Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge	(x)		(0.42)	(0.42)
(c) Share of OCI in associates and joint ventures, to the extent that may be reclassified to profit or loss	(xi)		(2.04)	(2.04)
(ii) Income tax relating to items that may be reclassified to profit or loss	(vi)		0.13	0.13
			<b>(208.08)</b>	<b>(208.08)</b>
<b>Total other comprehensive income - [XI]</b>			<b>(178.93)</b>	<b>(178.93)</b>
<b>XII Total comprehensive income for the period before Non-Controlling interest [X]+[XI]</b>		<b>1543.50</b>	<b>(167.81)</b>	<b>1375.69</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (vi) Adjustments to the Statement of Cash Flows

Particulars	Notes	Previous GAAP	Effect of transition to Ind AS	Ind AS
Net cash flows from operating activities	(xi)	2055.46	(277.87)	1777.59
Net cash flows from investing activities	(xi)	(1008.84)	282.20	(726.64)
Net cash flows from financing activities	(xi)	(891.23)	35.34	(855.89)
<b>Net increase (decrease) in cash and cash equivalents</b>	(xi)	155.39	39.67	195.06
Cash and cash equivalents at the beginning of the period		1312.54	(347.32)	965.22
Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies		(24.48)	-	(24.48)
<b>Cash and cash equivalents at the end of the period</b>		1443.45	(307.65)	1135.80

Analysis of cash and cash equivalents as at March 31, 2016 and as at April 01, 2015 for the purpose of statement of cash flows from Ind AS

Particulars	Notes	31.03.2016	31.03.2015
Cash and cash equivalents for the purpose of cash flows as per previous GAAP		1443.45	1312.54
Cash and cash equivalents of Joint ventures proportionately considered under previous GAAP	(xi)	(307.65)	(347.32)
Cash and cash equivalents for the purpose of cash flows under Ind AS		1135.80	965.22

Notes:

- i. Under Ind AS, dividends payable and the associated corporate dividend tax are recorded as a liability in the year in which these are declared and approved. Under previous Indian GAAP, dividends payable are recorded as a provision in the year to which they relate.
- ii. Under Ind AS, deferred tax may be availed on unrealised profit on stock eliminated at Consol Group. Movement between the years have been recognised as reversal of tax expenses during the period. Under previous Indian GAAP, no such provision is available.
- iii. On account of Ind AS transition on Joint ventures & associate, differences in other equity and profits are recognised in Group consolidation under equity method.
- iv. Under previous GAAP, long term investments were measured at cost less diminution in value which is other than temporary. Under IndAS, these financial assets have been classified as FVTOCI and FVTPL. On the date of transition to Ind AS, these financial assets have been measured at their fair value which is higher than cost as per previous GAAP, resulting in an increase in the carrying amount of ₹79.01 million as at April 01, 2015. Increase on fair value as compared to March 31, 2016 previous GAAP amounts to ₹114.21 million. During FY 15-16, effect on fair value increase on investment as of March 31, 2016 from April 01, 2015 have been recognised as below:
  - a) Investment designated under Profit & loss: Through profit and loss to equity - ₹0.21 million
  - b) Investment designated under OCI: Through OCI to equity - ₹34.99 million
- v. Under Ind AS, redeemable preference share capital of subsidiary classified as Loan ; Preference dividend component as interest component and effect of changes on account of. On Ind AS Balance Sheet, non-current and current portion classified as per maturity.
- vi. Under Ind AS, deferred tax is calculated on hedging reserve. Under previous Indian GAAP, deferred tax was not created on hedging reserve.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

- vii. Under Ind AS, tax to be recognised on undistributed profit on the Group company, where parent company doesn't have control over dividend policy over their Group companies. CUMI recognised tax liability on undistributed profit of its associate company ie., Wendt. Movement of the tax balances and actual pay out during the period were recognised as tax expenses during the year.
- viii. Under Ind AS, ESOPs are to be measured at grant date fair value of the equity instruments issued. Under previous Indian GAAP, such ESOPs were measured at the grant date intrinsic value of the equity instruments issued.
- ix. Under Ind AS the actuarial gains and losses on post retirement defined employee benefits are recognised in Other Comprehensive Income. Under previous Indian GAAP such actuarial gains and losses were recognised in the statement of profit and loss.
- x. Under Ind AS, change in fair value of derivatives designated in cash flow hedge to the extent they are effective to be presented in Other Comprehensive Income. Under previous Indian GAAP, changes were reflected in Hedging reserve.
- xi. Under Ind AS, Joint venture entities of MMTCL & Ciria are accounted under equity method versus proportionate consolidation under Previous GAAP . Under Ind AS, Wendt India Limited is classified as associate and accounted under equity method versus Joint venture - proportionate method under previous GAAP.
- xii. As per eligibility criterion under IndAS on Finance lease, written down value on component of Leasehold land has been reclassified to other non -current asset and current asset. Amortisation component related to leasehold land have been reclassified to "Other expenses".
- xiii. Capital work-in-progress relating to Intangible portion is classified as Intangible under development.
- xiv. Non-controlling interest impact on Ind AS Transitional impact on non-wholly owned subsidiary.
- xv. Interest accrued on borrowing classified under other financial liabilities have been added to respective related borrowings.
- xvi. Under the previous GAAP, excise duty on sale of goods was reduced from sales to present the revenue from operations. Whereas, under Ind AS, this excise duty is included in the revenue from the operations and corresponding expenses is included is part of total expenses. The change does not affect total equity as at April 01, 2015 and March 31, 2016, profit before tax or total profit for the year ended March 31, 2016.
- xvii. Prompt payment discount presented under Other expenses have been netted off against sale of goods.
- xviii. Under Ind AS Foreign currency translation during the year to be presented under Other Comprehensive Income. Under previous GAAP, it was reflected as reserve movement.

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 44. Additional information as required by Paragraph 2 of the General Instructions for Preparation of Consolidated Financial Statements to Schedule III to the Companies Act, 2013

Name of the entity	2016-17							
	Net assets ie., total asset minus total liabilities		Share in profit or loss		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As % of consolidated net assets	Amount (₹ million)	As % of consolidated Profit	Amount (₹ million)	As % of consolidated Other Comprehensive Income	Amount (₹ million)	As % of consolidated Profit	Amount (₹ million)
<b>I. Parent</b>								
Carborundum Universal Limited	76.30%	10550.30	69.64%	1217.75	(20.24%)	(79.50)	53.15%	1138.25
<b>II. Subsidiaries (including Step down subsidiaries)</b>								
<b>a) Indian</b>								
1. Net Access India Ltd	0.76%	104.60	1.38%	24.13	(0.14%)	(0.56)	1.10%	23.57
2. Southern Energy Development Corporation Ltd	1.67%	231.17	3.52%	61.59	(0.28%)	(1.10)	2.82%	60.49
3. Sterling Abrasives Ltd	3.10%	428.34	3.78%	66.07	0.38%	1.49	3.15%	67.56
<b>b) Foreign</b>								
1. CUMI (Australia) Pty Ltd	4.22%	584.22	5.74%	100.34	-	-	4.69%	100.34
2. CUMI International Limited	20.37%	2816.25	13.72%	239.91	-	-	11.20%	239.91
3. Volzhsky Abrasives Works	25.00%	3457.37	35.54%	621.43	-	-	29.02%	621.43
4. Foskor Zirconia (Pty) Ltd	1.23%	170.68	(1.35%)	(23.59)	(0.08%)	(0.33)	(1.12%)	(23.92)
5. CUMI America Inc	0.56%	78.22	(5.62%)	(98.31)	-	-	(4.59%)	(98.31)
6. CUMI Middle East FZE	0.13%	18.49	0.27%	4.81	-	-	0.22%	4.81
7. CUMI Abrasives & Ceramics Company Limited	0.38%	52.89	0.03%	0.57	-	-	0.03%	0.57
8. Thukela Refractories Isithebe Pty Limited	-	0.15	(0.11%)	(2.00)	-	-	(0.09%)	(2.00)
9. CUMI Europe s.r.o	0.07%	9.12	0.08%	1.38	-	-	0.06%	1.38
Non controlling interest in all subsidiaries	(4.75%)	(656.63)	(5.10%)	(89.13)	(0.07%)	(0.27)	(4.17%)	(89.40)
<b>II. Associates (Investment as per equity method)</b>								
1. Wendt (India) Ltd	3.24%	447.77	2.75%	48.05	(0.71%)	(2.81)	2.11%	45.24
<b>III. Joint ventures (Investment as per equity method)</b>								
<b>Indian</b>								
1. Murugappa Morgan Thermal Ceramics Ltd	3.84%	530.64	6.09%	106.49	(0.24%)	(0.94)	4.93%	105.55
2. Ciria India Ltd.	0.60%	83.67	2.08%	36.34	0.00%	(0.02)	1.70%	36.32
Inter-company Elimination & Consolidation Adjustments	(36.72%)	(5079.39)	(32.44%)	(567.16)	121.38%	476.91	(4.21%)	(90.25)
<b>Total</b>	<b>100.00%</b>	<b>13827.86</b>	<b>100.00%</b>	<b>1748.67</b>	<b>100.00%</b>	<b>392.87</b>	<b>100.00%</b>	<b>2141.54</b>

## Notes Forming Part of the Consolidated Financial Statements

For the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Name of the entity	2015-16							
	Net assets ie., total asset minus total liabilities		Share in profit or loss		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As % of consolidated net assets	Amount (₹ million)	As % of consolidated Profit	Amount (₹ million)	As % of consolidated Other Comprehensive Income	Amount (₹ million)	As % of consolidated Profit	Amount (₹ million)
<b>I. Parent</b>								
Carborundum Universal Limited	80.39%	9584.30	80.80%	1164.37	(18.08%)	32.26	94.78%	1196.63
<b>II. Subsidiaries (including Step down subsidiaries)</b>								
<b>a) Indian</b>								
1. Net Access India Ltd	0.68%	80.90	1.15%	16.65	(0.01%)	0.02	1.32%	16.67
2. Southern Energy Development Corporation Ltd	1.76%	209.44	1.61%	23.26	-	-	1.84%	23.26
3. Sterling Abrasives Ltd	3.20%	381.10	3.59%	51.77	0.20%	(0.35)	4.07%	51.42
<b>b) Foreign</b>								
1. CUMI (Australia) Pty Ltd	4.93%	587.42	6.04%	87.08	0.00%	-	6.90%	87.08
2. CUMI International Limited	22.17%	2643.77	(15.39%)	(221.84)	0.00%	-	(17.57%)	(221.84)
3. Volzhsky Abrasives Works	22.76%	2713.49	48.62%	700.68	0.00%	-	55.50%	700.68
4. Foskor Zirconia (Pty) Ltd	1.51%	180.26	4.10%	59.01	0.39%	(0.69)	4.62%	58.32
5. CUMI America Inc	(0.18%)	(21.78)	(3.69%)	(53.20)	0.00%	-	(4.21%)	(53.20)
6. CUMI Canada Inc	-	-	(0.00)	(2.21)	-	-	(0.00)	(2.21)
7. CUMI Middle East FZE	0.12%	14.16	(0.71%)	(10.29)	0.00%	-	(0.82%)	(10.29)
8. CUMI Abrasives & Ceramics Company Limited	(1.22%)	(145.35)	(14.32%)	(206.30)	0.00%	-	(16.34%)	(206.30)
9. Thukela Refractories Isithebe Pty Limited	(0.00)	(7.24)	(0.05)	(68.30)	-	-	(0.05)	(68.30)
10. CUMI Europe s.r.o	0.07%	8.56	(0.69%)	(9.99)	0.00%	-	(0.79%)	(9.99)
Non controlling interest in all subsidiaries	(5.21%)	(621.61)	(7.88%)	(113.61)	(0.27%)	0.48	(8.96%)	(113.13)
<b>II. Associates (Investment as per equity method)</b>								
1. Wendt (India) Ltd	3.58%	426.53	2.99%	43.06	2.28%	(4.06)	3.09%	39.00
<b>III. Joint ventures (Investment as per equity method)</b>								
<b>Indian</b>								
1. Murugappa Morgan Thermal Ceramics Ltd	5.15%	614.53	6.99%	100.69	0.20%	(0.36)	7.95%	100.33
2. Ciria India Ltd.	0.55%	65.40	0.97%	13.96	0.00%	(0.00)	1.11%	13.96
<b>Inter-company Elimination &amp; Consolidation Adjustments</b>	(40.20%)	(4791.28)	(9.29%)	(133.78)	115.29%	(205.75)	(26.90%)	(339.53)
<b>Total</b>	<b>100.00%</b>	<b>11922.60</b>	<b>100.00%</b>	<b>1441.01</b>	<b>100.00%</b>	<b>(178.45)</b>	<b>100.00%</b>	<b>1262.56</b>

### 45. Events after the reporting period

No significant event is to be reported between the closing date and that of the meeting of Board of Directors.

### 46. Approval of financial statements

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors in their meeting held on May 9, 2017.

## AOC-1

(in Indian Rupees million, unless otherwise stated)

### Statement containing salient features of the Financial Statement of subsidiaries/associate companies/joint ventures.

Pursuant to first proviso to sub-section (3) of section 129 read with Companies (Accounts) Rules, 2014)

#### (a) Summary financial information of Subsidiary Companies

Reporting currency	RUB		Rand		AUD		INR		USD	
Exchange rate	1.10	1.10	4.84	4.84	49.71	49.71	NA		67.95	67.95
Particulars	Volzhsky Abrasive Works		Foskor Zirconia Pty Ltd		CUMI Australia Pty. Ltd		Sterling Abrasives Limited		CUMI International Ltd	
Financial year ended	2016	2015	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016	2015
Date of becoming subsidiary	7 <sup>th</sup> September 2007		4 <sup>th</sup> August 2008		1 <sup>st</sup> September 2003		31 <sup>st</sup> March 2003		7 <sup>th</sup> June 2007	
1. Share capital	3.96	3.96	0.00	0.00	24.89	24.89	9.00	9.00	1748.86	1748.86
2. Reserves & Surplus	3158.16	2812.58	170.72	195.07	460.56	460.56	419.34	372.09	1254.15	1041.57
3. Total Liabilities <sup>(a)</sup>	413.59	347.44	527.22	647.30	211.22	200.88	227.12	256.00	996.90	995.61
4. Total Assets <sup>(b)</sup>	3575.71	3163.98	697.94	842.37	696.67	686.33	655.46	637.09	3999.91	3786.04
5. Investments	0.11	0.08	-	-	-	-	-	-	3778.94	3484.91
6. Turnover	5391.83	5131.10	950.58	997.59	824.69	827.29	724.42	683.35	346.80	219.21
7. Profit before Tax	874.09	891.80	(19.26)	91.49	141.10	127.03	101.20	79.03	229.92	(989.32)
8. Provision for Taxation	164.73	208.28	4.76	31.37	42.33	37.10	35.13	27.26	17.34	10.89
9. Profit after Tax	709.36	683.52	(24.02)	60.12	98.77	89.93	66.07	51.77	212.58	(1000.21)
10. Proposed dividend <sup>(c)</sup>	356.47	354.01	-	-	98.77	89.93	27.08	27.08	-	-
11. % of Shareholding	98.07	98.07	51.00	51.00	51.22	51.22	60.00	60.00	100.00	100.00

Reporting currency	RMB		RAND		INR		INR		USD	
Exchange Rate	9.79	9.79	4.84	4.84	NA		NA		64.84	64.84
Particulars	CUMI Abrasives & Ceramics Co Ltd		Thukela Refractories Isithebe Pty. Ltd.		Southern Energy Development Corporation Limited		Net Access India Limited		CUMI Middle East FZE.	
Financial year ended	2016	2015	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16
Date of becoming subsidiary	31 <sup>st</sup> December 2009		1 <sup>st</sup> August 2012		31 <sup>st</sup> March 2003		1 <sup>st</sup> December 2001		11 <sup>th</sup> December 2005	
1. Share capital	794.45	794.45	0.01	0.01	4.60	4.60	50.00	16.00	1.77	1.77
2. Reserves & Surplus	(910.50)	(806.52)	0.14	(7.84)	919.58	616.18	54.60	64.90	16.72	12.08
3. Total Liabilities <sup>a</sup>	326.58	622.65	0.93	13.32	9.45	10.84	81.48	58.19	36.51	41.45
4. Total Assets <sup>b</sup>	210.53	610.58	1.08	5.49	933.63	631.62	186.08	139.09	55.00	55.30
5. Investments	-	-	-	-	758.84	432.34	2.31	14.92	-	-
6. Turnover	303.23	302.92	2.83	32.50	271.07	225.26	396.71	296.83	151.29	126.30
7. Profit before Tax	(103.98)	(84.37)	(2.04)	(69.59)	89.96	30.28	35.40	25.09	4.65	(10.19)
8. Provision for Taxation	-	0.01	-	-	28.37	7.02	11.27	8.44	-	-
9. Profit after Tax	(103.98)	(84.38)	(2.04)	(69.59)	61.59	23.26	24.13	16.65	4.65	(10.19)
10. Proposed dividend <sup>c</sup>	-	-	-	-	55.37	-	34.00	-	4.86	-
11. % of Shareholding	100.00	100.00	100.00	100.00	84.76	84.76	100.00	100.00	100.00	100.00

## AOC-1

(in Indian Rupees million, unless otherwise stated)

Reporting currency	USD		CZK	
Exchange Rate	64.84	64.84	2.64	2.64
Particulars	CUMI America Inc		CUMI Europe s.r.o	
Financial year ended	2016-17	2015-16	2016	2015
Date of becoming subsidiary	4 <sup>th</sup> June 1999		9 <sup>th</sup> December 2014	
1. Share capital	314.47	119.95	72.86	72.86
2. Reserves & Surplus	(236.26)	(141.24)	(11.84)	(10.84)
3. Total Liabilities <sup>a</sup>	366.40	488.33	6.43	7.21
4. Total Assets <sup>b</sup>	444.61	467.04	67.45	69.23
5. Investments	-	-	-	-
6. Turnover	387.35	330.02	32.62	14.74
7. Profit before Tax	(95.02)	(68.01)	(1.00)	(10.84)
8. Provision for Taxation	-	(15.32)	-	-
9. Profit after Tax	(95.02)	(52.69)	(1.00)	(10.84)
10. Proposed dividend <sup>c</sup>	-	-	-	-
11. % of Shareholding	100.00	100.00	100.00	100.00

- Names of subsidiaries which are yet to commence operations - Nil
- Names of subsidiaries which have been liquidated or sold during the year - Nil

### Notes:

- Total Liabilities include: Current Liabilities, Non-Current Liabilities
- Total Assets include: Current Assets, Non-Current Assets
- Including interim dividend and dividend distribution tax as applicable. For Volzhsky Abrasive Works, Russia, dividend for 2016 is due for consideration by the shareholders in June 2017.
- The above information has been furnished in accordance with Section 129(3) of the Companies Act 2013. The above statement is based on the financial statements of the respective subsidiary company which have been prepared in accordance with regulatory requirements as applicable in the country of incorporation. In case of foreign subsidiaries, the figures given in foreign currency have been translated into Indian Rupees based on the exchange rate as on 31.3.2017/31.12.2016, as applicable.
- The conversion rates have been maintained same for the previous financial year for comparative purposes.
- Investments in VAW, Foskor, CACCL China, Thukela Refractories, CUMI Middle East, CUMI America, CUMI Europe are held by CUMI International Limited.

### (b) Associates and Joint Ventures

#### Statement pursuant to Section 129(3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

S. no	Name of Associates/ Joint Ventures	Wendt (India) Limited	Ciria India Limited	Murugappa Morgan Thermal Ceramics Limited
1	Latest audited Balance Sheet Date	31.03.2017	31.03.2017	31.03.2017
2	Date on which the Associate or Joint Venture was associated or acquired	16 <sup>th</sup> October 1990	26 <sup>th</sup> July 2000	13 <sup>th</sup> November 1995
3	Shares of Associate/Joint Ventures held by the Company on the year end			
	No. of shares	797,352	59,998	1,430,793
	Amount of Investment in Associates/ Joint Venture ₹ In million	10.36	1.68	44.04
	Extent of Holding %	39.87	30.00	49.00
4	Description of how there is significant influence	Through shareholding	Through shareholding	Through shareholding
5	Reason why the associate/joint venture is not consolidated	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials
6	Networth attributable to Shareholding as per latest audited Balance Sheet	449.88	83.67	530.64
7	Profit / Loss for the year	120.51	121.14	217.33
	Considered in Consolidation	48.05	36.34	106.49
	Not Considered in Consolidation	72.46	84.81	110.85

On behalf of the Board

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

Chennai  
May 9, 2017

## Independent Auditor's Report

To

### **The Members of Carborundum Universal Limited Report on the Standalone Ind AS Financial Statements**

We have audited the accompanying standalone Ind AS financial statements of Carborundum Universal Limited ("the Company"), which comprise the Balance Sheet as at 31<sup>st</sup> March, 2017, the Statement of Profit and Loss (including Other Comprehensive Income) and the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and a summary of the significant accounting policies and other explanatory information.

### **Management's Responsibility for the Standalone Ind AS Financial Statements**

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these standalone Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) prescribed under section 133 of the Act.

This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these standalone Ind AS financial statements based on our audit.

In conducting our audit, we have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit of the standalone Ind AS financial statements in accordance with the Standards on Auditing

specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the standalone Ind AS financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the standalone Ind AS financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the standalone Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the standalone Ind AS financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the standalone Ind AS financial statements.

We believe that the audit evidence obtained by us is sufficient and appropriate to provide a basis for our audit opinion on the standalone Ind AS financial statements.

### **Opinion**

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at 31<sup>st</sup> March, 2017, its profit, total comprehensive income, its cash flows and the changes in equity for the year ended on that date.

### **Report on Other Legal and Regulatory Requirements**

1. As required by Section 143(3) of the Act, based on our audit, referred to in the Other Matters paragraph above we report, to the extent applicable that:
  - a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
  - b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

## Independent Auditor's Report

- c) The Balance Sheet, the Statement of Profit and Loss including Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the relevant books of account.
- d) In our opinion, the aforesaid standalone Ind AS financial statements comply with the Indian Accounting Standards prescribed under section 133 of the Act.
- e) On the basis of the written representations received from the directors as on 31<sup>st</sup> March, 2017 taken on record by the Board of Directors, none of the directors is disqualified as on 31<sup>st</sup> March, 2017 from being appointed as a director in terms of Section 164(2) of the Act.
- f) With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in "Annexure A". Our report expresses an unmodified opinion on the adequacy and operating effectiveness of the Company's internal financial controls over financial reporting.
- g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended, in our opinion and to the best of our information and according to the explanations given to us:
- i. The Company has disclosed the impact of pending litigations on its financial position in its standalone Ind AS financial statements (Refer Note 31 to the financial statements);
  - ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses.
- iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company.
- iv. The Company has provided requisite disclosures in the standalone Ind AS financial statements as regards its holding and dealings in Specified Bank Notes as defined in the Notification S.O. 3407(E) dated the 8th November, 2016 of the Ministry of Finance, during the period from 8th November 2016 to 30th December 2016. Based on audit procedures performed and the representations provided to us by the management, we report that the disclosures are in accordance with the books of account maintained by the Company. (Refer Note 47 to the financial statements).
2. As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government in terms of Section 143(11) of the Act, we give in "Annexure B" a statement on the matters specified in paragraphs 3 and 4 of the Order.

For **Deloitte Haskins & Sells**  
*Chartered Accountants*  
(Firm's Registration No.008072S)

**Geetha Suryanarayanan**

Chennai  
May 9, 2017

*Partner*  
(Membership No. 29519)

## Annexure “A” to the Independent Auditor’s Report

(Referred to in paragraph (f) under ‘Report on Other Legal and Regulatory Requirements’ of our report of even date)

Report on the Internal Financial Controls Over Financial Reporting under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 (“the Act”)

We have audited the internal financial controls over financial reporting of Carborundum Universal Limited (“the Company”) as of March 31, 2017 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

### Management’s Responsibility for Internal Financial Controls

The Company’s management is responsible for establishing and maintaining internal financial controls based on “the internal control over financial reporting criteria established by the Company, considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India”. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company’s policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

### Auditor’s Responsibility

Our responsibility is to express an opinion on the Company’s internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls over Financial Reporting (the “Guidance Note”) issued by the Institute of Chartered Accountants of India and the Standards on Auditing prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness.

Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing whether a risk of material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor’s judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company’s internal financial controls system over financial reporting.

### Meaning of Internal Financial Controls over Financial Reporting

A company’s internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

### Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Annexure “A” to the Independent Auditor’s Report

### Opinion

In our opinion, to the best of our information and according to the explanations given to us, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2017, based on “the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on

Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India”.

For **Deloitte Haskins & Sells**  
Chartered Accountants  
(Firm’s Registration No.: 008072S)

**Geetha Suryanarayanan**  
Partner

Chennai, May 9, 2017

(Membership No.: 29519)

## Annexure “B” to the Independent Auditors’ Report

(Referred to in paragraph 2 under ‘Report on Other Legal and Regulatory Requirements’ section of our report of even date)

(i) In respect of Fixed assets:

- (a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.
- (b) The fixed assets were physically verified during the year by the Management in accordance with a regular programme of verification which, in our opinion, provides for physical verification of all the fixed assets at reasonable intervals. According to the information and explanation given to us, no material discrepancies were noticed on such verification.
- (c) According to the information and explanations given to us and based on the examination of the registered title deeds provided to us, we report that, the title deeds of all the immovable properties of land and buildings are held in the name of the Company as at the Balance Sheet date; Immovable properties of land and buildings whose title deeds have been pledged as security for loans, guarantees etc., are held in the name of the Company as per the Memorandum of Entry executed by the Company and confirmed by the banker as on the balance sheet date. In respect of immovable properties of land and buildings that have been taken on lease, the lease agreements are in the name of the Company, where the Company is the lessee in the agreement.

(ii) In respect of inventories, physical verification was carried out by the management at reasonable intervals and no material discrepancies were noticed on such verification.

(iii) The Company has not granted any loans, secured or unsecured, to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013.

(iv) In our opinion and according to the information and explanations given to us, the Company has complied with the provisions of Sections 185 and 186 of the Companies Act, 2013 in respect of making investments and providing guarantees.

(v) According to the information and explanations given to us, the Company has not accepted any deposits during the year. There were no unclaimed deposits at any time during the year.

(vi) We have broadly reviewed the cost records maintained by the Company pursuant to the Companies (Cost Records and Audit) Rules, 2014, as amended prescribed by the Central Government under sub-section (1) of Section 148 of the Companies Act, 2013, and are of the opinion that, prima facie, the prescribed cost records have been made and maintained. We have, however, not made a detailed examination of the cost records with a view to determine whether they are accurate or complete.

(vii) According to the information and explanations given to us in respect of statutory dues:

(a) The Company has been generally regular in depositing undisputed statutory dues including Provident Fund, Employees’ State Insurance, Income-tax, Sales Tax, Service Tax, Customs Duty, Excise Duty, Value Added Tax, cess and other material statutory dues applicable to it with the appropriate authorities.

(b) There were no undisputed amounts payable by the Company, in respect of Provident Fund, Employees’ State Insurance, Income-tax, Sales Tax, Service Tax, Customs Duty, Excise Duty, Value Added Tax, cess and other material statutory dues in arrears as at March 31, 2017 for a period of more than six months from the date they became payable.

## Annexure “B” to the Independent Auditors’ Report

(c) Details of Sales Tax, Service Tax and Excise Duty which have not been deposited as on March 31, 2017 on account of disputes are given below:

Name of Statute	Nature of dues	Forum where dispute is pending	Period to which the amount relates	Amount involved (₹ in Mio)	Amount unpaid (₹ in Mio)
Central Sales Tax Act, 1956, Local Sales Tax Laws of various States	Sales Tax	Commissioner of Sales Tax (Appeals)	2000 - 2001 2004 - 2008 2011 - 2015	26.68	17.75
		Sales Tax Appellate Tribunal	1995 - 1997 2000 - 2003	4.92	1.36
		Madras High Court	1989 - 1990	0.47	0.47
Central Excise Act, 1944	Excise Duty	Commissioner of Central Excise (Appeals)	1999 - 2000 2009 - 2010 2011 - 2012	1.09	0.58
		Kerala High Court	1986 -1987	0.95	0.95
		The Customs, Excise & Service Tax Appellate Tribunal	1991 - 1992 1993 - 1994 1995 - 1996 1998 - 2003	2.80	1.66
		Commissioner of Central Excise (Appeals)	2010 - 2011	0.03	0.01
		The Customs, Excise & Service Tax Appellate Tribunal	2004 - 2008	2.86	2.31

(viii) In our opinion and according to the information and explanations given to us, the Company has not defaulted in the repayment of loans or borrowings to financial institutions and banks. The company has not issued any debentures.

(ix) The Company has not raised moneys by way of initial public offer or further public offer (including debt instruments) or term loans and hence reporting under clause (ix) of the CARO 2016 is not applicable.

(x) To the best of our knowledge and according to the information and explanations given to us, no fraud by the Company and no material fraud on the Company by its officers or employees has been noticed or reported during the year.

(xi) In our opinion and according to the information and explanations given to us, the Company has paid / provided managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Companies Act, 2013.

(xii) The Company is not a Nidhi Company and hence reporting under clause (xii) of the CARO 2016 Order is not applicable.

(xiii) In our opinion and according to the information and explanations given to us the Company is in compliance

with Section 177 and 188 of the Companies Act, 2013, where applicable, for all transactions with the related parties and the details of related party transactions have been disclosed in the financial statements etc. as required by the applicable accounting standards.

(xiv) During the year the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures and hence reporting under clause (xiv) of CARO 2016 is not applicable to the Company.

(xv) In our opinion and according to the information and explanations given to us, during the year the Company has not entered into any non-cash transactions with its directors or persons connected with him and hence provisions of Section 192 of the Companies Act, 2013 are not applicable.

(xvi) The Company is not required to be registered under Section 45-I of the Reserve Bank of India Act, 1934.

For **Deloitte Haskins & Sells**  
Chartered Accountants  
(Firm’s Registration No. 008072S)

**Geetha Suryanarayanan**  
Partner  
(Membership No. 29519)

Chennai,  
May 9, 2017

# Balance Sheet

(in Indian Rupees million, unless otherwise stated)

Particulars	Notes	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
<b>ASSETS</b>				
<b>Non-Current assets</b>				
(a) Property, plant and equipment	4A	4004.01	3654.44	3879.43
(b) Capital work-in-progress	4B	514.09	678.03	169.85
(c) Intangible assets	5A	76.90	98.96	99.77
(d) Intangible assets under development	5B	0.33	3.57	6.54
(e) Financial assets				
(i) Investments				
(a) Investment in associate	6A	10.36	10.36	10.36
(b) Investment in joint ventures	6B	45.72	45.72	45.72
(c) Investment in subsidiaries	6C	2352.35	2318.35	2112.36
(d) Other investments	6D	132.73	186.14	150.94
(ii) Other financial assets	7A	99.87	91.95	84.82
(f) Other non-current assets	8A	229.13	290.44	180.09
<b>Total Non-Current assets</b>		<b>7465.49</b>	<b>7377.96</b>	<b>6739.88</b>
<b>Current assets</b>				
(a) Inventories	9	2267.72	2252.37	2084.94
(b) Financial assets				
(i) Trade receivables	10	2562.84	2532.14	2231.23
(ii) Cash and cash equivalents	11A	67.05	84.43	55.70
(iii) Bank balances other than (ii) above	11B	12.21	14.07	11.16
(iv) Other financial assets	7B	43.60	44.30	57.88
(c) Other Current assets	8B	554.25	398.63	325.40
<b>Total Current assets</b>		<b>5507.67</b>	<b>5325.94</b>	<b>4766.31</b>
<b>Total Assets</b>		<b>12973.16</b>	<b>12703.90</b>	<b>11506.19</b>
<b>EQUITY AND LIABILITIES</b>				
<b>EQUITY</b>				
(a) Equity share capital	12	188.66	188.38	188.18
(b) Other equity	13	10361.64	9395.92	8569.82
<b>Total Equity</b>		<b>10550.30</b>	<b>9584.30</b>	<b>8758.00</b>
<b>LIABILITIES</b>				
Non-Current liabilities				
(a) Financial liabilities				
Borrowings	14	17.94	259.46	512.21
(b) Provisions	15A	43.84	43.58	44.87
(c) Deferred tax liabilities (net)	16	340.65	378.82	412.54
<b>Total Non-Current liabilities</b>		<b>402.43</b>	<b>681.86</b>	<b>969.62</b>
<b>Current liabilities</b>				
(a) Financial liabilities				
(i) Borrowings	17	-	325.66	316.70
(ii) Trade payables	18	1339.36	1033.03	933.82
(iii) Other financial liabilities	19	525.04	953.67	376.26
(b) Provisions	15B	39.46	24.90	26.22
(c) Other Current liabilities	20	116.57	100.48	125.57
<b>Total Current liabilities</b>		<b>2020.43</b>	<b>2437.74</b>	<b>1778.57</b>
<b>Total Liabilities</b>		<b>2422.86</b>	<b>3119.60</b>	<b>2748.19</b>
<b>Total Equity and Liabilities</b>		<b>12973.16</b>	<b>12703.90</b>	<b>11506.19</b>

See accompanying notes forming part of the Financial Statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**  
Chartered Accountants

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Geetha Suryanarayanan**  
Partner  
Chennai  
May 9, 2017

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

## Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

S. No.	Particulars	Note	For the year	
			2016-17	2015-16
I	Revenue from operations	21	15197.77	13941.67
II	Other Income	22	343.25	399.45
<b>III</b>	<b>Total Income (I+II)</b>		<b>15541.02</b>	<b>14341.12</b>
<b>IV</b>	<b>Expenses</b>			
	Cost of material consumed		5120.71	4886.08
	Purchase of Stock-in-Trade		818.13	761.13
	Changes in inventories of finished goods, stock-in-trade and work-in-progress	23	11.96	(69.64)
	Excise duty on sale of goods		1140.86	1023.48
	Employee benefits expense	24	1532.71	1413.09
	Finance costs	25	87.60	89.04
	Depreciation and amortisation expense	26	669.36	620.73
	Other expenses	27	4452.61	3942.33
	<b>Total expenses (IV)</b>		<b>13833.94</b>	<b>12666.24</b>
<b>V</b>	<b>Profit before tax (III-IV)</b>		<b>1707.08</b>	<b>1674.88</b>
<b>VI</b>	<b>Tax expense</b>			
	(1) Current tax	28A	527.50	544.20
	(2) Deferred tax	16	(38.17)	(33.69)
			<b>489.33</b>	<b>510.51</b>
<b>VII</b>	<b>Profit for the year (V - VI)</b>		<b>1217.75</b>	<b>1164.37</b>
<b>VIII</b>	<b>Other Comprehensive Income [OCI]</b>			
A	(i) Items that will not be reclassified to profit or loss			
	(a) Remeasurement of the defined benefit plans		(25.34)	(2.67)
	(b) Equity instruments through OCI		(54.16)	34.99
	(ii) Income tax relating to items that will not be reclassified to profit or loss	28B	-	-
			<b>(79.50)</b>	<b>32.32</b>
B	(i) Items that will be reclassified to profit or loss			
	Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge		-	(0.09)
	(ii) Income tax relating to items that will be reclassified to profit or loss	28B	-	0.03
			-	<b>(0.06)</b>
	<b>Total Other Comprehensive Income (VIII A + VIII B)</b>		<b>(79.50)</b>	<b>32.26</b>
<b>IX</b>	<b>Total Comprehensive Income for the year (VII + VIII)</b>		<b>1138.25</b>	<b>1196.63</b>
<b>X</b>	<b>Earnings per equity share (₹1 each) on Profit for the year (VII)</b>	29		
	- Basic		6.46	6.18
	- Diluted		6.44	6.17

See accompanying notes forming part of the Financial Statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner  
Chennai  
May 9, 2017

On behalf of the Board

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

## Statement of changes in equity

(in Indian Rupees million, unless otherwise stated)

### A. Equity share capital - Refer Note: 12

Balance as at April 01, 2015	188.18
Changes in equity share capital during the year	
Shares issued against ESOP scheme	0.20
<b>Balance as at March 31, 2016</b>	<b>188.38</b>
Changes in equity share capital during the year	
Shares issued against ESOP scheme	0.28
<b>Balance as at March 31, 2017</b>	<b>188.66</b>

### B. Statement of changes in other equity

Particulars	Reserves and Surplus - Refer Note: 13A						Items of Other Comprehensive Income - Refer Note: 13B			Total
	Profit on Forfeiture of Shares / Warrants	Capital redemption reserve	Securities premium	General Reserve	Share options outstanding account	Retained Earnings	Reserve for equity instruments	Effective portion of Cash flow hedges	Revaluation surplus	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
Balance at the beginning of the year - April 01, 2015	6.03	27.68	142.18	5175.43	10.48	3107.26	76.96	0.06	23.74	8569.82
Profit for the year						1164.37				1164.37
Other Comprehensive income for the year						(2.67)	34.99	(0.06)		32.26
<b>Total Comprehensive income for the year</b>	-	-	-	-	-	<b>1161.70</b>	<b>34.99</b>	<b>(0.06)</b>	-	<b>1196.63</b>
Share premium received on allotment of equity shares under ESOP			24.43							24.43
Recognition of share-based payments					1.29					1.29
Final dividend paid during the year						(94.12)				(94.12)
Interim dividend paid during the year						(282.56)				(282.56)
Dividend tax on Interim dividend paid during the year						(19.57)				(19.57)
Transfer to retained earnings				500.00		(500.00)				-
<b>Balance at the end of the year - March 31, 2016</b>	<b>6.03</b>	<b>27.68</b>	<b>166.61</b>	<b>5675.43</b>	<b>11.77</b>	<b>3372.71</b>	<b>111.95</b>	-	<b>23.74</b>	<b>9395.92</b>
Profit for the year						1217.75				1217.75
Other Comprehensive income for the year						(25.34)	(54.16)			(79.50)
<b>Total Comprehensive income for the year</b>	-	-	-	-	-	<b>1192.41</b>	<b>(54.16)</b>	-	-	<b>1138.25</b>
Share premium received on allotment of equity shares under ESOP			27.54							27.54
Recognition of share-based payments					4.31					4.31
Interim dividend paid during the year						(188.63)				(188.63)
Dividend tax on Interim dividend paid during the year						(15.75)				(15.75)
Transfer to retained earnings				500.00		(500.00)				-
<b>Balance at the end of the year - March 31, 2017</b>	<b>6.03</b>	<b>27.68</b>	<b>194.15</b>	<b>6175.43</b>	<b>16.08</b>	<b>3860.74</b>	<b>57.79</b>	-	<b>23.74</b>	<b>10361.64</b>

See accompanying notes forming part of the Financial Statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 9, 2017

On behalf of the Board

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

## Cash flow Statement

(in Indian Rupees million, unless otherwise stated)

Particulars	2016-17	2015-16		
<b>A. Cash flow from operating activities</b>				
Profit before tax	1707.08	1674.88		
<b>Adjustment for:</b>				
Depreciation and amortisation expense	669.36	620.73		
Fair valuation of investments	(0.75)	(0.21)		
Finance costs	87.60	89.04		
Interest income	(5.40)	(4.40)		
Dividend income	(321.25)	(345.22)		
Allowance for doubtful receivable and advances	18.22	19.49		
Reversal of allowance for doubtful receivables and advances	(9.65)	(10.25)		
Provision for expenses no longer required written back	(3.73)	(22.34)		
Loss on sale of assets (net)	3.12	8.78		
Unrealised exchange gain/(loss) - net	9.93	447.45	38.71	394.33
<b>Operating profit before working capital changes</b>	<b>2154.53</b>	<b>2069.21</b>		
<b>Movement in working capital</b>				
(Increase)/decrease in Trade and other receivables	(52.47)	(365.82)		
(Increase)/decrease in Inventories	(15.35)	(167.43)		
(Increase)/decrease in Other financial assets	(7.21)	6.46		
(Increase)/decrease in Other assets	(165.85)	(86.95)		
Increase/(decrease) in Trade payables	313.32	138.51		
Increase/(decrease) in Provision & other current liabilities	30.90	(27.70)		
Increase/(decrease) in Other financial liabilities	25.83	129.17	66.73	(436.20)
<b>Cash generated from Operations</b>	<b>2283.70</b>	<b>1633.01</b>		
Income tax paid	(515.00)	(514.00)		
<b>Net cash generated by Operating activities</b> [A]	<b>1768.70</b>	<b>1119.01</b>		
<b>B. Cash flow from Investing activities</b>				
Payments to acquire property, plant and equipment	(742.94)	(999.80)		
Payments for Intangible assets	(8.70)	(30.91)		
Proceeds from sale of property, plant and equipment	2.05	2.37		
Investment made in subsidiaries	(34.00)	(205.99)		
Interest income received	5.39	4.40		
Dividend income received	321.25	345.22		
<b>Net cash (used in) Investing activities</b> [B]	<b>(456.95)</b>	<b>(884.71)</b>		
<b>C. Cash flow from Financing activities</b>				
Proceeds from issue of equity shares	27.82	24.63		
(Repayment)/proceeds from long term borrowings - net	(739.32)	246.11		
(Repayment) of Short term borrowings - net	(325.65)	8.96		
Finance costs paid	(87.60)	(89.03)		
Dividends paid	(188.63)	(376.68)		
Tax on Dividend	(15.75)	(19.56)		
<b>Net cash used in Financing activities</b> [C]	<b>(1329.13)</b>	<b>(205.57)</b>		
<b>Net increase/(decrease) in cash and cash equivalents</b> [A]+[B]+[C]	<b>(17.38)</b>	<b>28.73</b>		
<b>Cash and Cash equivalents as per Balance sheet - Refer Note: 11A</b>				
<b>Add: Cash and Cash equivalents at the beginning of the year</b>	<b>84.43</b>	<b>55.70</b>		
<b>Cash and Cash equivalents at the end of the year</b>	<b>67.05</b>	<b>84.43</b>		

See accompanying notes forming part of the Financial Statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**  
Chartered Accountants

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Geetha Suryanarayanan**  
Partner  
Chennai  
May 9, 2017

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017

Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Standalone Financial Statements

Ind AS No.	Description	Accounting policy No.	Note No.
2	Inventories	3.17	9
7	Statement of Cash flows	3.16	11
10	Event after the reporting period		49, 50
12	Income tax	3.10	28, 16
16	Property, plant and equipment	3.11	4, 26
17	Leases	3.24	4, 44
18	Revenue	3.4	21,38
19	Employee benefits	3.8	24, 34
24	Related party disclosures		36
28	Investments in associates and joint ventures		6A, 6B
33	Earnings per share	3.25	29
36	Impairment of assets	3.14	4, 5
37	Provisions, Contingent liabilities and assets	3.18, 3.19	15, 31
38	Intangible assets	3.12	5, 26
101	First time adoption of Indian accounting standards	3.1, 3.13	48
102	Share based payments	3.9	24, 37
103	Business combinations	3.12.3	
105	Non current held for sale and discontinued operations	3.3	
107	Financial instruments - Disclosures	3.20,3.27, 3.28	10, 14, 18, 22, 35
108	Operating segments	3.23	30
113	Fair value measurements		35

# Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017

## 1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The addresses of its registered office and place of business are disclosed in the annual report.

CUMI manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals. (Refer Note:30)

## 2. Application of new and revised Ind AS

The financial statements have been prepared in accordance with Ind AS notified under the Companies (Indian Accounting Standards) Rules 2015.

## 3. Significant accounting policies

### 3.1. Statement of Compliances

Upto the year ended March 31, 2016, the Company has prepared its financial statements in accordance with the requirements of previous GAAP, which includes Standards notified under the Companies (Accounting Standards) Rules, 2006. These are the first Ind AS financial statements. The date of transition to Ind AS is April 1, 2015. Refer Note: 48 for the details of first-time adoption exemptions availed by the Company.

### 3.2.1 Basis of preparation and presentation

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below:

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

### 3.2.2 Use of estimates and judgements

In preparing these financial statements, management has made judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

**3.2.2.1 Estimates** and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017

**3.2.2.2 Judgements** are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

**3.2.2.3 Assumptions** and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

S.No	Particulars	Notes
I	Estimation of useful life of tangible and intangible asset	3.11 & 3.12
II	Estimation of fair value of unlisted securities	6D
III	Impairment of Trade receivables: Expected credit loss	10
IV	Recognition and measurement of provisions and contingencies; key assumptions about the likelihood and magnitude of an outflow of resources.	15 & 31
V	Measurement of defined benefit obligation: Key actuarial assumptions.	34
VI	Lease: Whether an arrangement contains a lease	44

### 3.3 Non-current assets held for sale

Non-current assets and disposals groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

### 3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

Based on the Educational Material on Ind AS 18 issued by the ICAI, the Company has assumed that recovery of excise duty

flows to the Company on its own account. This is for the reason that it is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to the Company on its own account, revenue is recorded inclusive of excise duty.

However, sales tax/ value added tax (VAT) is not received by the Company on its own account. Rather, it is tax collected on value added to the commodity by the seller on behalf of the government. Accordingly, it is excluded from revenue.

The specific recognition criteria described below must also be met before revenue is recognised.

#### 3.4.1 Sale of goods

Revenue from the sale of goods is recognised when the goods are delivered and titles have passed, which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales, at which time all the following conditions are satisfied:

- the Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the Company; and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

#### 3.4.2 Rendering of services

The revenue from divisible contracts are recognised on the percentage completion method in respect of service contracts and in respect of supplies on dispatch. In respect of indivisible contracts, the revenues are recognised on a percentage completion method, synchronized to the billing schedules agreed by the customers.

#### 3.4.3 Other income

**Royalty income** is recognised on an accrual basis in accordance with the substance of the relevant agreement.

**Dividend income** from investments is recognised when the shareholder's right to receive payment has been established.

**Interest income** from a financial asset is recognised and accrued on time proportion basis.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

**Rental income** is recorded on accrual basis in accordance with the agreement.

### 3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the statement of profit and loss.

Foreign currency monetary items (other than derivative contracts) of the Company, outstanding at the Balance Sheet date are restated at the year-end rates. Non-monetary items of the Company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the Company are recognised as income or expense in the Statement of Profit and Loss.

Refer Notes: 3.27 and 3.28 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

### 3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets-Refer Note: 4 & 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

### 3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Company recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the Balance Sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future

related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

Export Benefits on account of entitlement to import goods free of duty under 'Exports Benefits Scheme' are accounted based on eligibility and when there is no uncertainty in receiving the same.

### 3.8 Employee benefits

#### 3.8.1. Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and losses, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the Balance Sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income;
- remeasurement

The Company presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and losses are accounted for as past service costs.

A liability for a termination benefit is recognised when the entity can no longer withdraw the offer of the termination benefit as per the relevant scheme.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

The employees and the Company make monthly fixed contributions to the Carborundum Universal Limited Employee's Provident Fund Trust, equal to a specified percentage of the covered employee's salary. The interest rate payable by the Trust to the beneficiaries is being notified by the Government every year. The Company obtains an independent actuarial valuation of the Interest Guarantees as at the Balance sheet date and provides for the shortfall, if any, in the present value of obligation of interest over the fair value of the surplus in the Fund.

### 3.8.2 Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

### 3.8.3 Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue.

## 3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 37.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the Company's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

## 3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

### 3.10.1 Current tax

The tax currently payable is based on taxable profits for the year. Taxable profit differ from 'profit before tax' as reported in the statement of profit and loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). The Company's current tax is calculated using tax rates that have been enacted by the end of the reporting period.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

### 3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

### 3.10.3 CENVAT / Service Tax / VAT

CENVAT/VAT credit on materials purchased / services availed for production / Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/utilising the credits. CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The CENVAT credits so taken are utilised for payment of excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised CENVAT/VAT credit is carried forward in the books.

### 3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the Balance Sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their useful lives, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Building on lease hold land are depreciated over the lease period.

Individual asset costing less than ₹5,000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss

arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

### 3.12 Intangible assets

#### 3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives.

The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

**3.12.2 Internally generated intangibles**, excluding eligible development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017

### 3.12.3. Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

### 3.12.4 Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from Derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

### 3.13 Deemed cost on transition to Ind AS

For transition to Ind AS, the Company has elected to continue with the carrying value of all of its Tangible and Intangible assets recognised as of April 01, 2015 (transition date) measured as per the previous GAAP and use that carrying value as its deemed cost as of transition date.

### 3.14 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Company reviews the carrying amount of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss(if any). When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

### 3.15 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

### 3.16 Cash flow statement

Cash flows are reported using the indirect method, whereby profit/(loss) before extraordinary items and tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Company are segregated based on the available information.

### 3.17 Inventories

Inventories are stated at the lower of cost and net-realizable value. Cost includes freight, taxes and duties net of CENVAT/VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts, cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realisable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

### 3.18 Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event,

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material)

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

### 3.19 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Company or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

### 3.20 Financial instruments

Financial assets and financial liabilities are recognised when the Company becomes a party to the contractual provision of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

### 3.21 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

#### 3.21.1 Classification of financial assets

Debt instrument that meet the following condition are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note 3.21.4

#### 3.21.2 Investment in equity instruments at FVTOCI

On initial recognition, the Company can make an irrevocable election (on an instrument- by instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term.
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The Company has equity instrument in two entities, which are not held for trading. The Company has elected the FVTOCI irrevocable option for both of these investments(Note: 6D). Fair value is determined in the manner described in Note: 35.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

Dividend on these investments are recognised in profit or loss when the Company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, the dividend does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss are included in 'Other income' line item.

### 3.21.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Note: 3.21.2 )

Debt instruments that do not meet the amortised cost criteria or FVTOCI Criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or losses on them on different bases. The Company has not designated any such debt instrument as at FVTPL.

Financial asset at FVTPL are measured at fair value at the end of each reporting period, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the Company's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the entity which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

### 3.21.4. Impairment of financial assets

The Company applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost, debt instruments at FVTOCI, lease receivable, trade receivable, other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the Company expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The Company estimates cash flows by considering all contractual terms of the financial instrument (for example, prepayments, extension, call and similar options) through the expected life of that financial instruments.

The Company measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition.

If the credit risk on financial instruments has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over the 12 months.

If the Company measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the Company again measures the loss allowance based on 12 month expected credit losses.

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the Company uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the Company compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 11 and Ind AS 18, the Company always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Company has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in other comprehensive income and is not reduced from the carrying amount in the Balance Sheet.

### 3.21.5 Derecognition of financial assets

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Company neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Company recognises its retained interest in the asset and an associated liability for the amount it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On Derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On Derecognition of a financial asset other than its entirety (eg., when the Company retains an option to repurchase part of a transferred asset), the Company allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

### 3.21.6 Foreign exchange gain and losses

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- for Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in other comprehensive income.
- For the purposes of recognising foreign exchange gain and losses, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in other comprehensive income.

## 3.22 Financial liabilities and equity instruments

### 3.22.1 Classification as debt or equity

Debt and equity instruments issued by a Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

### 3.22.2 Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Company is recognised at the proceeds received, net of direct issue costs.

### 3.22.3 Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Company, and commitments issued by the Company to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below.

### 3.22.3.1 Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term ;or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a group of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates

any interest paid on the financial liability and is included in the 'Other income' line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or losses on financial guarantee contract and loan commitments issued by the Company that are designated by the Company as at fair value through profit or loss are recognised in profit or loss.

Fair value is determined in the manner described in Note: 35.

### 3.22.3.2 Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. Interest expenses that is not capitalised as part of cost of an asset is included in the 'Finance cost' line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

### 3.22.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contracts issued by a Company are initially

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

measured at their fair value and, if not designated as at FVTPL, are subsequently measured at the higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and
- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 18.

### 3.22.3.4 Foreign exchange gain and losses

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and losses are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or losses and is recognised in profit or loss.

### 3.22.3.5 Derecognition of financial liabilities

The Company derecognises financial liabilities when, and only when, the Company's obligations are discharged, cancelled or have expired. An exchange between lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### 3.23 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Company with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis have been included under "Un-allocated Corporate expenses".

### 3.24 Leases

Assets leased by the Company in its capacity as a lessee, where substantially all the risks and rewards of ownership vest in the Company are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

### 3.25 Earnings per share

Basic earnings per share is computed by dividing the profit/(loss) after tax (including the post tax effect of extraordinary items, if any) by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/(loss) after tax (including the post tax effect of extraordinary items, if any) as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

### 3.26 Research and development

All revenue expenditure related to research and development are charged to the respective heads on the Statement of profit and loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Company.

### 3.27 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair values at the end of each reporting

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2017

period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

### 3.28 Hedge accounting

The Company designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the entity documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

Note: 35 sets out details of the fair values of the derivatives instruments used for hedging purposes.

#### 3.28.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

#### 3.28.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the

recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or losses are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Company has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e., Reserve for time value of options and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e., not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition of a non-financial asset or non-financial liability. In other cases, the amount accumulated is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e. Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects other comprehensive income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Company makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

### 3.29 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/expected to be admitted and to the extent that

the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

### 3.30 Operating cycle

Based on the nature of the products/activities of the Company and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Company has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

## 4. Property, plant and equipment

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Carrying amounts</b>			
Freehold land	37.86	37.86	37.86
Buildings	1194.74	1100.10	1110.00
Plant and equipment	2703.58	2449.46	2667.37
Furniture and fittings	40.27	38.49	39.51
Vehicles	6.48	7.69	9.50
Vehicles under finance lease	21.08	20.84	15.19
<b>Total</b>	<b>4004.01</b>	<b>3654.44</b>	<b>3879.43</b>
<b>B. Capital work-in-progress</b>	<b>514.09</b>	<b>678.03</b>	<b>169.85</b>

Cost	Freehold land	Buildings (b)	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at April 01, 2015 (Deemed cost) (a)	37.86	1110.00	2667.37	39.51	9.50	15.19	3879.43
Additions - (c)		45.27	297.90	11.53	3.93	13.39	372.02
Disposals		(0.79)	(6.27)	(0.15)	(4.61)	(2.54)	(14.36)
<b>Balance at March 31, 2016</b>	<b>37.86</b>	<b>1154.48</b>	<b>2959.00</b>	<b>50.89</b>	<b>8.82</b>	<b>26.04</b>	<b>4237.09</b>
Additions - (c)		151.37	814.62	14.44	0.99	8.68	990.10
Disposals		(0.04)	(7.70)	(0.56)	(1.17)	(0.27)	(9.74)
<b>Balance at March 31, 2017</b>	<b>37.86</b>	<b>1305.81</b>	<b>3765.92</b>	<b>64.77</b>	<b>8.64</b>	<b>34.45</b>	<b>5217.45</b>

Accumulated depreciation and impairment	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
Balance at April 01, 2015	-	-	-	-	-	-	-
Depreciation expense	-	54.41	510.97	12.44	1.40	6.82	586.04
Eliminated on disposals	-	(0.03)	(1.43)	(0.04)	(0.27)	(1.62)	(3.39)
<b>Balance at March 31, 2016</b>	<b>-</b>	<b>54.38</b>	<b>509.54</b>	<b>12.40</b>	<b>1.13</b>	<b>5.20</b>	<b>582.65</b>
Depreciation expense		56.69	556.30	12.61	1.32	8.44	635.36
Eliminated on disposals		-	(3.50)	(0.51)	(0.29)	(0.27)	(4.57)
<b>Balance at March 31, 2017</b>	<b>-</b>	<b>111.07</b>	<b>1062.34</b>	<b>24.50</b>	<b>2.16</b>	<b>13.37</b>	<b>1213.44</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Carrying amounts	Freehold land	Buildings	Plant and equipment	Furniture and fittings	Vehicles	Vehicles under finance lease	Total
<b>Balance at April 01, 2015</b>	<b>37.86</b>	<b>1110.00</b>	<b>2667.37</b>	<b>39.51</b>	<b>9.50</b>	<b>15.19</b>	<b>3879.43</b>
Additions	-	45.27	297.90	11.53	3.93	13.39	372.02
Depreciation expense	-	(54.41)	(510.97)	(12.44)	(1.40)	(6.82)	(586.04)
Disposals (net)	-	(0.76)	(4.84)	(0.11)	(4.34)	(0.92)	(10.97)
<b>Balance at March 31, 2016</b>	<b>37.86</b>	<b>1100.10</b>	<b>2449.46</b>	<b>38.49</b>	<b>7.69</b>	<b>20.84</b>	<b>3654.44</b>
Additions	-	151.37	814.62	14.44	0.99	8.68	990.10
Depreciation expense	-	(56.69)	(556.30)	(12.61)	(1.32)	(8.44)	(635.36)
Disposals (net)	-	(0.04)	(4.20)	(0.05)	(0.88)	-	(5.17)
<b>Balance at March 31, 2017</b>	<b>37.86</b>	<b>1194.74</b>	<b>2703.58</b>	<b>40.27</b>	<b>6.48</b>	<b>21.08</b>	<b>4004.01</b>

Capital work in progress movement	Total
<b>Balance at April 01, 2015</b>	<b>169.85</b>
Addition during the year	880.20
Capitalised during the year	(372.02)
<b>Balance at March 31, 2016</b>	<b>678.03</b>
Addition during the year	826.16
Capitalised during the year	(990.10)
<b>Balance at March 31, 2017</b>	<b>514.09</b>

### (a) Adoption of transitional provisions

In accordance with Ind AS transitional provisions, the Company has opted to consider previous GAAP carrying value of property, plant and equipment as deemed cost as on the transition date i.e., April 01, 2015. The following table provides the value of gross block and the carrying value considered in previous GAAP as on April 01, 2015.

Particulars	As on April 01, 2015		
	Gross block Cost	Gross accumulated depreciation	Net block (carrying value)
Freehold land	37.86	-	37.86
Buildings	1570.05	460.05	1110.00
Plant and equipment	6378.69	3711.32	2667.37
Furniture and fittings	120.42	80.91	39.51
Vehicles	20.60	11.10	9.50
Vehicles under finance lease	31.49	16.30	15.19
<b>Total</b>	<b>8159.11</b>	<b>4279.68</b>	<b>3879.43</b>

(b) Includes ₹595.62 million (Previous years as at 31.03.2016: ₹558.11 million and as at 01.04.2015: ₹531.37 million) being cost of building on leasehold land.

(c) Includes Research & Development capital expenditure of ₹11.45 million (Previous year 15-16: ₹14.96 million) - Refer Note: 42 on Research & Development expenditure.

### (d) Assets pledged as security

Immovable properties of the Company carry pari-passu charge in favour of the consortium of bankers, as security for banking facilities availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

### (e) Capitalised borrowing cost

Borrowing costs capitalised on property, plant and equipment during the year 2016-17 - ₹Nil (Previous year 2015-16: ₹Nil).

### (f) Contractual obligations

Refer Note: 31B for disclosure of Contractual commitments for the acquisition of property, plant and equipment.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 5. Intangible assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Carrying amounts</b>			
Software	8.76	8.29	11.84
Technical know-how	68.14	90.67	87.93
<b>Total</b>	<b>76.90</b>	<b>98.96</b>	<b>99.77</b>
<b>B. Intangible assets under development</b>	<b>0.33</b>	<b>3.57</b>	<b>6.54</b>

Cost	Software	Technical know-how	Total
<b>Balance at April 01, 2015 - Deemed cost (a)</b>	<b>11.84</b>	<b>87.93</b>	<b>99.77</b>
Additions - (b)	3.84	30.04	33.88
<b>Balance at March 31, 2016</b>	<b>15.68</b>	<b>117.97</b>	<b>133.65</b>
Additions - (b)	5.77	6.17	11.94
<b>Balance at March 31, 2017</b>	<b>21.45</b>	<b>124.14</b>	<b>145.59</b>

Accumulated amortisation and impairment	Software	Technical know-how	Total
<b>Balance at April 01, 2015</b>	-	-	-
Amortisation expense	7.39	27.30	34.69
<b>Balance at March 31, 2016</b>	<b>7.39</b>	<b>27.30</b>	<b>34.69</b>
Amortisation expense	5.30	28.70	34.00
<b>Balance at March 31, 2017</b>	<b>12.69</b>	<b>56.00</b>	<b>68.69</b>

Carrying amounts	Software	Technical know-how	Total
<b>Balance at April 01, 2015</b>	<b>11.84</b>	<b>87.93</b>	<b>99.77</b>
Additions	3.84	30.04	33.88
Amortisation expense	(7.39)	(27.30)	(34.69)
<b>Balance at March 31, 2016</b>	<b>8.29</b>	<b>90.67</b>	<b>98.96</b>
Additions	5.77	6.17	11.94
Amortisation expense	(5.30)	(28.70)	(34.00)
<b>Balance at March 31, 2017</b>	<b>8.76</b>	<b>68.14</b>	<b>76.90</b>

#### (a) Adoption of transitional provisions

In accordance with Ind AS transitional provisions, the Company has opted to consider previous GAAP carrying value of intangible assets as deemed cost as on the transition date i.e., April 01, 2015. The following table provides the value of gross block and the carrying value considered in previous GAAP as on April 01, 2015.

Particulars	As at April 01, 2015		
	Gross block Cost	Gross accumulated amortisation	Net block (carrying value)
Trademark	1.61	1.61	-
Software	20.88	9.04	11.84
Technical know-how	173.54	85.61	87.93
<b>Total</b>	<b>196.03</b>	<b>96.26</b>	<b>99.77</b>

(b) Includes Research & Development capital expenditure of ₹2.29 million (Previous year 15-16: ₹1.08 million) - Refer Note: 42 on Research & Development expenditure.

# Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

## 6. Investments

Particulars	Quantity in numbers			Nominal value (g)	Notes	Value		
	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015			As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
<b>Non Current investments:</b>								
<b>(A) Investment in associate - Equity Shares (fully paid)</b>								
<b>Quoted (Trade): Instruments at cost</b>								
Wendt (India) Ltd.	797,352	797,352	797,352	10		10.36	10.36	10.36
					<b>6A</b>	<b>10.36</b>	<b>10.36</b>	<b>10.36</b>
<b>(B) Investments in joint ventures - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost</b>								
Murugappa Morgan Thermal Ceramics Ltd.	1,430,793	1,430,793	1,430,793	10		44.04	44.04	44.04
Ciria India Ltd.	59,998	59,998	59,998	10		1.68	1.68	1.68
					<b>6B</b>	<b>45.72</b>	<b>45.72</b>	<b>45.72</b>
<b>(C) Investments in subsidiaries - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost</b>								
CUMI International Ltd., Cyprus - (b)	25,737,407	25,737,407	24,456,573	USD 1		2195.80	2195.80	1989.81
Sterling Abrasives Ltd.	54,000	54,000	54,000	100		37.10	37.10	37.10
Southern Energy Development Corporation Ltd.	389,908	389,908	389,908	10		54.66	54.66	54.66
Net Access India Ltd. - (a)	5,000,000	1,600,000	1,600,000	10		50.00	16.00	16.00
CUMI Australia Pty Ltd., Australia	1,050	1,050	1,050	AUD 1		14.79	14.79	14.79
					<b>6C</b>	<b>2352.35</b>	<b>2318.35</b>	<b>2112.36</b>
<b>(D) Other Investments</b>								
<b>Instruments at Fair Value Through Other Comprehensive Income [FVTOCI]</b>								
<b>Investments in equity instruments - Equity Shares (fully paid)</b>								
<b>Quoted (Trade)</b>								
Coromandel Engineering Co. Ltd.	3,042,900	3,042,900	3,042,900	10		118.22	172.38	137.39
<b>Un Quoted (Non - Trade)</b>								
Murugappa Management Services Ltd.	44,704	44,704	44,704	100		11.30	11.30	11.30
					<b>6D(i)</b>	<b>129.52</b>	<b>183.68</b>	<b>148.69</b>
<b>Instruments at Fair Value Through Profit or Loss [FVTPL]</b>								
<b>Quoted (Non-Trade)</b>								
<b>Investments in equity instruments - Equity Shares (fully paid)</b>								
Grindwell Norton Ltd. - (c)	800	400	400	5		0.28	0.28	0.29
Orient Abrasives Ltd.	10,000	10,000	10,000	1		0.35	0.50	0.23
Orient Refractories Ltd.	10,000	10,000	10,000	1		1.29	0.76	0.86
EID Parry (India) Ltd.	1,000	1,000	1,000	1		0.28	0.22	0.18
Cholamandalam Investment and Finance Co Ltd	100	100	100	10		0.10	0.07	0.06
Tube Investments of India Ltd.	1,000	1,000	1,000	2		0.63	0.39	0.36
Coromandel International Ltd.	330	330	330	1		0.10	0.06	0.09
					<b>6D(ii)</b>	<b>3.03</b>	<b>2.28</b>	<b>2.07</b>
<b>Un Quoted (Non-Trade)</b>								
<b>Investments in equity instruments - Equity Shares (fully paid)</b>								
Chennai Willingdon Corporate Foundation(₹50 only) - (d)	5	5	5	10		0.00	0.00	0.00
John Oakey Mohan Ltd.	1,900	1,900	1,900	10		0.05	0.05	0.05
CUMI Employees Co-operative Society/Stores	-	-	-	-		0.03	0.03	0.03
Kerala Enviro Infrastructure Ltd.	10,000	10,000	10,000	10		0.10	0.10	0.10
<b>Other Investment</b>								
7 Years National Savings Certificate of ₹2000/- deposited with the Government	-	-	-	-		0.00	0.00	0.00
					<b>6D(iii)</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>
					<b>6D</b>	<b>132.73</b>	<b>186.14</b>	<b>150.94</b>
<b>Grand Total [ 6A ]+ [ 6B ]+ [ 6C ]+[ 6D ]</b>						<b>2541.16</b>	<b>2560.57</b>	<b>2319.38</b>

(a) During the year, the Company invested in 3,400,000 equity shares of ₹10 each at par in Net Access India Ltd.

(b) During the previous year 2015-16, the Company invested in 1,280,834 equity shares of USD 1 each at the premium of USD 1.5 per share in CUMI International Ltd.

(c) During the year, Grindwell Norton Ltd issued bonus shares in the ratio of 1:1.

(d) Shares allotted against corporate membership contribution.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

(e) Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Aggregate book value of quoted investments	131.61	185.02	149.82
Aggregate market value of quoted investments	1633.23	1562.05	1497.11
Aggregate carrying value of unquoted investments	2409.55	2375.55	2169.56
<b>(f) Category-wise other investments - as per Ind AS 109</b>	<b>As at</b>		
	<b>31.03.2017</b>	<b>31.03.2016</b>	<b>01.04.2015</b>
Mandatorily measured at FVTPL - 6D(ii)+6D(iii)	3.21	2.46	2.25
Financial assets designated at FVTOCI (equity instruments) - 6D(i)	129.52	183.68	148.69
Investments at cost (includes investment in associate, joint ventures and subsidiaries) - 6A+6B+6C	2408.43	2374.43	2168.44
	<b>2541.16</b>	<b>2560.57</b>	<b>2319.38</b>

(g) Nominal value per share is given in Indian rupees or in respective foreign currency where stated.

### 7. Other financial assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non-current</b>			
Security deposits	99.87	91.95	84.82
	<b>99.87</b>	<b>91.95</b>	<b>84.82</b>
<b>B. Current</b>			
Advances to employees	9.85	14.46	10.65
Other receivables:			
Considered good	33.75	29.84	47.23
Considered doubtful	0.92	26.30	26.22
Less: Allowance for doubtful receivables	(0.92)	(26.30)	(26.22)
	<b>43.60</b>	<b>44.30</b>	<b>57.88</b>

### 8. Other assets

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non-current</b>			
Capital advances	92.91	153.81	24.07
Prepayments	78.41	79.27	80.13
Deposits paid under protest relating to disputed Sales tax, Central excise and Service tax demands	19.49	14.45	14.77
Taxation (net of provisions)	38.32	42.91	61.12
	<b>229.13</b>	<b>290.44</b>	<b>180.09</b>
<b>B. Current</b>			
Prepayments	27.87	23.77	22.67
Recoverable from Electricity Board - Banked power	74.61	44.82	-
Trade advance to Suppliers	204.07	151.75	142.25
Balances with Statutory Authorities:			
CENVAT credit	88.86	71.47	45.06
Value Added Tax	14.70	13.40	14.10
Customs Duty	116.39	69.43	85.60
Service Tax credit	27.75	23.99	15.72
	<b>554.25</b>	<b>398.63</b>	<b>325.40</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 9. Inventories

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Raw materials	675.81	672.65	587.19
Raw materials in transit	68.94	73.45	74.45
Work-in-progress	601.45	631.70	503.75
Stock-in-trade	161.70	182.30	163.68
Finished goods	583.97	545.08	622.01
Stores and spares	175.85	147.19	133.86
	<b>2267.72</b>	<b>2252.37</b>	<b>2084.94</b>

- a The method of valuation of inventories are stated in Note: 3.17.
- b The cost of inventories recognised as an expense (consumption) during the year 2016-17 was ₹6581.26 million (previous year 2015-16: ₹6134.97 million) and such expense includes ₹7.22 million towards reversal of write-down of inventory to net realisable value (the corresponding amount for 2015-16, was an expense of ₹26.97 million). The write-down of inventory to net realisable value made in earlier years were reversed in current year as a result of increased realisations in certain markets/segments.
- c All the above inventories are expected to be recovered within twelve months.

### 10. Trade receivables (Unsecured)

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Current</b>			
Considered good	2562.84	2532.14	2231.23
Doubtful	50.35	72.36	65.02
Allowance for doubtful receivables (expected credit loss allowance)	(50.35)	(72.36)	(65.02)
	<b>2562.84</b>	<b>2532.14</b>	<b>2231.23</b>

- a Trade receivables are generally due between 30 to 60 days. The Company's term includes charging of interest for delayed payment beyond agreed credit days. However, the Company charges interest after considering the historical trend, business prospects, reason for delay, market conditions etc.
- b **Credit risk** is managed at the operational segmental level. The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The credit limit and the credit period are reviewed regularly at periodical intervals.
- c **Concentration risk** considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant as the customer base is large and diversified.
- d The Company has used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix which takes into account the historical credit loss experience adjusted for forward looking information.
- e Some trade receivable may be past due over 365 days without being impaired considering the certainty of realisation.
- f Movement in expected credit loss allowance:

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	72.36	65.02
Add: Allowance made during the year	17.69	19.31
Less: Reversal of allowance made during the year	(39.70)	(11.97)
<b>Balance at the end of the year</b>	<b>50.35</b>	<b>72.36</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 11A. Cash and cash equivalents

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Balances with banks	63.13	83.54	54.73
Deposit account	3.03	-	-
Cash on hand	0.89	0.89	0.97
	<b>67.05</b>	<b>84.43</b>	<b>55.70</b>

#### Non-cash transactions:

During the year, the Company has not entered into any non-cash transactions on investing and financing activities.

### 11B. Bank balances other than above

	As at		
	31.03.2017	31.03.2016	01.04.2015
Earmarked funds - Unclaimed dividend - Refer Note: 19	12.21	14.07	11.16

## 12. Equity Share Capital

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Authorised share capital:</b>			
387,250,000 (as at March 31, 2016: 387,250,000 & as at April 01, 2015: 387,250,000) equity shares of ₹1 each	387.25	387.25	387.25
<b>Issued, Subscribed and Paid-up</b>			
188,658,090 (as at March 31, 2016: 188,379,560 & as at April 01, 2015: 188,179,042) equity shares of ₹1 each fully paid	<b>188.66</b>	<b>188.38</b>	<b>188.18</b>

#### a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2017		As at 31.03.2016	
	No. of Shares	Value of Shares	No. of Shares	Value of Shares
Equity shares with voting rights				
At the beginning of the year	188,379,560	188.38	188,179,042	188.18
Add: Shares issued against ESOP scheme	278,530	0.28	200,518	0.20
At the end of the year	<b>188,658,090</b>	<b>188.66</b>	<b>188,379,560</b>	<b>188.38</b>

#### b) Terms / Rights attached to Equity Shares

The Company has only one class of Equity shares having a par value of ₹1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital will be in proportion to the number of equity shares held.

#### c) Dividend details

An interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 04, 2017 and the same has been paid (previous year an interim dividend of ₹1/- per share & ₹0.50 per share were declared at the meetings of the Board of Directors held on February 5, 2016 & March 11, 2016 respectively and paid).

Final dividend of ₹0.75 per share is proposed for the year ended March 31, 2017. The dividends proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### d) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of Shareholder	As at					
	31.03.2017		31.03.2016		01.04.2015	
	No. of Shares held	% of holding	No. of Shares held	% of holding	No. of Shares held	% of holding
Murugappa Holdings Limited	55,432,284	29.38%	55,432,284	29.43%	55,432,284	29.46%
Nalanda India Fund Limited	-	-	16,793,362	8.91%	16,793,362	8.92%
HDFC Trustee Company Ltd - a/c HDFC Mid-Cap Opportunities fund	9,991,550	5.30%	9,973,000	5.29%	9,068,000	4.82%

### e) Share options granted under the Company's Employee Share Option Plan

Share options granted under the Company's employee share option plan pending exercise by option holders carry no rights to dividends and no voting rights. Further details of the employee share option plan are provided in Note: 37.

## 13. Other equity

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Reserves and Surplus</b>			
a. Profit on Forfeiture of shares / warrants	6.03	6.03	6.03
b. Capital redemption reserve	27.68	27.68	27.68
c. Securities premium	194.15	166.61	142.18
d. General reserve	6175.43	5675.43	5175.43
e. Share options outstanding account	16.08	11.77	10.48
f. Retained earnings	3860.74	3372.71	3107.26
<b>B. Items of Other Comprehensive Income:</b>			
g. Reserve for equity instruments	57.79	111.95	76.96
h. Effective portion of Cash flow hedges	-	-	0.06
i. Revaluation Surplus	23.74	23.74	23.74
<b>Total Other Equity</b>	<b>10361.64</b>	<b>9395.92</b>	<b>8569.82</b>

### a. Profit on Forfeiture of shares/warrants

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	6.03	6.03
Movements	-	-
<b>Balance at end of the year</b>	<b>6.03</b>	<b>6.03</b>

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

### b. Capital redemption reserve

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	27.68	27.68
Movements	-	-
<b>Balance at end of the year</b>	<b>27.68</b>	<b>27.68</b>

During the year 2000-01, the Company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### c. Securities premium

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	166.61	142.18
Movements	27.54	24.43
<b>Balance at end of the year</b>	<b>194.15</b>	<b>166.61</b>

The Securities premium received during the year represents the premium received towards allotment of 278,530 shares. Cumulatively 1,950,090 equity shares were allotted during the period FY 2009-10 to FY 2016-17 under ESOP scheme 2007 (Refer Note: 37 towards details of the scheme).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission / discount expenses on issue of shares / debentures, premium payable on redemption of redeemable preference shares / debentures and buy back of its own shares / securities under Section 68 of the Companies Act.

### d. General reserve

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	5675.43	5175.43
Transfer from retained earnings	500.00	500.00
<b>Balance at end of the year</b>	<b>6175.43</b>	<b>5675.43</b>

The general reserve is a free reserve, retained from Company's profits and can be utilized upon fulfilling certain conditions in accordance with Companies Act.

### e. Share options outstanding account

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	11.77	10.48
Movements	4.31	1.29
<b>Balance at end of the year</b>	<b>16.08</b>	<b>11.77</b>

Under Ind AS 102, fair value of the options granted is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Stock options granted but not vested as on the transition date were valued for expired period, calculated from the grant date till date of transition, aggregating to ₹10.48 million and were credited to Share options outstanding account by debiting Retained earnings - Refer Note: 37. In respect of balance unexpired period from the transition date till expiry of the vesting period, the amount is charged to Profit and Loss and credited to Share option outstanding account.

### f. Retained earnings:

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	3372.71	3107.26
Add: Profits for the year	1217.75	1164.37
Add: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax	(25.34)	(2.67)
Less: Transfer to General reserve	(500.00)	(500.00)
Less: Final dividend paid during the year including dividend tax	-	(94.12)
Less: Interim dividend paid	(188.63)	(282.56)
Less: Dividend tax on interim dividend	(15.75)	(19.57)
<b>Balance at end of the year</b>	<b>3860.74</b>	<b>3372.71</b>

The amount that can be distributed by the Company as dividends to its equity shareholders is determined based on the financial position and dividend policy of the Company and in compliance with the requirements of the Companies Act, 2013. Thus, the amounts reported above are not distributable in its entirety.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### g. Reserve for equity instruments

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	111.95	76.96
Movements	(54.16)	34.99
<b>Balance at end of the year</b>	<b>57.79</b>	<b>111.95</b>

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through other comprehensive income (Refer Note: 6D(i)), which will be reclassified to retained earnings when those assets are disposed off.

### h. Effective portion of Cash flow hedges

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	-	0.06
Movements	-	(0.06)
<b>Balance at end of the year</b>	<b>-</b>	<b>-</b>

The hedging reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of designated portion of hedging instruments entered into for cash flow hedges. The reserve will be reclassified to profit or loss when the hedged transaction impacts the profit or loss, or included as a basis adjustment to the non-financial hedged item.

### i. Revaluation Surplus

Particulars	As at	
	31.03.2017	31.03.2016
Balance at the beginning of the year	23.74	23.74
Movements	-	-
<b>Balance at end of the year</b>	<b>23.74</b>	<b>23.74</b>

Land & Building added upto 31<sup>st</sup> August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion were recouped every year from this reserve upto March 31, 2015 under previous GAAP.

## 14. Non - Current borrowings

Particulars	Maturity date	Repayment terms	Interest rate	As at		
				31.03.2017	31.03.2016	01.04.2015
<b>Secured</b>						
Long term maturities of Finance lease obligation (consisting of multiple contracts with varied maturities) - Refer (a)	Ranging from 2015 to 2021	Monthly installments		25.98	23.79	19.18
<b>Unsecured - at amortised cost</b>						
Term loan - 1 from bank	Oct 2016	Bullet	9.8%	-	500.00	500.00
Term loan - 2 from bank - Refer (b)	July 2018	Bullet	8.9%	-	241.50	-
<b>Total</b>				<b>25.98</b>	<b>765.29</b>	<b>519.18</b>
Less: Current maturities of term loan (included in Note: 19)					500.00	
Less: Current maturities of finance lease obligation (included in Note: 19)				8.04	5.83	6.97
<b>Total Non - Current borrowings</b>				<b>17.94</b>	<b>259.46</b>	<b>512.21</b>

- (a) Secured by the assets (vehicles) leased under the finance lease arrangement. The obligation consists of fixed rate of debt with repayment periods of not exceeding 4 years (Refer Note: 44)
- (b) During the year 2016-17, Term loan -2 was repaid earlier to the agreed due date.
- (c) Loan covenants: All the stipulated covenants under the respective loan arrangement have been fully complied with.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 15. Provisions

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Non Current</b>			
Employee benefits - Compensated absences	43.84	43.58	44.87
<b>B. Current</b>			
Employee benefits - Compensated absences	39.46	24.90	26.22

The movement represents the provision created for the year arising out of the actuarial valuation after considering the actual settlements made during the year.

### 16. Deferred tax liabilities (net)

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Deferred tax liabilities (net)	340.65	378.82	412.54

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences.

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of: (a) deductible temporary differences; (b) the carry forward of unused tax losses; and (c) the carry forward of unused tax credits.

Particulars	2016-17			
	Balance as at 31.03.2016	Recognised in Profit & loss	Recognised in Other Comprehensive Income	Balance as at 31.03.2017
<b>Breakup of deferred tax liabilities (net):</b>				
Allowance for doubtful receivables and advances	(34.13)	16.39	-	(17.74)
Voluntary retirement scheme payments	(0.37)	(0.06)	-	(0.43)
Expenses allowed on payment basis	(39.90)	(4.93)	-	(44.83)
Principal portion of finance lease rentals	(1.02)	(0.67)	-	(1.69)
Accelerated depreciation for tax purposes	454.24	(48.90)	-	405.34
	<b>378.82</b>	<b>(38.17)</b>	<b>-</b>	<b>340.65</b>

Particulars	2015-16			
	Balance as at 01.04.2015	Recognised in Profit & loss	Recognised in Other Comprehensive Income	Balance as at 31.03.2016
<b>Breakup of deferred tax liabilities (net):</b>				
Allowance for doubtful receivables and advances	(31.00)	(3.13)	-	(34.13)
Voluntary retirement scheme payments	(0.41)	0.04	-	(0.37)
Expenses allowed on payment basis	(40.22)	0.32	-	(39.90)
Principal portion of finance lease rentals	(1.36)	0.34	-	(1.02)
Accelerated depreciation for tax purposes	485.50	(31.26)	-	454.24
Cash flow hedges	0.03	-	(0.03)	-
	<b>412.54</b>	<b>(33.69)</b>	<b>(0.03)</b>	<b>378.82</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 17. Current borrowings

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Unsecured - at amortised cost</b>			
Buyer's credit and other loans	-	136.13	119.90
<b>Secured - at amortised cost (a)</b>			
Cash credit (repayable on demand)	-	189.53	70.12
Packing credit facility	-	-	126.68
	-	<b>325.66</b>	<b>316.70</b>

- (a) Secured by a pari-passu first charge on the current assets of the Company - both present and future ; and a pari-passu second charge on immovable properties - both present and future.

### 18. Trade payables

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Total outstandings due to micro and small enterprises - Refer Note: 33	16.62	14.57	21.49
Other Trade payables:			
- Acceptances	-	-	35.52
- Other than Acceptances	1322.74	1018.46	876.81
	<b>1339.36</b>	<b>1033.03</b>	<b>933.82</b>

- a. Trade payables are non-interest bearing and are normally settled as per due dates generally ranging from 30 to 60 days.
- b. The Company has financial risk management policies in place to ensure that all payables are paid within the agreed credit terms.
- c. Dues to Micro and Small enterprises have been determined to the extent such parties have been identified on the basis of the information collected by the Management. This has been relied upon by the Auditors.

### 19. Other financial liabilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>Secured</b>			
Current maturities of Finance lease obligation (Refer Note: 14)	8.04	5.83	6.97
<b>Unsecured</b>			
Current maturities of Term loan (Refer Note: 14)	-	500.00	-
Unclaimed dividends (a)	12.21	14.07	11.16
Remuneration payable to Directors	20.01	18.60	15.06
Deposits	34.43	29.52	28.40
Payable relating to Capital expenditure	79.86	57.54	47.21
Other payables	370.49	328.11	267.46
	<b>525.04</b>	<b>953.67</b>	<b>376.26</b>

- (a) There is no amount which has fallen due as at Balance sheet date to be credited to Investor Education and Protection Fund. The unclaimed dividend portion are kept separately in earmarked bank account - Refer Note: 11B

### 20. Other current liabilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Advance from Customers	33.17	23.54	40.37
Statutory liabilities	83.40	76.94	85.20
	<b>116.57</b>	<b>100.48</b>	<b>125.57</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 21. Revenue from operations

Particulars	For the year	
	2016-17	2015-16
<b>a. Gross Sales / Income from Operations</b>		
Sale of products (including Excise duty of ₹1140.86 million for the year 2016-17 and ₹1023.48 million for the year ended 2015-16) - Refer Note: 30 "Segment Disclosure" for breakup of sales	14865.49	13678.11
Sale of services / Income from Contracts	103.15	80.73
	<b>14968.64</b>	<b>13758.84</b>
<b>b. Other operating income</b>		
Service income	65.33	61.44
Scrap Sales	66.39	67.24
Miscellaneous income		
- Export benefits	77.82	43.62
- Royalty income	3.74	3.33
- Others	15.85	7.20
	<b>229.13</b>	<b>182.83</b>
<b>Total Revenue from operations ( a + b )</b>	<b>15197.77</b>	<b>13941.67</b>

### 22. Other Income

Particulars	For the year	
	2016-17	2015-16
<b>(a) Dividend Income</b>		
Dividend Income from Non-Current Investments		
Dividend from Subsidiaries	111.26	280.56
Dividend from Joint ventures	172.39	43.62
Dividend from Associate	19.93	19.93
Dividend from Others	0.03	0.02
Dividend Income from Current Investments	17.64	1.09
	<b>321.25</b>	<b>345.22</b>
<b>(b) Interest Income earned on financial assets that are not designated as fair value through profit or loss [FVTPL]</b>		
from bank deposits (at amortised cost)	0.42	0.00
from other financial assets carried (at amortised cost)	4.98	4.40
	<b>5.40</b>	<b>4.40</b>
<b>(c) Net gain/(loss) arising on financial assets mandatorily measured at fair value through profit or loss [FVTPL] - (Refer Note: 6D(ii) &amp; 6D(iii) )</b>	<b>0.75</b>	<b>0.21</b>
<b>(d) Other Non operating income</b>		
Profit on sale of assets	0.64	0.67
Profit on exchange fluctuation (net)	-	15.27
Reversal of allowance for doubtful receivables and advances	9.65	10.25
Provision for expenses no longer required written back	3.73	22.34
Rental income	1.83	1.09
	<b>15.85</b>	<b>49.62</b>
<b>Total Other Income (a + b + c + d )</b>	<b>343.25</b>	<b>399.45</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 23. Changes in inventories of finished goods, stock-in-trade and work in progress

Particulars	For the year	
	2016-17	2015-16
Opening stock		
Work-in-progress	631.70	503.75
Stock-in-trade	182.30	163.68
Finished goods	545.08	622.01
	<b>(A)</b>	<b>1359.08</b>
Less: Closing stock		
Work-in-progress	601.45	631.70
Stock-in-trade	161.70	182.30
Finished goods	583.97	545.08
	<b>(B)</b>	<b>1347.12</b>
<b>Decretion / (Accretion) to stock (A) - (B)</b>	<b>11.96</b>	<b>(69.64)</b>

### 24. Employee benefits expense

Particulars	For the year	
	2016-17	2015-16
Salaries, wages and bonus	1114.48	1037.72
Contribution to provident and other funds	124.34	109.91
Voluntary retirement compensation	0.90	0.40
Share based payments to employees (ESOPs) - Refer Note: 37	4.31	1.29
Remuneration to Managing Director	19.99	17.44
Welfare expenses	268.69	246.33
	<b>1532.71</b>	<b>1413.09</b>
<b>Remuneration to Managing Director includes:</b>		
Salaries & Allowances	12.22	11.12
Incentive *	5.19	4.10
Contribution to provident and other funds (excludes gratuity, compensated absences and share based payments since employee-wise valuation is not available)	2.58	2.22
	<b>19.99</b>	<b>17.44</b>
Value of perquisites (included under appropriate heads of accounts)	0.03	0.03

\* Incentive to Managing Director is provisional and subject to determination by the Nomination and Remuneration Committee.

### 25. Finance costs

Particulars	For the year	
	2016-17	2015-16
Interest costs		
- on Fixed loans	70.98	78.85
- on Others	9.78	4.41
Other borrowing costs	6.84	5.78
	<b>87.60</b>	<b>89.04</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 26. Depreciation and amortisation expense

Particulars	For the year	
	2016-17	2015-16
Depreciation of property, plant and equipment - Refer Note: 4A	635.36	586.04
Amortisation of intangible assets - Refer Note: 5A	34.00	34.69
	<b>669.36</b>	<b>620.73</b>

### 27. Other expenses

Particulars	For the year	
	2016-17	2015-16
Consumption of stores and spares	630.46	557.40
Power and fuel (a)	1298.08	1175.18
Rent	42.26	34.53
Excise duty on stock differential (b)	7.07	(7.68)
Rates and taxes	76.75	71.90
Insurance	19.54	24.53
Repairs to: (c)		
- Buildings	32.85	26.01
- Machinery	431.11	395.95
Directors' sitting fees (refer Corporate governance report)	1.56	1.87
Commission to Non-wholetime Directors (refer Corporate governance report)	14.82	14.50
Auditors' remuneration (Refer Note: 41)	6.79	6.76
Travel and Conveyance	166.34	156.97
Freight, delivery and shipping charges	395.00	358.46
Impairment loss on financial assets	55.96	1.82
Less: Provision adjusted	(55.96)	(1.82)
Allowance for doubtful receivable and advances	18.22	19.49
Selling commission	46.37	29.97
Advertisement and publicity	59.74	57.48
Printing, stationery and communication	48.16	45.65
Loss on exchange fluctuation (net)	29.33	-
Professional fees	74.06	48.94
Services outsourced	914.06	793.82
Loss on sale of assets	3.76	9.45
Miscellaneous expenses	136.28	121.15
	<b>4452.61</b>	<b>3942.33</b>

(a) Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹74.61 million (Previous year ₹44.82 million) - Refer Note: 8B

(b) Represents the difference between the excise duty on opening and closing stock of finished goods.

(c) Repairs includes consumption of stores and spares amounting to ₹246.38 million (Previous year: ₹221.54 million)

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 28. Income tax expense

Particulars	For the year	
	2016-17	2015-16
<b>A. Income tax expense recognised in Profit and loss:</b>		
<b>a. Current tax</b>		
In respect of the current year	527.50	544.20
	<b>527.50</b>	<b>544.20</b>
<b>b. Deferred tax</b>		
In respect of the current year	(38.17)	(41.48)
Adjustment to deferred tax attributable to changes in tax rates and laws	-	7.79
	<b>(38.17)</b>	<b>(33.69)</b>
<b>Total Income tax expense recognised during the year (net)</b>	<b>489.33</b>	<b>510.51</b>
<b>Income tax reconciliation</b>		
<b>Profit before tax</b>	<b>1707.08</b>	<b>1674.88</b>
Income tax expense calculated at the applicable tax rate of 34.608% on Profit before tax	590.79	579.64
Tax expenses recognised during the year	489.33	510.51
<b>Differential tax impact</b>	<b>(101.46)</b>	<b>(69.13)</b>
<b>Differential tax impact due to the following (tax benefit)/tax expenses</b>		
Exempted Dividend income - Net of disallowance	(86.56)	(31.77)
Dividend Income from Overseas Subsidiaries - Taxable at special rates	(7.89)	(43.60)
Expenditure on Corporate Social Responsibility not eligible for tax deduction	4.40	4.80
Claim of weighted benefit relating to In-house Research & Development facilities	(17.76)	(11.95)
Movement in the fair valuation of the quoted Investment	(0.26)	(0.07)
Area based tax incentives	(7.12)	(7.26)
Donations not allowable	2.06	1.62
Depreciation and amortisation not allowable under Income tax provisions	6.83	3.81
Effect of changes in tax rate	-	7.79
Share based payments not eligible for tax deduction	1.49	0.44
Others	3.35	7.06
	<b>(101.46)</b>	<b>(69.13)</b>
<b>B. Income tax expense recognised in Other Comprehensive Income:</b>		
Net gain of effective portion on hedging instruments in a Cash flow hedge	-	0.03
<b>Total income tax expense recognised in Other Comprehensive Income</b>	<b>-</b>	<b>0.03</b>
Bifurcation of the income tax recognised in Other Comprehensive Income into:		
Items that will not be reclassified to profit or loss	-	-
Items that will be reclassified to profit or loss	-	<b>0.03</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 29. Earnings per share

Particulars	For the year	
	2016-17	2015-16
Basic earnings per share (₹)	6.46	6.18
Diluted earnings per share (₹)	6.44	6.17
The calculation of the Basic and Diluted Earnings per share is based on the following data:		
Profits for the year after tax	1217.75	1164.37
Weighted average number of equity shares outstanding during the year:		
- Basic	188,513,561	188,276,270
- Dilutive	189,030,648	188,669,852

The weighted average number of equity shares: for the purpose of diluted earnings per share reconciles with the basic earnings per share as given below:

Particulars	For the year	
	2016-17	2015-16
Weighted average number of equity shares used in the calculation of basic earnings per share	188,513,561	188,276,270
Shares deemed to be issued for no consideration in respect of:		
- Employee Stock Option Plan	517,087	393,582
Weighted average number of equity shares used in the calculation of diluted earnings per share	189,030,648	188,669,852

### 30. Segment information

Carborundum Universal Limited provides solutions for following industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals:

- Surface engineering (material removal, cutting, polishing ) known as Abrasives. This segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, specialty minerals and captive power generation from hydel power plant

The Business Group Management Committee headed by Managing Director (CODM) consisting of Chief financial officer, Leaders of Strategic Business Units and Human resources have identified the above three reportable business segments. It reviews and monitors the operating results of the business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	Abrasives		Ceramics		Electrominerals		Eliminations		Total	
	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16
<b>Sales</b>										
External Sales - Gross	8583.69	7835.70	3778.98	3285.99	2502.82	2556.42	-	-	14865.49	13678.11
Income from Contracts	-	-	103.15	80.73	-	-	-	-	103.15	80.73
Inter segment sales	8.00	7.83	16.44	16.24	893.19	742.80	(917.63)	(766.87)	-	-
<b>Total Sales</b>	<b>8591.69</b>	<b>7843.53</b>	<b>3898.57</b>	<b>3382.96</b>	<b>3396.01</b>	<b>3299.22</b>	<b>(917.63)</b>	<b>(766.87)</b>	<b>14968.64</b>	<b>13758.84</b>
<b>Results</b>										
Segment result - EBITDA	1281.52	1168.15	766.69	633.24	376.78	480.70	-	-	2424.99	2282.09
Depreciation/amortisation	(232.99)	(227.03)	(257.87)	(234.85)	(163.81)	(145.57)	-	-	(654.67)	(607.45)
Profit on sale of Fixed Assets (Net)	(1.68)	(3.67)	(0.21)	(0.84)	(1.40)	(1.44)	-	-	(3.29)	(5.95)
Unallocated corporate expenses/(Income)									(299.75)	(254.60)
Interest expense									(87.60)	(89.04)
Interest and dividend income									326.65	349.62
Fair valuation of Investment									0.75	0.21
<b>Profit before tax</b>	<b>1046.85</b>	<b>937.45</b>	<b>508.61</b>	<b>397.55</b>	<b>211.57</b>	<b>333.69</b>	<b>-</b>	<b>-</b>	<b>1707.08</b>	<b>1674.88</b>
Income taxes									(489.33)	(510.51)
<b>Net profit after taxes</b>									<b>1217.75</b>	<b>1164.37</b>
Other information:										
Segment assets	4096.20	4008.85	3255.51	3121.63	2974.53	2824.08	-	-	10326.24	9954.56
Unallocated corporate assets									2646.92	2749.34
<b>Total assets</b>	<b>4096.20</b>	<b>4008.85</b>	<b>3255.51</b>	<b>3121.63</b>	<b>2974.53</b>	<b>2824.08</b>	<b>-</b>	<b>-</b>	<b>12973.16</b>	<b>12703.90</b>
Segment liabilities	973.85	708.04	435.73	367.19	486.17	423.80	-	-	1895.75	1499.03
Unallocated corporate liabilities									527.11	1620.57
<b>Total liabilities</b>	<b>973.85</b>	<b>708.04</b>	<b>435.73</b>	<b>367.19</b>	<b>486.17</b>	<b>423.80</b>	<b>-</b>	<b>-</b>	<b>2422.86</b>	<b>3119.60</b>
Addition to Non - Current assets	207.92	120.96	240.35	336.52	312.20	566.65	13.49	16.72	773.96	1040.85
Depreciation & Amortization	232.99	227.03	257.87	234.85	163.81	145.57	14.69	13.28	669.36	620.73
Impairment losses	7.31	0.52	8.77	18.97	2.14	-	-	-	18.22	19.49

Sales between operating segments are carried out at arm's length basis and are eliminated at entity level consolidation.

The accounting policies of the reportable segments are the same as that of Company's accounting policies described in Note: 3.23; Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and Directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Segment assets and liabilities:

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets other than investments, loans, current and deferred tax assets, unallocable current and non-current assets, are allocated to reportable segments.
2. All liabilities other than borrowings, current and deferred tax liabilities, and unallocable current and non-current liabilities, are allocated to reportable segments.

### Geographical information:

The Company is domiciled in India. The amount of its revenue from external customers is broken down by location of the customers and information about its non-current assets other than financial instruments, deferred tax assets, post employment benefit asset and right arising from insurance contracts by location are detailed below:

Particulars	Sales from external customers		Non-current assets		
	For the year		As at		
	2016-17	2015-16	31.03.2017	31.03.2016	01.04.2015
India	11832.35	11035.17	4824.46	4725.44	4335.68
Rest of the world	3136.29	2723.67	-	-	-
	14968.64	13758.84	4824.46	4725.44	4335.68

### Information about major customers:

No single customer contributed 10% or more to the Company's revenue during the years 2016-17 and 2015-16 respectively.

## 31 Contingent Liabilities and commitments

Particulars	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
<b>A. Contingent Liabilities</b>			
a. No provision is considered necessary for disputed income tax, sales tax, service tax, excise duty and customs duty demands which are under various stages of appeal proceedings as given below:			
i. Income Tax Act, 1961	196.52	120.99	127.15
ii. Central Sales Tax Act, 1956 & Local Sales Tax laws of various states	8.67	11.57	11.14
iii. Central Excise Act, 1944	4.83	3.90	5.65
iv. Service Tax, 1994	2.88	2.88	3.20
b. Outstanding guarantees given on behalf of subsidiaries	1691.08	2609.94	3224.66
c. Outstanding letters of credit	88.01	108.54	90.06
d. Claims against the Company not acknowledged as debts			
i. Urban Land Tax	-	4.20	4.20
ii. Electricity tax	3.92	3.92	0.00
iii. Stamp duty	1.90	1.90	1.90
iv. Claim filed by ship liner towards damages	14.00	14.00	14.00
v. Claim filed before Consumer Dispute Redressal Forum / Civil Court	1.61	1.60	1.00
vi. Mining Royalty	42.80	42.80	42.80
vii. Additional Electricity Deposit Demand - Tamil Nadu Electricity Board	3.00	3.00	-
viii. Demand charges - TANGEDCO	1.39	-	-
ix. Contribution to District Mineral Foundation under Mines and Minerals (Development and Regulation) Act	22.76	-	-
	<b>91.38</b>	<b>71.42</b>	<b>63.90</b>
e. Employees demands pending before Labour Courts - quantum not ascertainable at present			
In respect of the above demands disputed by the Company, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the Company's rights for future appeals. No reimbursements are expected.			

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
<b>B. Commitments:</b>			
Estimated amount of contracts remaining to be executed (net of advances):			
- Towards capital account	148.30	214.54	76.57
<b>C.</b> The Company did not have any long term contracts and there were no losses on derivative contracts.			

### 32. The following pre-commissioning expenses incurred during the year on various projects have been included in Fixed Assets/Capital Work in Progress

Particulars	For the year	
	2016-17	2015-16
<b>Account Head</b>		
Raw material Consumption	4.94	-
Consumption of Stores & Spares	4.31	0.03
Salary, Wages & Bonus	9.43	-
Power & Fuel	12.51	-
Equipment Hire Charges	1.27	0.11
Travel	1.72	8.49
Freight	43.25	33.48
Rates & Taxes	0.66	1.62
Professional Fees	1.17	3.84
Miscellaneous Expenses	2.69	2.60
	<b>81.95</b>	<b>50.17</b>

### 33. Disclosures required under Section 22 of the Micro, Small and Medium Enterprises Development Act, 2006

Particulars	As at 31.03.2017	As at 31.03.2016	As at 01.04.2015
(i) Principal amount remaining unpaid to suppliers (Refer Note: 18 )	16.62	14.57	21.49
Dues to Micro and Small Enterprises have been determined to the extent such parties have been identified on the basis of information collected by the Management. This has been relied upon by the Auditors. There were no overdue amounts / interest payable to Micro and small enterprises as per Micro, Small and Medium Enterprises Development Act, 2006 as at the Balance Sheet date or any time during the year.			

### 34. Employee Benefits

#### a. Defined contribution plans:

The Company operates defined contribution retirement benefit plans for all qualifying employees. The assets of the plans are held separately from those of the Company in funds under the control of trustees. When employees leave the plans prior to full vesting of the contributions, the contributions payable by the Company are reduced by the amount of forfeited contributions.

Particulars	For the year	
	2016-17	2015-16
Contribution to Provident fund and Other funds recognised in Profit and Loss	102.09	89.42
Amount outstanding as at the end of the respective year and paid subsequently	12.39	11.71

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### b. Defined benefit plans:

The Company sponsors funded defined benefit plans for employees. Under the plans, the employees are entitled to post-retirement benefits amounting to 57.69% of last drawn salary for each year of completed service until the retirement age of 58. The defined benefit plans are administered by separate funds, independent of the Company..

**These plans typically expose the Company to actuarial risks such as: Investment, Interest rate, longevity and salary risk:**

- i) **Investment risk:** The present value of the defined benefit obligation is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds.
- ii) **Interest risk:** A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.
- iii) **Longevity risk:** The present value of the defined benefit obligation is calculated by reference to the best estimate of the mortality of plan participants during their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.
- iv) **Salary escalation risk:** The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

No other post-retirement benefits are provided to the employees.

The actuarial valuation of the plan assets and the present value of the defined benefit obligation were carried out as at March 31, 2017 by a certified actuary of the Institute of Actuaries of India. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

### Assumptions:

The principal assumptions used for the purposes of the actuarial valuations are given below:

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Discount rate	7.25%	8%	8%
Expected rate of return	7.25%	8%	8%
Expected salary increment	5%	5%	5%
Attrition rate	2%	2%	2%
Mortality table used	Indian Assured Lives Mortality (2006-08) Ultimate		

The details of actuarial valuation in respect of Gratuity liability are given below:

Particulars	As at	
	31.03.2017	31.03.2016
i. Projected benefit obligation as at beginning of the year	240.22	217.14
Service cost	21.45	20.66
Interest cost	18.53	16.60
Remeasurement (gain)/loss:		
Actuarial (gain)/loss arising from experience adjustments	8.36	5.12
Benefits paid	(17.26)	(19.30)
<b>Projected benefit obligation as at end of the year</b>	<b>271.30</b>	<b>240.22</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Particulars	As at	
	31.03.2017	31.03.2016
ii. Fair value of plan assets as at beginning of the year	218.19	200.86
Expected return on plan assets	17.72	16.76
Contributions	23.20	17.42
Benefits paid	(17.25)	(19.30)
Remeasurement gain/(loss):		
Actuarial Gain/(losses) on plan assets	(16.98)	2.45
<b>Fair value of plan assets as at end of the year</b>	<b>224.88</b>	<b>218.19</b>
iii. Amount recognised in the Balance Sheet:		
Projected benefit obligation at the end of the year	271.30	240.22
Fair value of the plan assets at the end of the year	224.88	218.19
<b>(Liability) / Asset recognised in the Balance sheet - net</b>	<b>(46.42)</b>	<b>(22.03)</b>
iv. Cost of the defined benefit plan for the year:		
Current service cost	21.45	20.66
Interest on obligation	18.53	16.60
Expected return on plan assets	(17.72)	(16.76)
<b>Components of defined benefit cost recognised in the Statement of Profit and Loss</b>	<b>22.26</b>	<b>20.50</b>
(included in Note: 24 Contribution to Provident and other funds)		
<b>Remeasurement on the net defined benefit liability:</b>		
Actuarial (gain)/loss arising from changes in demographic assumptions	8.36	5.12
Actuarial (gain)/loss arising from changes in financial assumptions	16.98	(2.45)
<b>Components of defined benefit costs recognised in Other Comprehensive Income</b>	<b>25.34</b>	<b>2.67</b>
<b>Total cost of the defined benefit plan for the year</b>	<b>47.60</b>	<b>23.17</b>

### v Experience Adjustment

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Present value of defined benefit obligation	271.30	240.22	217.14
Fair value of plan assets	224.88	218.19	200.86
Balance sheet (Liability)/Asset	(46.42)	(22.03)	(16.28)
P & L (Income)/expenses	22.26	23.17	16.26
Experience adjustment on plan liabilities (gain)/loss	8.36	5.12	(2.27)
Experience adjustment on plan assets gain/(loss)	16.98	(2.45)	1.12

In the absence of the relevant information from the actuary, the above details do not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹17.72 million (for the year ended March 31, 2016: ₹16.76 million).

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation are given below:

Particulars	As at	
	31.03.2017	31.03.2016
Discount rate - 100 basis point higher	(252.49)	(219.00)
Discount rate - 100 basis point lower	292.73	253.90
Salary escalation rate - 100 basis point higher	291.25	253.00
Salary escalation rate - 100 basis point lower	(253.30)	(219.52)
Life expectancy rate - 100 basis point higher	274.56	239.18
Life expectancy rate - 100 basis point lower	(267.67)	(231.08)

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability.

The weighted average duration of the benefit obligation as at March 31, 2017 is 15 years (as at March 31, 2016: 15 years).

The Company expects to make a contribution of ₹46.42 million (as at March 31, 2016: ₹22.03 million) to the defined benefit plans during the next financial year.

### 35. Financial Instruments

#### (i) Capital management

For the purpose of the Company's capital management, capital includes issued equity capital, securities premium and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximise the shareholder value.

The Company's objective when managing capital are to:

- Safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and
- Maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure, the Company may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares, or sell non-core assets to reduce the debt.

#### Debt to Equity ratio

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Debt	25.98	1090.95	835.88
Equity	10550.30	9584.30	8758.00
Debt to Equity ratio	0.25%	11.38%	9.54%

#### Loan covenants

No covenants are applicable as of March 31, 2017, since the term loans outstanding were ₹NIL.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (ii) Categories of financial instruments

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
<b>A. Financial assets</b>			
<b>Measured at fair value through Profit or Loss (FVTPL) - Mandatorily measured:</b>			
- Equity and other investments	3.21	2.46	2.25
<b>Measured at Amortised cost</b>			
- Cash and bank balances	79.26	98.50	66.86
- Other financial assets	2706.31	2668.39	2373.93
<b>Measured at fair value through Other Comprehensive Income (FVTOCI)</b>			
- Investments in equity instruments designated upon initial recognition	129.52	183.68	148.69
<b>Measured at cost</b>			
- Investments in Equity instruments in subsidiaries, joint ventures and associate	2408.43	2374.43	2168.44
<b>B. Financial liabilities</b>			
Measured at amortised cost (including trade payable balances)	1882.34	2571.82	2138.99

### (iii) Financial risk management objectives

The Company's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the entity is exposed to and how the entity manages the risk.

Risk	Exposure arising from	Measurement	Management
a. Credit risk	Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost	Aging analysis Credit ratings Financial analysis	Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment
b. Market risk:			
i. Market risk - Foreign exchange	Future commercial transactions Recognised financial assets and liabilities not denominated in Indian rupee (INR)	Cash flow forecasting Sensitivity analysis	Foreign exchange forward contracts
ii. Market risk - Interest rate	Long-term borrowings at variable rates	Sensitivity analysis	Market trends, Interest rate swaps
iii. Market risk - Price risk	Investment in securities	Sensitivity analysis	Portfolio diversification
c. Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availability of sanctioned credit lines and borrowing facilities

The Company's risk management is governed by policies and approved by the Board of Directors. Company's treasury identifies, evaluates and hedges financial risks in close co-ordination with the Company's operating units. The board provides written principles for overall risk management, as well as policies covering areas such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments and investment of excess liquidity.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### a. Credit risk:

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments

#### a (i) Trade receivables

Customer credit risk is managed by each business unit under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on this evaluation, credit limit and credit terms are decided. Exposure on customer receivables are regularly monitored and managed through credit lock and release. For export customers, credit insurance is generally taken.

The impairment is based on expected credit loss model considering the historical data and financial position of individual customer at each reporting period. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 10. The Company does not hold any collateral as security.

The Company has low concentration of risk with respect to trade receivables, as its customers are widely spread and belong to diversified industries and operate in largely independent markets.

#### a (ii) Financial Instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by the Company's treasury department in accordance with the Company's policy. Investments of surplus funds are made for short-term in liquid funds of rated mutual funds and deposits with banks. The Investment limits are set out per Mutual fund and the value of total fixed deposit in Banks to minimise the concentration risk. Investments are reviewed by the Board of Directors on a quarterly basis.

The Company has no exposure to credit risk relating to these cash deposits as at: 31<sup>st</sup> March 2017, 31<sup>st</sup> March 2016 and 31<sup>st</sup> March 2015. The Corporate guarantees given by the Company to bankers on behalf of its subsidiaries are duly approved by the Board of Directors and are reviewed on a quarterly basis. The total exposure to corporate guarantees is limited to figures reported in Note: 31A.

### b. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change in the measurement and management of the Company's exposure to market risks .

#### b (i) Foreign currency risk management

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters approved by Board of Directors. The Company manages its foreign currency risk by hedging transactions that are expected to occur within a maximum of 12 month period of forecasted receipts and payments. When a derivative is entered into for the purpose of hedging, the Company negotiates the terms of those derivatives to match with the terms of the hedged exposure. The Company hedges around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per Company policy at the time of commitment.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period is as under:

Currency	Liabilities as at			Assets as at		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
US Dollar (USD)	162.17	116.00	83.51	543.62	588.78	472.24
Euro (EUR)	23.79	18.68	17.69	126.12	137.18	63.19
Great British Pound (GBP)	0.61	3.99	-	5.04	8.56	11.14
Australian Dollar (AUD)	-	0.37	-	-	-	-
Japanese Yen (JPY)	-	4.28	-	-	-	-
Swedish Krona (SEK)	-	2.81	-	-	-	-

Quantum of Forward contract (derivatives) (all of which identified as hedges) outstanding as at the end of the year (notional principal amount) on:

Contracts booked for	Currency	As at		As at		As at	
		31.03.2017		31.03.2016		01.04.2015	
		Number of contracts	value	Number of contracts	value	Number of contracts	value
Loan	USD	-	-	1	40.05	4	239.69
Export receivable	EUR	-	-	-	-	2	6.75
Export receivable	USD	-	-	-	-	3	9.39
Import payment	USD	-	-	-	-	1	3.13

### Foreign currency sensitivity analysis

The Company is mainly exposed to US Dollar. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

Currency impact in (₹ million) relating to the foreign currencies of:	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
	Profit or loss	Equity	Profit or loss	Equity	Profit or loss	Equity
US Dollar (USD)	38.15	38.15	47.28	47.28	38.25	38.31
EURO (EUR)	10.23	10.23	11.85	11.85	3.87	3.90
Great Britain Pound (GBP)	0.44	0.44	0.46	0.46	1.11	1.11
Australian Dollar (AUD)	-	-	(0.04)	(0.04)	-	-
Japan Yen (JPY)	-	-	(0.43)	(0.43)	-	-
Swedish Krona (SEK)	-	-	(0.28)	(0.28)	-	-
<b>Total</b>	<b>48.82</b>	<b>48.82</b>	<b>58.84</b>	<b>58.84</b>	<b>43.23</b>	<b>43.32</b>

The Company's sensitivity impact to foreign currency has decreased during the current year end mainly due to the lower value of net exposure and less volatility in the currency exchange rates.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Foreign exchange forward contracts

The details of outstanding forward exchange contracts taken towards hedging the net trade exposures are given under:

Outstanding contracts - Cash flow hedges	Euro			USD		
	As at			As at		
	31.03.2017	31.03.2016	01.04.2015	31.03.2017	31.03.2016	01.04.2015
Average exchange rate - (in ₹)	-	-	68.51	-	-	64.81
Foreign currency	-	-	100,000	-	-	200,000
Nominal amounts - (in ₹ million)	-	-	6.85	-	-	12.96
Fair value assets/(liabilities) - (in ₹ million)	-	-	(0.02)	-	-	0.11

### b (ii) Interest rate risk Management

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107. The Company at the end of March 2017, does not carry any loans with variable interest.

Classification of borrowings by nature of interest rate	As at		
	31.03.2017	31.03.2016	01.04.2015
Borrowings at variable interest rate			
- Non-Current	-	241.50	-
- Current	-	189.53	70.12
Borrowings at fixed interest rate			
- Non-Current	17.94	17.96	512.21
- Current	8.04	641.96	253.55
<b>Total Borrowings</b>	<b>25.98</b>	<b>1090.95</b>	<b>835.88</b>

The outstanding position of Non - current loan at variable interest rate along with proportion of total loans is given below:

Variable loans	As at 31.03.2017			As at 31.03.2016			As at 01.04.2015		
	Weighted average rate	Balance	% of total loans	Weighted average rate	Balance	% of total loans	Weighted average rate	Balance	% of total loans
Non-Current	-	-	-	8.90%	241.50	22%	-	-	-

The exposures relating to the non-current borrowing taken at variable interest rate was mitigated by prepayment of the same within one year.

### Sensitivity of interest rate change on Non-current loan availed at variable interest rate

Particulars	Impact on Profit After Tax		Impact on Other Components of Equity	
	FY 2016-17	FY 2015-16	FY 2016-17	FY 2015-16
Interest rate - increase by 50 basis points	-	(0.77)	-	(0.77)
Interest rate - decrease by 50 basis points	-	0.77	-	0.77

### b (iii) Price risks

The Company is exposed to equity price risks arising from equity investments. Certain of the Company's equity investments are held for strategic rather than trading purposes. The Company also holds certain other equity investments for trading purposes.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Equity price sensitivity analysis

The significant value of the equity investment which are held for strategic purpose and designated at Fair value through other comprehensive income as at 31<sup>st</sup> March 2017 is ₹57.79 million (31<sup>st</sup> March 2016: ₹111.95 million). The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decrease by 5%, the impact to other comprehensive income and equity is given below:

Movement of equity price	Impact to Other Comprehensive income / Equity	
	As at March 31, 2017	As at March 31, 2016
Increase by 5%	5.91	8.62
Decrease by 5%	(5.91)	(8.62)

The impact of change in equity price on non current investment recorded at Fair value through Profit and Loss and other investment designated as Fair value through Other comprehensive income are not significant.

### c. Liquidity risk management

The Company's treasury under the guidance of Board of Directors have established an appropriate liquidity risk management framework. The Company manages liquidity risk through cash generation from business and have adequate banking facilities. The Company continuously forecasts and monitors actual cash flows and matches the maturity profiles of financial assets and liabilities.

#### Contractual maturities of financial liabilities

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31<sup>st</sup> March 2017:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Finance lease liability	17.94		17.33	5.42		22.75
<b>Current financial liabilities</b>						
Trade payables	1339.36	1339.36				1339.36
Finance lease liability	8.04	11.43				11.43
Other financial liabilities	517.00	517.00				517.00

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31<sup>st</sup> March 2016:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Borrowings and interest thereon*	241.50		273.74			273.74
Finance lease liability	17.96		18.20	5.25		23.45
<b>Current financial liabilities</b>						
Borrowings and interest thereon*	825.66	853.03				853.03
Trade payables	1033.03	1033.03				1033.03
Finance lease liability	5.83	9.05				9.05
Other financial liabilities	447.84	447.84				447.84

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 1<sup>st</sup> April 2015:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial liabilities</b>						
Borrowings and interest thereon*	500.00		575.45			575.45
Finance lease liability	12.21		10.93	4.09		15.02
<b>Current financial liabilities</b>						
Borrowings and interest thereon*	316.70	317.98				317.98
Trade payables	933.82	933.82				933.82
Finance lease liability	6.97	9.30				9.30
Other financial liabilities	369.29	369.29				369.29

\*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

### Contractual maturities of financial assets

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31<sup>st</sup> March 2017:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	99.87				99.87	99.87
<b>Current financial assets</b>						
Trade receivables	2562.84	2562.84				2562.84
Advance to employees	9.85	9.85				9.85
Other financial assets	33.75	33.75				33.75

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31<sup>st</sup> March 2016:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	91.95				91.95	91.95
<b>Current financial assets</b>						
Trade receivables	2532.14	2532.14				2532.14
Advance to employees	14.46	14.46				14.46
Other financial assets	29.84	29.84				29.84

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 1<sup>st</sup> April 2015:

Particulars	Carrying amount	upto 1 year	1-3 years	3-5 years	More than 5 years	Total contracted cash flows
<b>Non-current financial assets</b>						
Other financial assets	84.82				84.82	84.82
<b>Current financial assets</b>						
Trade receivables	2231.23	2231.23				2231.23
Advance to employees	10.65	10.65				10.65
Other financial assets	47.23	47.23				47.23

### Maturity analysis of Derivative financial instruments

The following table details the Company's maturity analysis for its derivative financial instruments. The table has been drawn up based on the undiscounted estimated cash flows determined by reference to the projected market rates at the end of the reporting period. A positive amount represents an anticipated cash inflow and a negative amount represents an anticipated cash outflow.

Currency	Contracts booked for	As at			As at			As at		
		31.03.2017			31.03.2016			01.04.2015		
		Carrying amount	Less than 1 year	1-3 years	Carrying amount	Less than 1 year	1-3 years	Carrying amount	Less than 1 year	1-3 years
USD	Loan	-	-	-	40.05	40.05	-	239.69	239.69	-
EURO	Export receivable	-	-	-	-	-	-	6.75	6.75	-
USD	Export receivable	-	-	-	-	-	-	9.39	9.39	-
USD	Import payment	-	-	-	-	-	-	3.13	3.13	-

The note below sets out details of additional undrawn facilities that the Company has at its disposal to further reduce liquidity risk.

### Financing facilities

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
Unsecured term loan from bank:			
Amount used	-	741.50	500.00
Amount unused.	-	258.50	-
	-	<b>1000.00</b>	<b>500.00</b>
Unsecured cash credit and other borrowings facility:			
Amount used	-	136.13	119.90
Amount unused.	845.00	888.97	997.90
	<b>845.00</b>	<b>1025.10</b>	<b>1117.80</b>
Secured cash credit and other borrowings facility:			
Amount used	-	189.53	196.80
Amount unused.	1500.00	1310.47	1303.20
	<b>1500.00</b>	<b>1500.00</b>	<b>1500.00</b>
Total facilities			
Amount used	-	1067.16	816.70
Amount unused	2345.00	2457.94	2301.10
	<b>2345.00</b>	<b>3525.10</b>	<b>3117.80</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Fair value measurements

This note provides information about how the Company determines fair value of various financial assets and financial liabilities.

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Company's financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used):

Financial assets/financial liabilities	Fair Value as at			Fair value hierarchy	Valuation techniques & key inputs used
	31.03.2017	31.03.2016	01.04.2015		
Investments in quoted equity instruments at FVTOCI	118.22	172.38	137.39	Level 1	Quoted bid price in an active market <b>(a)</b>
Investments in quoted instruments at FVTPL	3.03	2.28	2.07	Level 1	Quoted bid price in an active market
Investments in unquoted instruments at FVTPL	0.08	0.08	0.08	Level 3	Fair valuation - <b>(b)</b>
Investments in unquoted instruments at OCI	11.30	11.30	11.30	Level 3	Fair valuation - <b>(b)</b>

There were no changes in the fair value hierarchy Levels in the above periods.

- (a) These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of IND AS 109, the Company has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.
- (b) These investments in equity are not significant in value and hence additional disclosures are not presented.

### Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)

Particulars	Fair value hierarchy	As at 31.03.2017		As at 31.03.2016		As at 01.04.2015	
		Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial assets held at amortised cost:</b>							
<b>Non-current financial assets</b>							
- Other financial assets - Security deposit	Level 3	99.87	86.15	91.95	79.31	84.82	73.17
<b>Current financial assets</b>							
- Trade receivables	Level 2	2562.84	2562.84	2532.14	2532.14	2231.23	2231.23
- Advances to employees	Level 3	9.85	9.85	14.46	14.46	10.65	10.65
- Other advances	Level 3	33.75	33.75	29.84	29.84	47.23	47.23
<b>Financial liabilities held at amortised cost:</b>							
<b>Non-current financial liabilities</b>							
- Borrowings and interest thereon	Level 2	-	-	241.50	221.77	500.00	459.14
- Finance lease and interest thereon	Level 2	17.94	17.94	17.96	15.14	12.21	10.30
<b>Current financial liabilities</b>							
- Borrowings and interest thereon	Level 2	-	-	825.66	802.66	316.70	313.56
- Trade payables	Level 2	1339.36	1339.36	1033.03	1033.03	933.82	933.82
- Finance lease and interest thereon	Level 2	8.04	8.04	5.83	5.83	6.97	6.97
- Other financial liabilities	Level 3	517.00	517.00	447.84	447.84	369.29	369.29

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 36. Related Party Disclosures

#### List of related parties

Related party relationships are as identified by the management and relied upon by the auditors.

#### I) Parties where control exists-subsidiaries

##### Direct holding:

Net Access India Ltd.	[Net access]
Southern Energy Development Corporation Ltd.	[Sedco]
Sterling Abrasives Ltd.	[Sterling]
CUMI (Australia) Pty Ltd.	[CAPL]
CUMI International Ltd.	[CIL]

##### Holding through subsidiary:

Volzhsky Abrasives Works	[VAW]
Foskor Zirconia (pty) Ltd.	[Foskor]
CUMI America Inc.	[CAI]
CUMI Middle east FZE	[CME]
CUMI Canada Inc.*	[CCI]
CUMI Abrasives & Ceramics Company Ltd.	[CACCL]
Thukela Refractories Isithebe Pty Ltd.	[TRIL]
CUMI Europe s.r.o	[CE]

#### II) Other related parties with whom transactions have take place during the year.

##### Joint ventures

Murugappa Morgan Thermal Ceramics Ltd.	[MMTCL]
Ciria India Ltd.	[Ciria]

##### Associate and its subsidiaries

Wendt (India) Ltd.	[Wendt]
Subsidiaries of Associate:	
Wendt Grinding Technologies Limited, Thailand	[WGTL]
Wendt (Middle East) FZE	[WME]

##### Key Management Personnel

Mr. K Srinivasan, Managing Director

##### Other Related parties

Murugappa Holdings Ltd (Shareholder with significant influence)	[MHL]
Ambadi Investments Pvt Ltd (Holding company of MHL )	[AIL]
Parry Enterprises India Ltd (Fellow subsidiary of MHL)	[PEIL]
Ambadi Holdings Pvt Ltd (Fellow subsidiary of MHL)	[AHL]
Parry Agro industries Ltd (Fellow subsidiary of MHL)	[PAL]
Carborundum Universal Employees Provident fund	[CUEPF]
Retiral funds of Joint Ventures, Associate and Other related parties	

\* Ceased to exist from 22<sup>nd</sup> May 2015

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### A. Transactions during FY 2016-17

Related Party	Income from Sales & Services	Royalty income	Dividend income	Reimbursement of employee cost	Purchase of goods	Purchase of power	Expenditure on other services	Rental expenses	Managerial remuneration	Commission paid	Purchases of Fixed asset	Investment made	Contribution to Provident Fund
<b>Subsidiaries</b>													
CAI	236.00	-	-	-	1.14	-	-	-	-	-	-	-	-
Net Access	1.46	-	28.25	-	-	-	21.53	-	-	-	-	34.00	-
Sterling	104.22	-	10.13	-	1.05	-	-	-	-	-	-	-	-
Sedco	-	-	27.29	-	-	196.91	-	-	-	-	-	-	-
CAPL	276.86	3.74	45.59	-	-	-	-	-	-	-	-	-	-
CME	95.14	-	-	-	-	-	-	-	-	-	-	-	-
Foskor	6.55	-	-	-	6.21	-	-	-	-	-	14.49	-	-
CACCL	57.36	-	-	-	112.14	-	-	-	-	-	21.87	-	-
VAW	39.57	-	-	-	239.87	-	-	-	-	-	-	-	-
CUMI Europe	-	-	-	-	-	-	-	-	-	9.40	-	-	-
<b>Total</b>	<b>817.16</b>	<b>3.74</b>	<b>111.26</b>	<b>-</b>	<b>360.41</b>	<b>196.91</b>	<b>21.53</b>	<b>-</b>	<b>-</b>	<b>9.40</b>	<b>36.36</b>	<b>34.00</b>	<b>-</b>
<b>Joint Ventures</b>													
MMTCL	23.94	-	157.39	-	9.53	-	-	-	-	-	-	-	-
Ciria	148.74	-	15.00	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>172.68</b>	<b>-</b>	<b>172.39</b>	<b>-</b>	<b>9.53</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Associate &amp; its subsidiaries</b>													
Wendt	27.70	-	19.93	0.06	18.66	-	2.42	1.54	-	-	-	-	-
WGTL	51.70	-	-	-	-	-	-	-	-	-	-	-	-
WME	2.97	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>82.37</b>	<b>-</b>	<b>19.93</b>	<b>0.06</b>	<b>18.66</b>	<b>-</b>	<b>2.42</b>	<b>1.54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Related parties</b>													
PEIL	-	-	-	-	-	-	39.68	-	-	-	-	-	-
CUEPF	-	-	-	-	-	-	-	-	-	-	-	-	106.26
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>39.68</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>106.26</b>
KMP	-	-	-	-	-	-	-	-	20.02	-	-	-	-
<b>Grand Total</b>	<b>1072.21</b>	<b>3.74</b>	<b>303.58</b>	<b>0.06</b>	<b>388.60</b>	<b>196.91</b>	<b>63.63</b>	<b>1.54</b>	<b>20.02</b>	<b>9.40</b>	<b>36.36</b>	<b>34.00</b>	<b>106.26</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### B. Transactions during FY 2015-16

Related Party	Income from Sales & Services	Royalty income	Dividend income	Reimbursement of employee cost	Purchase of goods	Purchase of power	Expenditure on other services	Rental expenses	Managerial remuneration	Commission paid	Purchases of Fixed asset	Investment made	Contribution to Provident Fund
<b>Subsidiaries</b>													
CAI	235.70	-	-	-	0.47	-	-	-	-	-	-	-	-
Net Access	1.46	-	5.00	-	-	-	19.72	-	-	-	0.06	-	-
Sterling	89.34	-	23.63	-	0.63	-	-	-	-	-	-	-	-
Sedco	-	-	-	0.06	-	171.32	-	-	-	-	-	-	-
CAPL	293.93	3.33	45.96	-	-	-	-	-	-	-	-	-	-
CME	83.73	-	-	-	-	-	-	-	-	-	-	-	-
Foskor	13.60	-	-	-	24.70	-	-	-	-	-	259.61	-	-
CIL	-	-	205.97	-	-	-	-	-	-	-	-	205.98	-
CACCL	65.57	-	-	-	150.03	-	-	-	-	-	-	-	-
VAW	45.16	-	-	-	333.53	-	-	-	-	-	-	-	-
TRIL	-	-	-	-	-	-	-	-	-	-	83.75	-	-
CUMI Europe	1.49	-	-	-	-	-	-	-	-	2.65	-	-	-
<b>Total</b>	<b>829.98</b>	<b>3.33</b>	<b>280.56</b>	<b>0.06</b>	<b>509.36</b>	<b>171.32</b>	<b>19.72</b>	<b>-</b>	<b>-</b>	<b>2.65</b>	<b>343.42</b>	<b>205.98</b>	<b>-</b>
<b>Joint Ventures</b>													
MMTCL	17.11	-	28.62	-	7.48	-	-	-	-	-	-	-	-
Ciria	75.42	-	15.00	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>92.53</b>	<b>-</b>	<b>43.62</b>	<b>-</b>	<b>7.48</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Associate &amp; its subsidiaries</b>													
Wendt	25.40	-	19.93	0.12	14.51	-	2.65	1.50	-	-	-	-	-
WGTL	65.08	-	-	-	-	-	-	-	-	-	-	-	-
WME	2.29	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>92.77</b>	<b>-</b>	<b>19.93</b>	<b>0.12</b>	<b>14.51</b>	<b>-</b>	<b>2.65</b>	<b>1.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Related parties</b>													
PEIL	-	-	-	-	-	-	24.37	-	-	-	-	-	-
PAL	-	-	-	-	0.07	-	-	-	-	-	-	-	-
CUEPF	95.91	-	-	-	-	-	-	-	-	-	-	-	95.91
<b>Total</b>	<b>95.91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>-</b>	<b>24.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>95.91</b>
KMP	-	-	-	-	-	-	-	-	17.47	-	-	-	-
<b>Grand Total</b>	<b>1111.19</b>	<b>3.33</b>	<b>344.11</b>	<b>0.18</b>	<b>531.42</b>	<b>171.32</b>	<b>46.74</b>	<b>1.50</b>	<b>17.47</b>	<b>2.65</b>	<b>343.42</b>	<b>205.98</b>	<b>95.91</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### C. Outstandings

Related Party	As at 31.03.2017				As at 31.03.2016				As at 01.04.2015			
	Trade and other receivable	Deposit outstanding	Payables	Letter of comfort/ Guarantee outstanding	Trade and other receivable	Deposit outstanding	Payables	Letter of comfort/ Guarantee outstanding	Trade and other receivable	Deposit outstanding	Payables	Letter of comfort/ Guarantee outstanding
<b>Subsidiaries</b>												
CAI	121.54	-	1.19	320.95	186.99	-	0.50	298.49	152.83	-	-	281.66
Net Access	0.14	-	0.48	-	0.43	-	0.20	-	0.55	-	1.07	-
Sterling	12.78	-	0.89	-	11.34	-	-	-	12.79	-	-	-
Sedco	-	-	16.65	-	-	-	11.00	-	0.08	-	13.58	-
CAPL	36.60	-	-	-	51.18	-	-	-	54.88	-	-	-
CME	21.60	-	-	-	24.09	-	-	-	14.49	-	-	-
Foskor	-	-	-	241.94	25.81	-	-	670.50	25.81	-	-	775.50
CIL	-	-	-	1128.19	-	-	-	1154.14	-	-	-	1527.20
CACCL	62.99	-	34.28	-	64.49	-	13.56	486.81	16.68	-	36.56	536.90
VAW	-	-	61.50	-	4.70	-	58.55	-	-	-	56.26	-
TRIL	-	-	-	-	-	-	3.55	-	-	-	2.60	103.40
CUMI Europe	-	-	0.81	-	-	-	0.26	-	-	-	-	-
<b>Total</b>	<b>255.65</b>	<b>-</b>	<b>115.80</b>	<b>1691.08</b>	<b>369.03</b>	<b>-</b>	<b>87.62</b>	<b>2609.94</b>	<b>278.11</b>	<b>-</b>	<b>110.07</b>	<b>3224.66</b>
<b>Joint Ventures</b>												
MMTCL	0.04	-	1.68	-	17.54	-	1.69	-	8.08	-	0.27	-
Cirra	8.90	-	-	-	39.13	-	-	-	11.13	-	-	-
<b>Total</b>	<b>8.94</b>	<b>-</b>	<b>1.68</b>	<b>-</b>	<b>56.67</b>	<b>-</b>	<b>1.69</b>	<b>-</b>	<b>19.21</b>	<b>-</b>	<b>0.27</b>	<b>-</b>
<b>Associate &amp; its subsidiaries</b>												
Wendt	2.39	1.00	3.79	-	25.45	1.00	4.77	-	15.55	1.00	2.62	-
WGTL	3.46	-	-	-	15.26	-	-	-	-	-	-	-
WME	0.96	-	-	-	13.90	-	-	-	-	-	-	-
<b>Total</b>	<b>6.81</b>	<b>1.00</b>	<b>3.79</b>	<b>-</b>	<b>54.61</b>	<b>1.00</b>	<b>4.77</b>	<b>-</b>	<b>15.55</b>	<b>1.00</b>	<b>2.62</b>	<b>-</b>
<b>Other Related parties</b>												
PEIL	-	-	1.19	-	-	-	0.84	-	-	-	1.52	-
CUEPF	-	-	9.09	-	-	-	8.38	-	-	-	7.08	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>10.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.22</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.60</b>	<b>-</b>
<b>Grand Total</b>	<b>271.40</b>	<b>1.00</b>	<b>131.55</b>	<b>1691.08</b>	<b>480.31</b>	<b>1.00</b>	<b>103.30</b>	<b>2609.94</b>	<b>312.87</b>	<b>1.00</b>	<b>121.56</b>	<b>3224.66</b>

Transactions with related parties in the nature of sale of goods, rendering of service, purchase of goods, procurement of service are at arm's length price.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### D. Compensation to Key Management Personnel

The remuneration to Key Management Personnel for the years is given below:

Particulars	Year ended	
	31.03.2017	31.03.2016
Short term benefits	17.41	15.22
Post employment benefits	2.58	2.22
Other benefits	0.03	0.03
	<b>20.02</b>	<b>17.47</b>

The Remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

## 37. Employee Stock Option Plan (ESOP)

### A ESOP Scheme 2007

- a. Pursuant to the approval accorded by shareholders at their Annual General Meeting held on 27<sup>th</sup> July 2007, the Nomination and Remuneration Committee of the Company formulated 'Carborundum Universal Limited Employee Stock Option Scheme 2007' (ESOP Scheme 2007).
- b. Under the Scheme, Options not exceeding 4,667,700 were reserved to be issued to the eligible employees, with each Option conferring a right upon the employee to apply for one equity share. The Options granted under the Scheme would vest as per the following schedule (except Grant V B):
  - 20% on expiry of one year from the date of grant;
  - 20% on expiry of two years from the date of grant;
  - 30% on expiry of three years from the date of grant; and
  - 30% on expiry of four years from the date of grant.

The Options granted to the employees would be capable of being exercised within a period of three years from the date of the first vesting and six years from the date of the second, third and fourth vesting.

In respect of Grant V B, 40 per cent on expiry of one year from the date of grant and 30 per cent each on expiry of 2 and 3 years from the date of grant. The Options granted to the employees (Grant V B) can be exercised within a period of three years from the date of the vesting in respect of 50% of the first tranche and six years for the balance 50% of the first tranche and the subsequent tranches from the respective date of vesting.

- c. The exercise price of the option is equal to the latest available closing market price of the shares on the stock exchange where there is highest trading volume as on the date prior to the date of the Nomination and Remuneration Committee resolution approving the grant.
- d. The vesting of Options is linked to continued association with the Company and the employee achieving performance rating parameters.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

The details of the grants under the aforesaid scheme are as follows:

Grant	I	II	III	IV	V A	V B	VI	VII	VIII
Date of Grant	29.09.2007	28.01.2008	30.04.2008	24.07.2008	27.01.2011	27.01.2011	30.04.2011	05.08.2011	04.02.2012
Exercise Price [₹]	91.80	75.23	59.03	61.40	125.08	125.08	124.15	146.00	155.00
Vesting commences on	29.09.2008	28.01.2009	30.04.2009	24.07.2009	27.01.2012	27.01.2012	30.04.2012	05.08.2012	04.02.2013
(i) Options granted	2,671,400	60,000	24,800	139,600	653,200	334,400	73,600	420,000	151,600
(ii) Options outstanding as on 1.4.2016	397,008	-	-	5,244	375,650	177,888	-	190,080	77,787
(iii) Options granted during the year	-	-	-	-	-	-	-	-	-
(iv) Options cancelled during the year	-	-	-	-	-	-	-	-	-
(v) Total options vested during the year	-	-	-	-	-	-	-	-	-
(vi) Options exercised during the year	208,392	-	-	1,368	52,822	15,948	-	-	-
(vii) Options lapsed during the year	-	-	-	-	-	-	-	-	-
(viii) Options outstanding as on 31.03.2017	188,616	-	-	3,876	322,828	161,940	-	190,080	77,787
(viii) = (ii) + (iii) - (iv) - (vi) - (vii)									
The Options under Grant II and III are fully cancelled and hence no outstanding as of March 31, 2017.									
(ix) Options vested but not exercised as at 01.04.2016	397,008	-	-	5,244	375,650	177,888	-	190,080	77,787
(x) Options vested but not exercised as at 31.03.2017 (x) = (ix) + (v)-(vi)-(vii)	188,616	-	-	3,876	322,828	161,940	-	190,080	77,787

- e. Contractual Life The ESOP 2007 Scheme was instituted with the approval of the shareholders on 27<sup>th</sup> July 2007 and the first grant was made on 29<sup>th</sup> September 2007.

No further grants is proposed to be made under the ESOP Scheme 2007. However, Options granted under the same which are pending to be exercised will continue to be administered by the Company.

- f. The fair value of Options based on the valuation of the independent valuer as of the respective dates of grant/modification are given below.

Grant	Fair value as per Black scholes options pricing formula [₹]	Incremental Fair Value due to the modification of Exercise Period	Exercise Price [₹]
I	33.56	6.09	91.80
II	27.76	-	75.23
III	22.78	-	59.03
IV	24.61	3.00	61.40
VA	49.59	10.20	125.08
VB	44.27	11.75	125.08
VI	45.80	10.09	124.15
VII	54.13	11.07	146.00
VIII	55.62	9.86	155.00

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

- g. Fair value has been calculated using the Black Scholes Options Pricing Formula and the significant assumptions in this regard are as follows: (weighted average basis)

	Grant			
	I & IV	II & III	V A & V B	VI, VII & VIII
Risk free Interest rate	7.38%	-	8.04%	8.35%
Expected Life (years)	2.5 to 7.0	-	2.5 to 7.0	2.5 to 7.0
Expected volatility	39.93	-	39.81	37.69
Expected dividend yield	2.32%	-	1.29%	1.60%

- h. Under Ind AS 101 transitional provision, the Company has adjusted ₹10.48 million against the opening retained earning as on April 01, 2015 towards expired portion of unvested Options. The cost debited to Profit and loss during FY 2016-17 - NIL (previous year FY 15-16 - ₹1.29 million)

Grant	I	II	III	IV	V A	V B	VI	VII	VIII
Date of Grant	29.09.2007	28.01.2008	30.04.2008	24.07.2008	27.01.2011	27.01.2011	30.04.2011	05.08.2011	04.02.2012
Exercise Price [₹]	91.80	75.23	59.03	61.40	125.08	125.08	124.15	146.00	155.00
Vesting commences on	29.09.2008	28.01.2009	30.04.2009	24.07.2009	27.01.2012	27.01.2012	30.04.2012	05.08.2012	04.02.2013
Options granted	2,671,400	60,000	24,800	139,600	653,200	334,400	73,600	420,000	151,600
Options Vested before April 01, 2015 (as of transition date)	2,671,400	60,000	24,800	139,600	653,200	334,400	51,520	294,000	116,170
Unvested Options as of transition date							22,080	126,000	35,430
Options vested during FY 15-16							22,080	126,000	35,430

### B ESOP 2016

#### A. Summary of Status of ESOPs Granted

The position of the existing Plan is summarized as under:

S. No.	Particulars	ESOP 2016
I. Details of the ESOP 2016		
1	Date of Shareholder's Approval	9 <sup>th</sup> January 2017
2	Total Number of Options approved	3,772,000
3	Vesting Requirements	The vesting of options granted, is based on annual performance rating for each financial year and as per following schedule:- 20 percent each on expiry of 1 and 2 years from the date of grant and 30 percent each on expiry of 3 and 4 years from the date of grant.
4	The Pricing Formula	The options carry a right to subscribe to equity shares at the latest available closing price on the stock exchange which reports the highest trading volume, prior to the date of grant of the options
5	Maximum term of Options granted (years)	The Exercise period would commence from the date of vesting and will expire on completion of 5 (five) years from the date of respective vesting.
6	Method of Settlement	Equity
7	Source of shares	Primary
8	Variation in terms of ESOP	No variations

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### II. Options Movement during the year ended 31<sup>st</sup> March 2017

S. No	Particulars	No. of Options	Weighted average exercise Price
1	No. of Options Outstanding at the beginning of the year	-	-
2	Options Granted during the year	914,900	257.55
3	Options Forfeited/Surrendered during the year	-	-
4	Options Lapsed during the year	-	-
5	Options Exercised during the year	-	-
6	Total number of shares arising as a result of exercise of options	-	-
7	Money realised by exercise of Options (₹)	NA	NA
8	Number of Options Outstanding at the end of the year	914,900	257.55
9	Number of Options exercisable at the end of the year-	-	-

Other than the grant of options, there was no other movement during the FY 2016-17.

### III. Weighted Average remaining contractual life

Range of Exercise Price	Weighted average contractual life (years) as on 31 <sup>st</sup> March 2017
0 to 100	Nil
No. of Options Outstanding	Nil
100 to 200	Nil
No. of Options Outstanding	Nil
200 to 300	7.55
No. of Options Outstanding	914,900

### IV Weighted average Fair Value of Options granted during the year ended 31<sup>st</sup> March 2017 whose:

Exercise price equals market price	₹84.07
------------------------------------	--------

V The weighted average market price of Options exercised during the year ended 31<sup>st</sup> March 2017

No Options exercised during the year under the Plan.

### VI Method and Assumptions used to estimate the fair value of Options granted during the year ended 31<sup>st</sup> March 2017:

The fair value has been calculated using the Black Scholes Option Pricing model

The Assumptions used in the model are as follows:

Variables	Weighted Average
1. Risk Free Interest Rate (%)	6.39
2. Expected Life(in years)	3.89
3. Expected Volatility (%)	31.98
4. Dividend Yield (%)	0.58
5. Exercise Price	₹257.55
6. Price of the underlying share in market at the time of the Option grant.(₹)	₹257.55

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### Assumptions

Stock Price: Closing price on National Stock Exchange of India Limited as on the date prior to the date of the Nomination and Remuneration Committee approving the grant has been considered.

Volatility: The expected price volatility is based on the historic volatility, adjusted for any expected changes to future volatility due to public available information.

Risk-free rate of return: The risk-free interest rate being considered for the calculation is the interest rate applicable for a maturity equal to the expected life of the options based on the zero-coupon yield curve for Government Securities.

Exercise Price: Exercise Price of each specific grant has been considered.

Time to Maturity: Time to Maturity / Expected Life of options is the period for which the Company expects the Options to be live.

Expected dividend yield: Expected dividend yield has been calculated as an average of dividend yields for five financial years preceding the date of the grant

### VII Effect of share-based payment transactions on the entity's Profit or Loss for the period:

Particulars	Amount
Employee Option plan expense	₹4.31 million

### 38. Disclosure relating to Contracts

Particulars	For the year	
	2016-17	2015-16
Contract revenue recognised during the year	103.15	80.73
Retentions	2.96	2.69
Receivables (net of retention)	37.09	25.76

### 39. a. Value of Imports on CIF basis

Particulars	For the year	
	2016-17	2015-16
Raw materials	2234.20	2208.48
Components & Spare parts	86.72	75.18
Finished goods	548.20	491.61
Capital goods	425.49	409.05

### 39. b. Expenditure in foreign currency (on cash basis)

Particulars	For the year	
	2016-17	2015-16
Professional / Consultancy fees	31.12	60.44
Commission	17.05	9.41
Interest	0.37	1.06
Travel and other matters	42.59	47.00

### 40. Earnings in foreign exchange on account of

Particulars	For the year	
	2016-17	2015-16
Value of exports on FOB basis	3070.64	2675.86
Royalty	3.74	3.33
Dividend	45.59	251.94
Management fees	19.61	20.15

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 41. Auditors' Remuneration

Particulars	For the year	
	2016-17	2015-16
Statutory audit	3.20	3.20
Tax Audit	0.80	0.80
Other services	2.79	2.75
Out of pocket expenses	-	0.01
	<b>6.79</b>	<b>6.76</b>

### 42. Research and Development expenditure

Particulars	For the year	
	2016-17	2015-16
<b>a) Revenue Expenditure (disclosed under the respective heads)</b>		
Direct Material, Supplies and Consumables	33.56	29.26
Employee Benefit Expenses	44.12	29.25
Repair & Maintenance	3.40	2.28
Other Expenses	18.60	12.93
Depreciation	10.53	8.27
<b>Total</b>	<b>110.21</b>	<b>81.99</b>
<b>b) Capital Expenditure</b>		
<b>Property, plant and equipments</b>		
• Buildings	2.49	4.62
• Plant & Machinery	7.11	6.90
• Furniture & Fixtures	1.85	3.44
	<b>11.45</b>	<b>14.96</b>
<b>Intangibles</b>	2.29	1.08
<b>Total</b>	<b>13.74</b>	<b>16.04</b>
<b>Capital Work-in-Progress (CWIP)</b>	-	<b>1.24</b>
<b>Total Capital Expenditure (including CWIP)</b>	<b>13.74</b>	<b>17.28</b>

### 43. Details on list of Investments in Subsidiaries, joint ventures and associate as per Ind AS 27

Particulars	Principal place of business and Incorporation	Proportion of ownership interest		
		31.03.2017	31.03.2016	01.04.2015
<b>A Investment in Subsidiaries</b>				
CUMI International Ltd., Cyprus	Cyprus	100%	100%	100%
Sterling Abrasives Ltd.	India	60%	60%	60%
Southern Energy Development Corporation Ltd.	India	84.76%	84.76%	84.76%
Net Access India Ltd.	India	100%	100%	100%
CUMI Australia Pty Ltd., Australia	Australia	51.22%	51.22%	51.22%
<b>B. Investment in Joint ventures</b>				
Murugappa Morgan Thermal Ceramics Ltd.	India	49.00%	49.00%	49.00%
Ciria India Ltd.	India	30%	30%	30%
<b>C. Investment in Associate</b>				
Wendt (India) Ltd.	India	39.87%	39.87%	39.87%

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 44. Leases

Particulars	As at		
	31.03.2017	31.03.2016	01.04.2015
The Company has acquired vehicles under finance lease with respective asset as security:			
a. Cost of Leased Assets	39.15	31.30	31.49
Deemed cost as per Fixed Assets Schedule - Refer Note: 4A	34.45	26.04	15.19
b. Net carrying amount	21.08	20.84	15.19
c. Reconciliation between total minimum lease payments and their present value			
Total minimum lease payments	34.18	32.50	24.32
Less: Future liability on interest account	8.20	8.71	5.14
Present value of lease payments - Refer Note: 14	25.98	23.79	19.18

d. Year-wise future minimum lease rental payments:

Particulars	Total Minimum Lease Payments as on 31.03.2017	Present value of Lease payments as on 31.03.2017	Total Minimum Lease Payments as on 31.03.2016	Present value of Lease payments as on 31.03.2016	Total Minimum Lease Payments as on 01.04.2015	Present value of Lease payments as on 01.04.2015
(i) Not later than one year	11.43	8.04	9.05	5.83	9.30	6.97
(ii) Later than one year and not later than three years	17.33	13.27	18.20	13.12	10.93	8.43
(iii) Later than three years and not later than five years	5.42	4.67	5.25	4.84	4.09	3.78
(iv) Later than five years	-	-	-	-	-	-
<b>Total</b>	<b>34.18</b>	<b>25.98</b>	<b>32.50</b>	<b>23.79</b>	<b>24.32</b>	<b>19.18</b>

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard is required.

**45 Dividend Tax** on the Interim Dividend has been paid after availing the credit amounting to ₹22.65 million (Previous year - ₹28.89 million) in respect of the tax paid on the dividends received from three domestic subsidiaries and an overseas subsidiary. Dividend tax payable on the proposed final dividend is eligible for credit amounting to ₹14.05 million (Previous year - NIL) available for set off in respect of dividend tax payable on dividends to be distributed by two domestic subsidiaries and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income tax Act.

### 46. Corporate Social Responsibility

During the year, the Company incurred an aggregate amount of ₹23.41 million towards Corporate Social Responsibility in compliance of Section 135 of the Companies Act 2013 read with relevant schedule and rules made thereunder. The details of the CSR spend is given below:

Particulars	For the year	
	2016-17	2015-16
<b>A. Expenditure incurred directly by the Company</b>		
Skill Centre Development - Revenue expenditure	12.71	13.88
<b>B. Expenditure incurred through Agencies</b>		
AMM Foundation	10.70	9.37
<b>Total</b>	<b>23.41</b>	<b>23.25</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### 47. Disclosure relating to Specified Bank Notes (SBN)

Particulars	SBN	Other	Total
		Denomination Notes	
Closing Cash in hand as on 08.11.2016	0.44	0.48	0.92
Add: Permitted Receipts	-	2.69	2.69
Deduct: Permitted Payments	-	2.50	2.50
Deduct: Amount deposited in Banks	0.44	-	0.44
<b>Closing Cash in hand as on 30.12.2016</b>	<b>-</b>	<b>0.67</b>	<b>0.67</b>

### 48. Transition to Ind AS

These financial statements, for the year ended 31 March 2017, are the first financial statements the Company has prepared in accordance with Ind AS. For periods up to and including the year ended 31 March 2016, the Company prepared its financial statements in accordance with accounting standards notified under Section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP).

Accordingly, the Company has prepared financial statements which comply with Ind AS applicable for periods ending on 31 March 2017, together with the comparative period data as at and for the year ended 31 March 2016, as described in the summary of significant accounting policies. In preparing these financial statements, the Company's opening Balance Sheet was prepared as at 1 April 2015, the Company's date of transition to Ind AS. An explanation of how the transition from previous GAAP to Ind AS has affected the Company's financial position, financial performance and cash flows is set out below:

- (i) Transition election
- (ii) Reconciliation of Other equity as previously reported under previous GAAP to Ind AS
- (iii) Reconciliation of Profits as previously reported under previous GAAP to Ind AS
- (iv) Reconciliation of Balance sheet as previously reported under previous GAAP to Ind AS
- (v) Reconciliation of Statement of Profit and Loss account as previously reported under previous GAAP to Ind AS
- (vi) Adjustments to the Statement of Cash Flows

#### (i) Transition election

##### (a) Optional exemptions

The Company in applying Ind AS principle for measurement of recognised assets and liabilities is subject to certain optional exemptions, apart from mandatory exceptions, availed by the Company as detailed below.

Optional exemptions	Notes
Deemed Cost for property, plant and equipment, investment property, and intangible assets	I
Share-based payment transactions	II
Investments in subsidiaries, joint controlled entities and associates in separate financial statements	III
Designation of previously recognised financial instruments	IV
Business combinations	V
Fair value measurement of financial assets or financial liabilities at initial recognition	VI
Leases	VII

#### 1. Deemed Cost for property, plant and equipment, investment property, and intangible assets:

Ind AS 101 permits a first-time adopter to elect to continue with the carrying value for all of its property, plant and equipment as recognised in the financial statements as at the date of transition to Ind AS, measured as per the previous GAAP and use that as its deemed cost as at the date of transition after making necessary adjustments for de-commissioning liabilities. This exemption can also be used for intangible assets covered by Ind AS 38 Intangible Assets.

Accordingly, the Company has elected to measure all of its property, plant & equipment and intangible assets at their previous GAAP carrying value.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### II. Share-based payment transactions:

A first-time adopter is encouraged, but not required, to apply Ind AS 102 Share-based Payment to equity instruments that were granted on or before the date of transition to Ind AS. However, if a first-time adopter elects to apply Ind AS 102 to such equity instruments, it may do so only if the entity has disclosed publicly the fair value of those equity instruments determined at the measurement date as defined in Ind AS 102.

Accordingly, the Company has used this option and not applied Ind AS 102 share based payment that have vested before Ind AS transition date. Refer Note: 37(h) for shares vested before transition date.

### III. Investments in subsidiaries, joint controlled entities and associates in separate financial statements:

According to Ind AS 27, when an entity prepares separate financial statements, it is required to account for its investments in subsidiaries, joint ventures and associates either:

- (a) at cost; or (b) in accordance with Ind AS 109.

Under the transitional provision set out in Ind AS 101, the first-time adopter can measure such an investment at cost in accordance with Ind AS 27, it shall measure that investment at one of the following amounts in its separate opening Ind AS Balance Sheet:

- (a) cost determined in accordance with Ind AS 27; or
- (b) deemed cost. The deemed cost of such an investment shall be its:
  - (i) fair value at the entity's date of transition to Ind AS in its separate financial statements; or
  - (ii) previous GAAP carrying amount at that date.

A first-time adopter may choose either (i) or (ii) above to measure its investment in each subsidiary, joint venture or associate that it elects to measure using a deemed cost.

The Company has elected previous GAAP carrying amount as cost for all subsidiaries, joint ventures and associate.

### IV. Designation of previously recognised financial instruments:

An entity may designate an investment in an equity instrument as at fair value through other comprehensive income in accordance with Ind AS 109 on the basis of the facts and circumstances that exist at the date of transition to Ind AS.

As per Ind AS 109, an entity can make an irrevocable election to present in Other Comprehensive Income the subsequent changes in the fair value of an investment in an equity instrument that is not held for trading.

In accordance with Ind AS transition provision, the Company has designated the equity investment in Coromandel Engineering Limited and Murugappa Management Services Limited as fair value through Other comprehensive income.

### V. Business combinations:

In accordance with Ind AS transitional provisions, the Company has elected to apply Ind AS relating to business combinations prospectively from April 01, 2015. As such, previous GAAP balances relating to business combinations entered into before that date, have been carried forward without adjustment.

### VI. Fair value measurement of financial assets or financial liabilities at initial recognition:

In accordance with Ind AS transitional provisions, the Company opted to apply the provisions of day one gain or loss provisions retrospectively on transactions occurring on or after the date of transition to Ind AS.

### VII. Leases:

Appendix C to Ind AS 17 requires an entity to assess whether a contract or arrangement contains a lease. In accordance with Ind AS 17, this assessment should be carried out at the inception of the contract or arrangement. Ind AS 101 provides an option to make this assessment on the basis of facts and circumstances existing at the date of transition to Ind AS, except where the effect is expected to be not material.

The Company has elected to apply this exemption for such contracts/arrangements.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

(b) Mandatory exceptions:

The Mandatory exceptions applicable to the Company are given below:

Mandatory exceptions	Notes
Estimates	I
De-recognition of financial assets and liabilities	II
Classification and measurement of financial assets	III
Hedge accounting	IV
Impairment of financial assets	V

I. Estimates:

An entity's estimates in accordance with Ind AS at the date of transition to Ind AS shall be consistent with estimates made for the same date in accordance with previous GAAP.

Ind AS estimates as at 1 April 2015 are consistent with the estimates as at the same date made in conformity with previous GAAP. The Company made estimates for following items in accordance with Ind AS at the date of transition as these were not required under previous GAAP:

- Investment in equity instruments carried at FVOCI;
- Investment in equity instruments carried at FVPL;
- Investment in debt instruments carried at FVPL; and
- Impairment of financial assets based on expected credit loss model.

II. De-recognition of financial assets and liabilities:

Ind AS 101 requires a first-time adopter to apply the de-recognition provisions of Ind AS 109 prospectively for transactions occurring on or after the date of transition to Ind AS. However, Ind AS 101 allows a first-time adopter to apply the de-recognition requirements in Ind AS 109 retrospectively from a date of the entity's choosing, provided that the information needed to apply Ind AS 109 to financial assets and financial liabilities derecognised as a result of past transactions was obtained at the time of initially accounting for those transactions.

The Company has elected to apply the de-recognition provisions of Ind AS 109 prospectively from the date of transition to Ind AS.

III. Classification and measurement of financial assets:

Ind AS 101 requires an entity to assess classification and measurement of financial assets (investment in debt instruments) on the basis of the facts and circumstances that exist at the date of transition to Ind AS.

IV. Hedge accounting:

Hedge accounting can only be applied prospectively from the transition date, to the transactions that satisfy the hedge accounting criteria in Ind AS 109, at that date. Hedging relationships cannot be designated retrospectively, and the supporting documentation cannot be created retrospectively. As a result, only hedging relationships that satisfied the hedge accounting criteria as of 1 April 2015 are reflected as hedges in the Company's results under Ind AS.

The Company had designated various hedging relationships as cash flow hedges under the previous GAAP. On date of transition to Ind AS, the entity had assessed that all the designated hedging relationship qualifies for hedge accounting as per Ind AS 109. Consequently, the Company continues to apply hedge accounting on and after the date of transition to Ind AS.

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### V. Impairment of financial assets:

The Company has applied the impairment requirements of Ind AS 109 retrospectively; however, as permitted by Ind AS 101, it has used reasonable and supportable information that is available without undue cost or effort to determine the credit risk at the date that financial instruments were initially recognised in order to compare it with the credit risk at the transition date.

### (ii) Reconciliation of Other equity as previously reported under previous GAAP to Ind AS

Particulars	Notes	As at	
		31.03.2016	01.04.2015
Reserves and surplus as reported under Previous GAAP		9281.71	8381.36*
a) Ind AS adjustments that lead to increase in equity			
Proposed dividend	(i)	-	109.48
Fair value of equity investments	(ii)	114.21	79.01
b) Ind AS adjustments that lead to decrease in equity			
Deferred tax on Hedging reserve	(iii)	-	(0.03)
<b>Other equity as reported under Ind AS</b>		<b>9395.92</b>	<b>8569.82</b>

\* Equity reported under Previous GAAP as adjusted for the impact of merger

### (iii) Reconciliation of Profits as previously reported under previous GAAP to Ind AS

Particulars	Notes	For the year 2015-16
<b>Profit as reported under previous GAAP</b>		<b>1162.78</b>
Ind AS adjustments that lead to increase/(decrease) in profit		
Actuarial gain/losses on remeasurement of the Defined benefit obligation	(iv)	2.67
Fair valuation of investment	(ii)	0.21
Effect of measuring ESOPs at fair value	(v)	(1.29)
<b>Profit as reported under Ind AS</b>		<b>1164.37</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (iv) Reconciliation of Balance sheet as previously reported under previous GAAP to Ind AS

Particulars	Notes	As at 31.03.2016			As at 01.04.2015		
		Previous GAAP	Effect of transition to Ind AS	As per Ind AS Balance Sheet	Previous GAAP	Effect of transition to Ind AS	As per Ind AS Balance Sheet
<b>ASSETS</b>							
<b>Non-current assets</b>							
(a) Property, plant and equipment	(vii)	3734.57	(80.13)	3654.44	3960.43	(81.00)	3879.43
(b) Capital work-in-progress	(viii)	681.60	(3.57)	678.03	176.39	(6.54)	169.85
(c) Intangible assets		98.96	-	98.96	99.77	-	99.77
(d) Intangible assets under development	(viii)		3.57	3.57		6.54	6.54
<b>(e) Financial assets</b>							
<b>(i) Investments</b>							
(a) Investment in associate		10.36	-	10.36	10.36	-	10.36
(b) Investment in joint ventures		45.72	-	45.72	45.72	-	45.72
(c) Investment in subsidiaries		2318.35	-	2318.35	2112.36	-	2112.36
(d) Other investments	(ii)	71.93	114.21	186.14	71.93	79.01	150.94
(ii) Other financial assets		91.95	-	91.95	84.82	-	84.82
(f) Other non-current assets	(vii)	211.17	79.27	290.44	99.96	80.13	180.09
<b>Total Non-current assets</b>		<b>7264.61</b>	<b>113.35</b>	<b>7377.96</b>	<b>6661.74</b>	<b>78.14</b>	<b>6739.88</b>
<b>Current assets</b>							
(a) Inventories		2252.37	-	2252.37	2084.94	-	2084.94
<b>(b) Financial assets</b>							
(i) Trade receivables		2532.14	-	2532.14	2231.23	-	2231.23
(ii) Cash and cash equivalents		84.43	-	84.43	55.70	-	55.70
(iii) Bank balances other than (ii) above		14.07	-	14.07	11.16	-	11.16
(iv) Other financial assets		44.30	-	44.30	57.88	-	57.88
(c) Other Current assets	(vii)	397.77	0.86	398.63	324.53	0.87	325.40
<b>Total Current assets</b>		<b>5325.08</b>	<b>0.86</b>	<b>5325.94</b>	<b>4765.44</b>	<b>0.87</b>	<b>4766.31</b>
<b>Total Assets</b>		<b>12589.69</b>	<b>114.21</b>	<b>12703.90</b>	<b>11427.18</b>	<b>79.01</b>	<b>11506.19</b>
<b>EQUITY AND LIABILITIES</b>							
<b>EQUITY</b>							
(a) Equity share capital		188.38	-	188.38	188.18	-	188.18
(b) Other equity	(i),(ii),(iii)	9281.71	114.21	9395.92	8381.36	188.46	8569.82
<b>Total Equity</b>		<b>9470.09</b>	<b>114.21</b>	<b>9584.30</b>	<b>8569.54</b>	<b>188.46</b>	<b>8758.00</b>
<b>LIABILITIES</b>							
<b>Non-current liabilities</b>							
<b>(a) Financial liabilities</b>							
Borrowings		259.46	-	259.46	512.21	-	512.21
(b) Provisions		43.58	-	43.58	44.87	-	44.87
(c) Deferred tax liabilities (net)	(iii)	378.82	-	378.82	412.51	0.03	412.54
<b>Total Non-current liabilities</b>		<b>681.86</b>	<b>-</b>	<b>681.86</b>	<b>969.59</b>	<b>0.03</b>	<b>969.62</b>
<b>Current liabilities</b>							
<b>(a) Financial liabilities</b>							
(i) Borrowings	(ix)	325.51	0.15	325.66	316.19	0.51	316.70
(ii) Trade payables		1033.03	-	1033.03	933.82	-	933.82
(iii) Other financial liabilities	(ix)	953.82	(0.15)	953.67	376.77	(0.51)	376.26
(b) Provisions	(i)	24.90	-	24.90	135.70	(109.48)	26.22
(c) Other current liabilities		100.48	-	100.48	125.57	-	125.57
<b>Total Current liabilities</b>		<b>2437.74</b>	<b>-</b>	<b>2437.74</b>	<b>1888.05</b>	<b>(109.48)</b>	<b>1778.57</b>
<b>Total Liabilities</b>		<b>3119.60</b>	<b>-</b>	<b>3119.60</b>	<b>2857.64</b>	<b>(109.45)</b>	<b>2748.19</b>
<b>Total Equity and Liabilities</b>		<b>12589.69</b>	<b>114.21</b>	<b>12703.90</b>	<b>11427.18</b>	<b>79.01</b>	<b>11506.19</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (v) Reconciliation of Statement of Profit and Loss account as previously reported under previous GAAP to Ind AS

S. No.	Particulars	Notes	For the year 2015-16		
			Previous GAAP	Effect of transition to IndAS	As per Ind AS
I	Revenue from Operations	x, xi	12992.78	948.89	13941.67
II	Other Income	ii	399.24	0.21	399.45
<b>III</b>	<b>Total Income (I+II)</b>		<b>13392.02</b>	<b>949.10</b>	<b>14341.12</b>
<b>IV</b>	<b>Expenses</b>				
	Cost of material consumed		4886.08	-	4886.08
	Purchase of Stock-in-Trade		761.13	-	761.13
	Changes in inventories of finished goods, stock-in-trade and work-in-progress		(69.64)	-	(69.64)
	Excise duty on sale of goods	x	-	1023.48	1023.48
	Employee benefits expense	iv,v	1414.47	(1.38)	1413.09
	Finance costs		89.04	-	89.04
	Depreciation and amortisation expense	vii	621.60	(0.87)	620.73
	Other expenses	vii, xi	4016.05	(73.72)	3942.33
	<b>Total expenses (IV)</b>		<b>11718.73</b>	<b>947.51</b>	<b>12666.24</b>
<b>V</b>	<b>Profit before tax (III-IV)</b>		<b>1673.29</b>	<b>1.59</b>	<b>1674.88</b>
<b>VI</b>	<b>Tax expense</b>				
	(1) Current tax		544.20	-	544.20
	(2) Deferred tax		(33.69)	-	(33.69)
			<b>510.51</b>	<b>-</b>	<b>510.51</b>
<b>VII</b>	<b>Profit for the year (V - VI)</b>		<b>1162.78</b>	<b>1.59</b>	<b>1164.37</b>
<b>VIII</b>	<b>Other Comprehensive Income [OCI]</b>				
A	(i) Items that will not be reclassified to profit or loss				
	(a) Remeasurement of the defined benefit plans	iv		(2.67)	(2.67)
	(b) Equity instruments through OCI	ii		34.99	34.99
	(ii) Income tax relating to items that will not be reclassified to profit or loss			-	-
			-	<b>32.32</b>	<b>32.32</b>
B	(i) Items that will be reclassified to profit or loss				
	Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge	vi		(0.09)	(0.09)
	(ii) Income tax relating to items that may be reclassified to profit or loss	iii		0.03	0.03
				<b>(0.06)</b>	<b>(0.06)</b>
	<b>Total Other Comprehensive Income (VIII)</b>		<b>-</b>	<b>32.26</b>	<b>32.26</b>
<b>IX</b>	<b>Total Comprehensive Income for the year (VII + VIII)</b>		<b>1162.78</b>	<b>33.85</b>	<b>1196.63</b>

## Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2017 (in Indian Rupees million, unless otherwise stated)

### (vi) Adjustments to the Statement of Cash Flows

The transition from Indian GAAP to Ind AS had no significant impact on cash flows generated by the Company. Cash flows relating to interest are classified in a consistent manner as operating, investing or financing for the year 2015-16

Particulars	Previous GAAP	Effect of transition to Ind AS	Ind AS
Net cash flows from operating activities	1119.01	-	1119.01
Net cash flows from investing activities	(884.71)	-	(884.71)
Net cash flows from financing activities	(205.57)	-	(205.57)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>28.73</b>	<b>-</b>	<b>28.73</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>55.70</b>	<b>-</b>	<b>55.70</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>84.43</b>	<b>-</b>	<b>84.43</b>

Notes:

- i. Under Ind AS, dividends payable and the related corporate dividend tax are recorded as a liability in the year in which these are declared and approved by the shareholders at the general meeting. Under previous Indian GAAP, dividends payable are recorded as a provision in the year to which they relate.
- ii. Under previous GAAP, long term investments were measured at cost less diminution in value which is other than temporary. Under IndAS, these financial assets have been classified as FVTOCI and FVTPL. On the date of transition to Ind AS, these financial assets have been measured at their fair value which is higher than cost as per previous GAAP, resulting in an increase in the carrying amount of ₹79.01 million as at April 01, 2015. Increase on fair value as compared to March 31, 2016 previous GAAP amounts to ₹114.21 million.  
During FY 15-16, effect on fair value increase on investment as of March 31, 2016 from April 01, 2015 have been recognised as below:
  - (a) Investment designated under Profit & loss: Through profit and loss to equity - ₹0.21 million.
  - (b) Investment designated under OCI: Through OCI to equity - ₹34.99 million.
- iii. Under Ind AS, deferred tax is calculated on hedging reserve. Under previous Indian GAAP, deferred tax was not created on hedging reserve.
- iv. Under Ind AS the actuarial gains and losses on post retirement defined employee benefits are recognised in other comprehensive income. Under previous Indian GAAP such actuarial gains and losses were recognised in the statement of profit and loss.
- v. Under Ind AS, ESOPs are to be measured at grant date fair value of the equity instruments issued. Under previous Indian GAAP, such ESOPs were measured at the grant date intrinsic value of the equity instruments issued.
- vi. Under Ind AS, change in fair value of derivatives designated in cash flow hedge to the extent they are effective to be presented in other comprehensive income. Under previous Indian GAAP, changes were reflected in Hedging reserve.
- vii. As per eligibility criterion under IndAS on Finance lease, written down value on component of Leasehold land has been reclassified to other non-current asset and current asset. Amortisation component related to leasehold have been reclassified to "Other expenses".
- viii. Capital work-in-progress relating to Intangible portion classified as Intangible under development.
- ix. Interest accrued on borrowing classified under other financial liabilities have been added to respective related borrowings.
- x. Under the previous GAAP, excise duty on sale of goods was reduced from sales to present the revenue from operations. Whereas, under Ind AS, this excise duty is included in the revenue from the operations and corresponding expenses is included as part of total expenses. The change does not affect total equity as at April 01, 2015 and March 31, 2016, profit before tax or total profit for the year ended March 31, 2016.
- xi. Prompt payment discount presented under Other expenses have been netted off against sale of goods. This has no impact on equity and profit.

### 49. Events after the reporting period

No significant event is to be reported between the closing date and that of the meeting of Board of Directors.

### 50. Approval of financial statements

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors in their meeting held on May 9, 2017.

## Glossary

### A Performance Ratios

EBITDA/Net Sales %	$\text{EBITDA} = \text{PBT} + \text{Interest} + \text{Depreciation} - \text{Exceptional items}$ $\text{Net Sales} = \text{Gross Sales} - \text{Excise duty on Sales}$
PBIT/Net Sales %	$\text{PBT} + \text{Interest} - \text{Exceptional items}$
Asset Turnover times (excluding Investments)	$\text{Net sales} / \text{Average of Total assets excluding Investments}$
Return on Capital Employed %	$\text{PBIT} / \text{Average Capital Employed}$
Average Capital employed	$\text{Average of Shareholder's funds} + \text{Loan funds} + \text{Non-Controlling interest}$
Return on Equity	$\text{PAT} / \text{Average of Shareholder's Funds}$

### B Leverage Ratios

Interest Cover times	$\text{EBITDA} / \text{Interest cost}$
Debt Equity Ratio	$\text{Total Debt} / \text{Shareholders Funds}$
Debt/Total Assets	$\text{Total Debt} / \text{Total Assets}$

### C Liquidity Ratio

Current Ratio	$\text{Current Assets} / \text{Current Liabilities}$
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### D Activity Ratios \*

Inventory Turnover days	$\text{Average Inventory} / (\text{Turnover} / 365)$
Receivable Turnover days	$\text{Average Receivables} / (\text{Turnover} / 365)$
Creditors No of days	$\text{Average Trade Creditors} / (\text{Turnover} / 365)$
Cash Cycle days	$\text{Inventory Turnover} + \text{Receivables Turnover} - \text{Creditors No of days}$

\* based on Turnover and average of opening/closing parameters

### E Investor related Ratios

Price to Earnings Ratio	$\text{Average share price of monthly high low} / \text{EPS}$
Enterprise Value/EBITDA	$\text{Total Enterprise Value} / \text{EBITDA}$
Enterprise Value/Net Sales	$\text{Total Enterprise Value} / \text{Net Sales}$
<sup>^</sup> Enterprise Value	$\text{Market Capitalisation} + \text{Loan Funds} + \text{Non-controlling interest} - \text{Cash \& Cash Equivalents}$



## THE SPIRIT OF THE MURUGAPPA GROUP



### THE FIVE LIGHTS

The values, principles and beliefs that have always guided us and continue to show the way forward.

#### INTEGRITY

We value professional and personal integrity above all else. We achieve our goals by being honest and straight forward with all our stakeholders. We earn trust with every action, every minute of every day.

#### PASSION

We play to win. We have a healthy desire to stretch, to achieve personal goals and accelerate business growth. We strive constantly to improve and be energetic in everything that we do.

#### QUALITY

We take ownership of our work. We unflinchingly meet high standards of quality in both what we do and the way we do it. We take pride in excellence.

#### RESPECT

We respect the dignity of every individual. We are open and transparent with each other. We inspire and enable people to achieve high standards and challenging goals. We provide everyone equal opportunities to progress and grow.

#### RESPONSIBILITY

We are responsible corporate citizens. We believe we can help make a difference to our environment and change lives for the better. We will do this in a manner that befits our size and also reflects our humility.

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