

CW

₹200

January 2018 • Vol.20 No.4

ASAPP
INFO GLOBAL GROUP

www.ConstructionWorld.in

t/CWmagazine

f/ConstructionWorldmagazine

Construction World

Largest Circulated Construction Business Magazine
with editions in India and Gulf

Report: Excon 2017!...78

Construction Software...108

Interviews:

- Municipal Corporation Amritsar...76
- Welspun Enterprises...106

“ We intend to award projects worth ₹3 lakh crore for Bharatmala this year and ₹3.5 lakh crore for Sagarmala by March 2018. ”

- Union Minister Nitin Gadkari

CONNECTING INDIA...54

Instant Subscription



Uniglaze

Uniglaze

Uniglaze

CONTENTS

52

COVER STORY CONNECTING INDIA

The government's flagship programmes Bharatmala and Sagarmala will transform the nation, boost economic development and unleash a tsunami of opportunity for the construction industry and allied sectors.

- **Interview:** Nitin Gadkari, Minister for Road Transport & Highways, Shipping and Water Resources, River Development & Ganga Rejuvenation, Government of India
- **Bharatmala:** Beyond Connecting Roads
- **Sagarmala:** All for Ports

Perspectives:

69

"We plan to increase our complete range of road equipment for India."

- **Wu Song, Managing Director, LiuGong South Asia, and Nischal Mehrotra, Director (Sales & Marketing), LiuGong India**

70

"JCB India is transforming in to a full range infrastructure equipment partner."

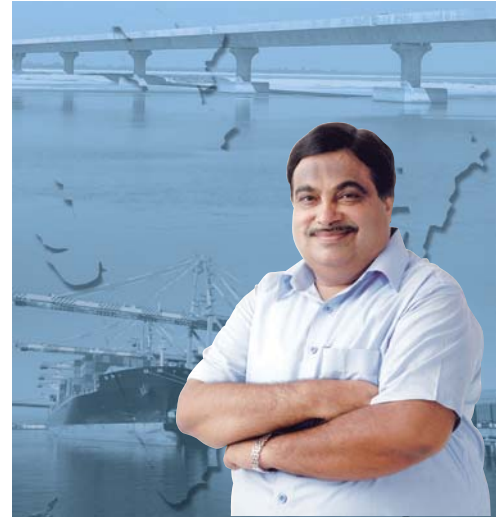
- **Jasmeet Singh, Head-Corporate Communications and External Relations, JCB India**

72

"Essentially, road construction and allied equipment will get a boost."

- **Rajinder Raina, General Manager-Strategy & Business Development, Escorts Construction Equipment**

Cover Photo: Nitin Gadkari, Minister for Road Transport & Highways, Shipping and Water Resources, River Development & Ganga Rejuvenation, GoI



FEATURES

108

Construction Software

CW explores the key look-for's in design, estimation and control solutions aimed at cutting costs in a competitive construction environment.

78

@ Excon 2017!

Held from December 12-16, the expo spread across 250,000 sq m housing 925 exhibitors including 275 companies from across the globe. **CW** gives a sneak peek into the look and feel of the expo in Bengaluru.

- | | |
|---|--------------------------------------|
| • Action Construction Equipment | • Gmmco |
| • Ajashy Engineering Sales | • Larsen & Toubro |
| • Atlas Copco Power Technique | • Mahindra & Mahindra |
| • BKT | • MB |
| • Bonfiglioli Riduttori Spa | • Putzmeister Concrete Machines |
| • Case New Holland Construction Equipment (India) | • Sany Heavy Industry India |
| • Caterpillar India | • Schwing Stetter Sales And Services |
| • Columbia Machine Engineering (I) | • SSAB India |
| • Epiroc India | • Tata Motors |
| • Escorts Construction Equipment | • Volvo CE India |
| | • Wirtgen India |



Photo courtesy: Trimble Solutions



CONTENTS

46

CURRENT AFFAIRS

- Water Resource Ministry identifies 10 HAM projects for Ganga Rejuvenation.
- Panel formed to solve the issue of NPAs in the power sector.
- Five mega industrial parks to give logistics a push.
- MoU signed for first dedicated OEM park in India.

128

TECHNOLOGY

Underwater Feats

Afcons gives India its first underwater Metro tunnel in Kolkata. **Virender Kaul, Project Manager, East West Metro Project, Kolkata**, writes on the technique that led to the fulfilment of this vision.

76

CIVIC SENSE

"We aim to make Amritsar an internationally oriented, green and vibrant city."

- **Municipal Corporation Amritsar** shares details on the projects under the smart city mission.

106

ON CONTRACT

"Our current HAM portfolio stands at an aggregate bid project cost of ₹4,200 crore."

- **Asim Chakraborty, COO-Roads, Welspun Enterprises**, speaks about the company's plans.

IN THIS ISSUE

10 Index	26 Smart Cities Update
14 Editor's Note	28 Power Update
16 Letters	32 Transport Update
18 News & Events	40 Cement Update
20 Project Update	166 Advertisers' Index

CWBIZ NEW LOOK

134 50+ Upcoming Projects	156 Tenders
150 Product Parade	158 Contracts Awarded
160 Building Material Prices	168 Newsmakers
164 Diary	

In the CW February 2018 issue, look for:

- Features: • Plumbing-Pipes & Pumps
• HVAC

CW PROPERTY TODAY ...113



114

COVER STORY

REALTY FUNDS

What's hot in realty finance: Debt or equity, residential or commercial, affordable housing or premium property?

126

BIG B

"We have witnessed about 100% growth."

- **Sanjay Jain, Group Managing Director, Siddha Group** speaks on the company's plans in metros.

128

TECHNOLOGY

Tall Tech Talk

While the real-estate sector continues to operate in a more transparent scenario where offering promised quality and meeting timelines have become paramount, **CW** explores the role of tunnel form technology in achieving these goals.

124

REAL ESTATE UPDATE

130

PROPERTY RATES



CW[®]

Construction World

www.ConstructionWorld.in

EDITOR'S NOTE

2018: A WATERSHED YEAR?



'Disruption' was an off-used word in 2017. Sometimes it was used when describing a phenomenon that turned an existing business model on its head, as Uber and Airbnb did. But more often than not, it was used when wishful thinking was allowed over logic, or when no clear solution was visible.

In essence, disruption represents a desire to change the status quo. Jio has challenged the status quo, but then it has deep pockets. Meanwhile, HAM tried to be a game-changer but did not get the desired results. The smart cities mission took on urban rejuvenation through inspiration – but it has achieved limited success.

That said, land pooling by Andhra Pradesh proved to be an intelligent solution. And, the Insolvency and Bankruptcy Code has been a game-changer. It is addressing the need to revive assets that have potential for productivity but need some respite. Assets changing hands will ensure that they do not lie idle and rot. Putting them to use enhances the GDP.

In the construction sector, too, consolidation is the name of the game. Stressed owners are selling prime assets and seeking a new lease of life. New buyers are seeking revenue earning assets at good value. This allows a more liquid market in trading revenue-yielding assets such that the investor has an exit route and can free up capital in engaging with new opportunities.

Our cover story sets the tone for the year 2018 as **Union Minister Nitin Gadkari** spells out his plans for

Bharatmala and Sagarmala with timelines and investments. Gadkari's commitment to work and penchant for numbers and details are legendary. After meeting our editorial team at 7 am, he continued the discussion through his personal grooming process and then set out for the airport! He has a challenge ahead of him as he revs up to accelerate the road construction per day rate.

Indeed, the year ahead is likely to be a watershed one for the construction industry. Here's why:

- The GST effect has stabilised and demand is limping back.
- The demonetisation wounds have healed.
- Ease of doing business has helped ease regulatory hurdles.
- The Insolvency & Bankruptcy Code has helped revived several projects.
- Credit disbursement has picked up and private-sector investment is likely to revive.
- Uttar Pradesh, Haryana and Gujarat are likely to expedite their projects.
- There will be ample provision for big-ticket infrastructure projects as next year's Budget is likely to be completely populist.
- Maximum contracts will be awarded in FY2018-19 so that they are secured before the election code kicks in by the time of the next Budget.

In other news, **SM@RT URBANATION** opens on March 22-23, 2018, in Hyderabad. Over 25 city officials will descend to seek knowledge on the latest technological smart solutions for cities at the two-day summit and expo, including an evening of awards.

To know more, check out www.SmartUrbanation.com.

And don't forget to keep your eyes on **CONSTRUCTION WORLD** on the web and print – we'll keep you up-to-date on every opportunity so you can stay ahead!

Follow me on twitter @PratikPadode

/ConstructionWorldmagazine

/CWmagazine

Group Managing Editor
Falguni Padode
Falguni@ASAPPinfoglobal.com

***Sr. Assistant Editor**
Shriyal Sethumadhavan
Shriyal@ConstructionWorld.in

Press Releases
pr@ASAPPinfoglobal.com

Managing Director
Pratap Padode

Vice President - Sales
Sobers George
George@ASAPPinfoglobal.com

For Advertisement
Adsales@constructionworld.in

Chief Manager - National Sales
Sandeep Rangroo : +91 84220 43000

Mumbai
Dipti : +91 84228 74027

Pune/Gujarat
Abhijit : +91 81085 43000

South
Sudhir : +91 8422987406

Subscription
Sub@ConstructionWorld.in
Tel: 022-2419 3000/6526 7838.

Published by:
ASAPP Info Global Services Pvt Ltd, A-303,
Navbharat Estates, Zakaria Bunder Road,
Sewri (West), Mumbai-400 015.
Tel: 022-2419 3000. Fax: 022-2417 5734.

Branch Offices

Delhi: Tel: 011-4656 1818.
Bengaluru: Tel: 080-40959611/40949259/42194502.
Pune: Tel: 020-26162900 / 020-41201833.
Chennai: Tel: 044-4299 1234/08422874017.
Kolkata: Tel: 033-6450 0465/6456 0011.
Ahmedabad: Tel: 079-2646 4890/2656 0872.

*Responsible for selection of news under the PRB Act. All rights reserved. While all efforts are made to ensure that the information published is correct, Construction World holds no responsibility for any unlikely errors that might have occurred.

All rights reserved. While all efforts are made to ensure that the information published is correct, Construction World holds no responsibility for any unlikely errors that might occur.

Printed and Published by Tarun Pal on behalf ASAPP Info Global Services Pvt Ltd, printed at Indigo Press (India) Pvt Ltd, Plot No 1C/716, Off Dadoji Konddeo Cross Road, Between Sussex and Retiwal Ind. Estate, Byculla (East), Mumbai-400 027 and Published from A-303, Navbharat Estates, Zakaria Bunder Road, Sewri (West), Mumbai-400 015. Editor : Pratap Vijay Padode.

CONSTRUCTION WORLD is a member of INS. Subject to Mumbai jurisdiction only.

The information on products and projects on offer is being provided for the reference of readers. However, readers are cautioned to make inquiries and take their decisions on purchase or investment after consulting experts on the subject. CONSTRUCTION WORLD holds no responsibility for any decision taken by readers on the basis of information provided herein.



To subscribe to the digital edition of CWIndia log on to: www.ConstructionWorld.in/Magzter

@ Excon 2017!



Held from December 12-16, the expo spread across 250,000 sq m housing 925 exhibitors including 275 companies from across the globe. **CW** gives a sneak peek into the look and feel of the 9th edition of the expo in Bengaluru in 2017.

Much to its success, CII Excon 2017 concluded with an overwhelming response from participants and visitors. True to its theme, 'Smart Technologies Fueling Next Gen Infra', 'optimism' was the sentiment among exhibitors as well as visitors. This was also evident in the new launches, key handovers, JV announcements and the discussions at the conferences held alongside the expo. The footfall and

rush hours were also testimony to the successful edition!

Aligned with the government's 'Make in India' vision, Excon 2017 emerged as an imperative platform bringing together leading global and domestic construction equipment players to demonstrate their world-class technological prowess and capabilities. The event provided an opportunity for participants to network; discuss and debate on the

opportunities and challenges in creating world-class infrastructure.

With the Government of Karnataka being the Host State for Excon 2017, the Indian Construction Equipment Manufacturers Association (ICEMA) was the Sector Partner and the expo was supported by the Builders Association of India (BAI).

Anant G Geete, Union Minister for Heavy Industries and Public Enterprises, Government of India,



Excon 2017 emerged as an imperative platform bringing together leading global and domestic construction equipment players to demonstrate their world-class technological prowess and capabilities.

inaugurated the 9th edition of the expo. Among other industry leaders, present at the inaugural session were **Amitabh Kant, CEO, Niti Aayog; Vipin Sondhi, Chairman, CII EXCON 2017; Arving Garg, President, ICEMA; Hari Sankaran, Chairman, CII National Committee on Infrastructure and PPP; and Kamal Bali, Chairman, CII Karnataka State Council.**

There were also sessions on 'Government Projects-The Key Enabler', 'Infra Development-Voice of Customers' and on 'Future Technologies-Its impact on construction equipment industry'. This apart, there were panel discussions by dignitaries in the Infrastructure Summit and a special CEOs Roundtable.

CII and ICEMA organised a Conference on 'Nextgen Infrastructure', presenting the

advancement of technology and integration of IT in building world-class infrastructure. This was attended by Chief Guests **RV Deshpande, Minister for Large & Medium Industries and Infrastructure Development, Government of Karnataka and KT Rama Rao, Minister of IT, Municipal Admin & Urban Development, Industries & Commerce, Public Enterprises, Sugar, Mines & Geology, NRI Affairs, Government of Telangana.** The Guest of Honour was **TCA Ranganathan, Former Chairman & Managing Director, Export-Import Bank of India.**

Speaking at the event, Deshpande said, "Creation of human resources is the biggest challenge in the present day and has urged the infrastructure industry captains to create good jobs. We have already created more than

13 lakh jobs by September 2017 and 5 lakh more jobs are in the pipeline." Adding to this, Rao said, "Both the government and private sectors need to come out with a 'jugaad' model, among others, to create more robust infrastructure. If you want India to propel to a global economy, the country needs infrastructure but with unique innovation."

What's more, there has been tremendous backing from renowned international associations such as Germany Engineering Federation (VDMA); Korea Construction Equipment Manufacturers Association (KOCEMA); Confindustria Modena and UNACEA, Italy; China Council for the Promotion of International Trade (CCPIT); and Construction Equipment Distributors and Manufacturers Association of Turkey (IMDER). Also the exhibition had dedicated country pavilions including leading economies like China, Germany, Italy, China, South Korea and the UK.

This apart, extensive business talks were on in the outdoor space and four halls. Planned activities by several exhibitors – such as the JCB's dancing diggers – to attract visitors were certainly crowd-pullers, and live demos by select companies engaged visitors to getting a first-hand experience of how the equipment functions and operates.

Amid this busy edition, the CW team recorded the optimism at the expo by interacting with the industry big-wigs, covering the many launches and key handovers, among others. Having interacted with the who's who of the construction equipment industry, here's offering an overview of the technological innovations and, new launches at the expo.

FEATURE-EXCON 2017



The JCB showcase: Introduced the world's first backhoe loader with an automated manual transmission and its largest Made in India 38-tonne tracked excavator. The company is now leveraging digital technology by integrating Big Data and IoT in its products and services. The new range of intelligent machines exhibit a blend of technology and digital innovation to build India's Next Gen infrastructure.



Ajax Fiori launched a wide range of its series of concreting equipment, including the biggest machine of the entire fleet, The Inline Bin Batching Plant 120 cu m and the very first 26-m boom pump in the Indian industry.



Launching of BL30-1 Wheel Loader by Amitabh Kant, CEO, Niti Aayog. Also, in the picture, Deepak Kumar Hota, Chairman and Managing Director, BEML and BR Viswanatha, Director (Mining and Construction).



CASE unveiled Vibratory Tandem Compactor, Pro Series Loader Backhoe and Only Loader – (L-R) Abhijit Gupta, Brand Leader & Managing Director, Case New Holland Construction Equipment (India); and Gabriele Lucano, Country Head-India, CNH Industrial (India).



Eaton announced the introduction of CMA200 – an advanced CAN-Enabled electro-hydraulic sectional mobile valve for the Indian market – and Dynamax EC881 – a high performing two wire braided hose qualified for 1 million impulse cycles.



Santhosh Rao P, Managing Director, Palfinger Cranes India. (His interview with more details will be featured in the **CW February 2018** edition.)



Epiroc Mining India commenced its journey as an independent business entity.



LiuGong India announced the launch of two all new products – 921D I Excavator and 611 Compactor – (L-R) Wu Song, Managing Director, LiuGong South Asia and Nischal Mehrotra, Director (Sales & Marketing), LiuGong India.



Escorts Construction Equipment unveiled India's safest pick-n-carry crane. In the pic: Ajay Mandahr, CEO, Escorts Construction Equipment, handing over the key to a customer.

FEATURE-EXCON 2017



The Gmmco team handing over the key to the company's key customers.



KYB-Conmat launched four new construction equipment – the new Fixed Form Concrete Paver, the new Side Discharge Conveyor, the new 9 cu m truck mixer, and a high speed 1 tonne Rack and Pinion Elevator.



Hyundai Construction Equipment India (P) showcased its technological prowess with the company latest SMART Series of excavators. In the picture: Inauguration by Amitabh Kant, CEO, NITI Aayog.



SANY India launched futuristic products – Heavy Equipment Pilling Rig SR285, BP HZS120, STM7, STM8, Rough terrain crane SRC750, truck crane SPC250, Concrete Pumps and Compactor and Excavators SY500LC-9H and SY120.



SDLG launched two new compact wheel loaders – the 3-tonne-rated L936L and 4-tonne-rated LG946L.



L&T steps up Make in India mission, unveils three new machines for Road Construction – Hydraulic Paver L&T 5590H, Pneumatic Tyred Roller L&T 2490HD and Skid Steer Loader S315R.



Schwing Stetter launched 18 new products, which included Schwing Stationary Concrete Pump SP 1015; Schwing Stationary Concrete Pump SP 1330; Stetter Batching Plant M3; Stetter Self Loading Mixer SLM 2200; Gomaco Concrete Paver GP 2600; Schwing Plastering Pump S30HD40-FU-TM100; SCHWING – XCMG Tower Crane XT 335 (8020-16); XCMG Crawler Crane XGC 85; XCMG Type Milling Machine XM1003; XCMG Motor Grader GR 1605; XCMG Rotary Drilling Rig XR180D; XCMG Aerial Work Platform GTJZ1012, GTJZ1212, GTBZ18A1, GTBZ22S; XCMG Horizontal Directional Drilling XZ (200/320) D; and Gomaco Concrete Paver with Independent Dowel bar inserter, etc.

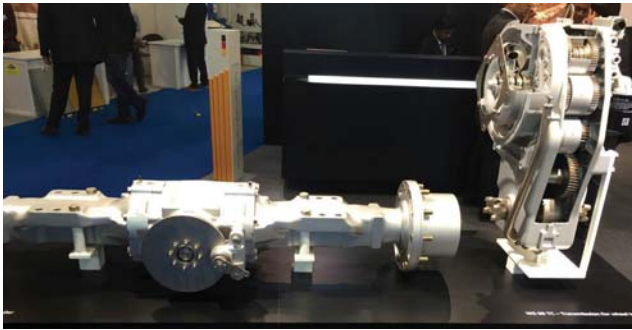
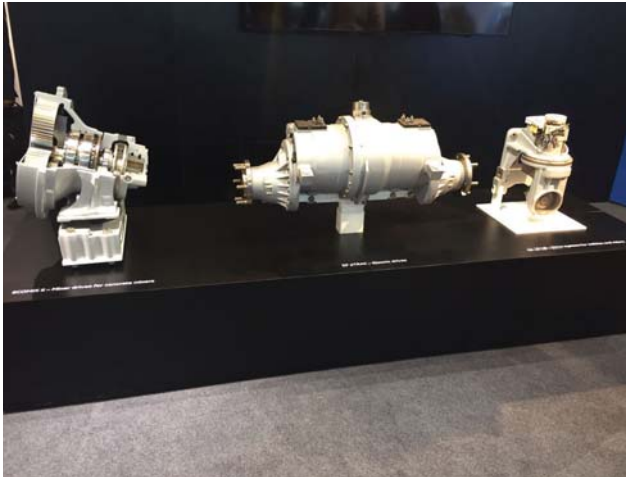


Unveiling of the all new backhoe loader, Tata Hitachi Shinrai. In the picture: (L-R) Shin Nakajima, Director Sales, Marketing & Customer Support; Kotaro Hirano, President and CEO, Hitachi Construction Machinery Japan; P Telang, Chairman, Tata Hitachi; Sandeep Singh, Managing Director, Tata Hitachi; and Warren Harris, Managing Director & CEO, Tata Technologies.



MB Crusher live demo at Excon 2017.

FEATURE-EXCON 2017



ZF showcased construction machinery systems, chassis components, latest mixer drive technology and electric drives for off-highway applications.



The CEAT team.



Eicher Trucks & Buses showcased its entire range of Heavy duty Pro series trucks for Construction & Mining at Excon 2017. The company launched a series of initiatives, including an On-Road-Service App and On-site Support to partner mining and construction customers. In the picture: (L-R) Rama Rao AS, EVP-HD Trucks; Vinod Aggarwal, Managing Director & CEO-VECV; and Siddharth Kirtane, Vice President-Marketing.



Haulotte



HT28 RTJ PRO

A BLEND OF PRECISION AND STURDINESS

With the best outreach and its exclusive 350 kg load capacity, the 28m articulating boom is the machine you expected. Our latest innovations in terms of safety and return on investment are about to become your new standard:

- > NEW Activ'Lighting System for easy and safe loading and unloading procedures
- > NEW generation of Activ'Shield™ Bar to protect operators from risks of crushing
- > NEW Stop Emission System that automatically stops and restarts the engine
- > NEW Activ'Screen with on-board diagnostic system to support users in maintenance operations



DISTRIBUTOR - ALL INDIA : GEMINI HOUSE BUS DEPOT LANE, DEONAR, MUMBAI, MAHARASHTRA,
400088, INDIA - TELEPHONE: +(91)-(22)-66819999 EMAIL: INFO@GEMINIINDIA.COM

HAULOTTE INDIA PRIVATE LIMITED - UNIT NO. 1205, 12TH FLOOR, BHUMIRAJ COSTARICA,
PLOT NO. 1 & 2, SECTOR 18, PALM BEACH ROAD, SANPADA, NAVI MUMBAI - 400 705 - MAHARASHTRA, INDIA.
CIN - NO.U29253MH2013PTC242733 - OFFICE PHONE: +91 22 66739531 TO 35 OR +91 7738165646
EMAIL: HLGINDIA@HAULOTTE.COM OR SRAY@HAULOTTE.COM



Haulotte

www.haulotte.in

FEATURE-EXCON 2017

TATA MOTORS



“We have modified the vehicle design to improve on the technology.”

With the current impetus on construction and infrastructure projects, for Tata Motors the construction sector will grow over the next two to three years. “We at Tata Motors are also betting big on tippers now and the subsequent years going forward because of the positive growth and demand drivers,” says **Rajesh Kaul, Head-Sales & Marketing-M&HCV, Commercial Vehicle Business Unit, Tata Motors**. He shares more...

Technological innovations: Our product Prima of 300 hp offers EGR technology. Each product over 150 hp works on the SCR technology. The engine in itself burns out the particulate matter at high temperatures and transfers this through the diesel exhaust fluid in the decomposition area and exhaust processor. We also have a concept called Tata Ok, through which we offer resale support. To improve efficiency, we have modified the vehicle design to improve on the technology. We have our Ultimix suspension as a solution for all terrain compatibility. Our products are also light in weight. In tippers, we have introduced steel bodies to reduce the weight between 700-1,500 kg. We have also improved on transmissions, bringing in six speed transmissions that benefit the driver. In developed countries, high torque capacity transmissions range from nine speeds to 12 speeds. These transmissions give our customers equipment of the best quality. At Tata Motors, we carry out an integrated R&D with a budget of Rs 2,500 crore. This research is exclusively for engineering and commercial vehicles.

Global trends: Engine is one major element, which calls for maintenance. Electrification will bring down the maintenance and running cost. It depends on the cost of electricity. However, battery technology is an area today that needs improvement. It is not yet viable for a commercial vehicle of every kind. The vehicles amenable for electrification are the city buses where they make huge sense, also last mile passenger transport or last mile goods transport vehicles make sense.

BONFIGLIOLI



(L-R) Stefano Baldi and Kennady V Kaippally

“We provide international quality products suited for Indian conditions.”

Bonfiglioli is one of the top-most international players in transmission products, which has some long-term plans for the Indian market. **Kennady V Kaippally, Country Manager, BU Mobile & Wind Solutions, Bonfiglioli Transmissions**, and **Stefano Baldi, Global Sales Director, BU Mobile and Wind Solutions, Bonfiglioli Riduttori SpA**, share more...

Current industry scenario: We think the industry is slowly coming out of the recent challenges that it faced in terms of GST and demonetisation. With the GDP picking up again, we are going to see a positive impact of this in the long term. What we are sure about is a double-digit growth in the coming years but different segments of the construction equipment industry will have different growth figures. For example, excavators will probably have much higher rate of growth than backhoe loaders because it will be used more in specialised applications. Both these equipment need to be there as a lot of projects are coming up,



COD AVAILABLE



72 HOURS FLAT DELIVERY



ONLINE CONCIERGE HELP



TATKAL QUOTE REQUEST



TECHNICAL DATA SHEETS AVAILABLE

SHOP BEST INDUSTRIAL ELECTRICAL PRODUCTS ONLINE, ONLY ON

VASHIELECTRICALS.COM

SHOP NOW >>



WIRES & CABLES



SWITCHEARS



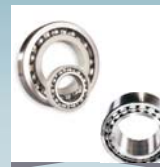
GEARED MOTORS



MOTORS



LIGHTING



BEARINGS



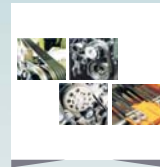
FUSES



SWITCHGEAR & AUTOMATION COM.



MCB'S/WIRING ACCESSORIES



V-BELTS



DIGITAL PANEL METERS



INDUSTRIAL LUBRICANTS



INDUSTRIAL AUTOMATION



TERMINAL BLOCKS

AUTHORISED CHANNEL PARTNER

SIEMENS

legrand

ABB

COOPER Bussmann

Bonfiglioli

hindustan ELECTRIC MOTORS

Panasonic

Finolex

POLYCARB

uniSTAR

RR/KABEL

PHILIPS sense and simplicity

SKF

OMRON

connectwell

ELMEASURE

Continental

Castrol

Sapphire Automation



SCAN THIS CODE



A-6, Plot No. 74, Shree Ganesh Complex, Behind Gupta Compound, Dapode Road, Mankoli Naka, Bhiwandi - 421 305. TOLL FREE: 1800 266 1658

MUMBAI
02522-661600

GURGAON
0124-4989575

TURBHE
022-27626300

AHMEDABAD
079-29703795

BANGALORE
080-26746116

VADODARA
0265-2630399

HYDERABAD
040-23097734/5

CHENNAI
044-24760381

KOLKATA
033-66301111

INDORE
0731-4045388



www.vashielectricals.com



buyonline@vashielectricals.com



/vashielectricalscom



/vashielectricals



/vashielectricals

but we expect specialised equipment to gain ground. The areas of concern would be mining, which is still to pick up but when commodity prices are going up, we think that mining has to come up because demands are going up.

Bonfiglioli has a long-term vision for India. We started investing in our new factory in 2016. We are in the finishing stage of this new facility in Chennai, which will be operational by mid-2018. The new facility will increase our capacity by 50 per cent.

New products and solutions: Existing products are an ongoing business in Bonfiglioli. Our in-house R&D facility works closely with customers, understanding their applications, changing needs and we keep on improving our portfolio to meet their requirements. When there is a new product coming up for customers based on their application, we design the product in India for them. In the new product lines, most of the new concepts and designs are coming from electric driven machines, which are more environment-friendly. The traction for this technology is seen in material handling equipment, because the power density recommendations are little conducive for electric drive in material handling equipment. So eventually, with the knowledge gained in this industry, we will apply similar concept in other areas also, such as road construction equipment, concrete machinery and others.

We design India-specific and application-specific products because Indian applications are different from other parts of the world. We can give complete solutions for the spectrum of applications in India. We have products within our portfolio, which can meet the needs of the Indian OEM customers. We can provide any of their development needs or future application needs.

Contributing to efficiency and productivity: When you talk about productivity there are two aspects: One is product performance and the second is product uptake. We bring in product performance by designing products, which suite the application requirement and brings in certain productivity. Secondly, we are the world leading technology players in the transmission industry globally. So that is the legacy what we are bringing here and offering products suited for Indian conditions. Thus, we are bringing in advantages to the customer in terms of improving their efficiency and reliability. Making sure that their machines are always running, comes from product reliability, which we provide by bringing in world-class products at best in class quality.

CATERPILLAR INDIA



“We design our products and solutions to make our customers more successful.”

Many customers are looking for a collaborative partner to help them achieve the most efficient and productive operation possible. “To be a true partner, Caterpillar India is developing not only products and technologies, but a solutions-based organisation that can operationally partner with our customers to help them realise that value,” says **Amit Bansal, Head-Sales & Marketing Building Construction Products, Caterpillar India**, as he shares more...

Equipment demand and growth: As construction activities gain pace in the country, demand is likely to grow for high-productivity equipment, though traditional machines will also maintain their space. Equipment like excavators, motor graders, wheel loaders, paving machinery, etc, is expected to experience higher demand primarily in the road segment. Housing is also likely to bounce back and backhoes, mini-excavators, skid steers, etc, will find favour there.

Big opportunity sectors: India is a developing country; with respect to our population, there is tremendous potential to develop infrastructure. The government has focused on all the segments mentioned above as they are important for the country’s growth. In terms of big-ticket spends, roads, railways, housing and irrigation offer a major opportunity. Caterpillar has a broad range of construction and mining equipment, diesel engines and gas turbines and has appropriate solutions for these sectors. Our customers are developing the world

– they could not do it without our engines, equipment and assistance.

Technological advancements: During Excon this year, we launched many new products, such as Cat 426F2, 424B2 backhoe loaders, Hindustan 2021D wheel loader and Cat 336D2 excavator as smart iron, which reinforces our plans for the construction equipment sector. We also plan to provide further impetus to our presence in the energy and transportation sectors. Globally, Caterpillar has a major presence in the energy and transportation sectors, especially in oil and gas, renewable energy, etc, with its wide range of products such as draglines, drills, pipe layers, marine power systems and electric and gas-based engines of various capacities.

Fuel savings and operator-efficiency: We are committed to our customers' success and design our products and solutions to make them more successful by using Caterpillar products rather than products from any other competitors. Cat Connect solutions offer various technologies and services to help our customers maximise machine output and increase fuel-efficiency.

CATERPILLAR INDIA



(L-R) Murali Achutaraman, Vivekanand Vanmeeganathan and Andy Dhanraj

“Our growth is going to be synonymous with industry growth.”

With the government's focus on construction and infrastructure, Caterpillar India is positive about opportunities coming along. **Vivekanand Vanmeeganathan, Managing Director & Country Head; Andy Dhanraj, Sales Director, Global Construction and Infrastructure; and Murali Achutaraman, National Accounts Manager,**

Global Construction and Infrastructure, from Caterpillar India, share more...

Demand drivers: Two years ago, there were a lot of announcements from the government, but not much activity on the ground. However, since then, there has been activity, which has given a lot of confidence to contractors and customers. Today, we are seeing all announcements translate into opportunities. For instance, in terms of roads, 30 km per day is real data. So we have been witnessing that a lot of customers are buying more machines to meet this target.

Company's growth rate: ICEMA launched a report at Excon's inaugural session, which typically looked at the industry outlook. Our growth is going to be synonymous with industry growth. The report pointed to a 10-12 per cent CAGR year-on-year for the next five years. The pipeline of projects awarded is typically long term with a natural gestation period attached to it. So the report is conservative and will say that the industry will be worth Rs 8 billion in 2020 and then continue to grow at 12-15 per cent till 2023. However, I would say that even with a conservative estimate, the industry will be approximately Rs13 billion by 2025 because of a 12-15 per cent growth rate. India is definitely positioning itself to be the world's third largest construction equipment industry when it happens.

Innovative technology: Let's take the wheel loader, for example. It scoops the materials and dumps it into the loader and the haul. Each time the wheel loader scoops, there should be some record of how much is it lifting and how much it is pouring down; in the case of coal, each kilogram matters. We have a technology inbuilt in the machine; when the operator scoops the material, it automatically calculates how much it is lifting and pouring. In another instance, let's consider an excavator and even motor grader. The key success of a motor grader job in a road contract is how the customer can save on cost. Caterpillar offers a technology called Accugrade in our machine. This helps maintain a uniform thickness for every material that is laid. Thus, the customer can be sure that he will use the material, just as required. One does not have to waste money and energy to refill, redo, undercut or overcut. Apart from these, there are many other technologies that our machines are equipped with. Caterpillar offers job site solutions, which increase fleet utilisation, control costs and use capital more efficiently. Our best application experts work with customer teams for designing and executing site-specific plans to improve productivity, manage the equipment lifecycle, enhance safety and sustainability, and optimise cash flow.

EPIROC INDIA



“We offer both locally made as well as imported products.”

Epiroc Mining India commenced its journey as an independent business entity at Excon 2017. Atlas Copco Group had, in January 2017, announced the group splitting into two world-class companies – Atlas Copco and Epiroc. While Atlas Copco would cater to industrial customers, Epiroc would focus on mining, infrastructure and natural resources. **Jerry Anderson, Managing Director, Epiroc India**, shares more...

Key offerings in the Indian mining sector: Our major offerings to the Indian mining sector are a large range of high productivity equipment through innovation and strong local customer support. We offer both locally made as well as imported products, all with the same high quality. The next step on our agenda is improving digitalisation. We talk about digitalisation in the machine industry but for most people it's the same as receiving figures on their phones sitting in their cars. We take it a step further by offering analyses that help prevent breakdown of our equipment and systems that track people and equipment underground, resulting in better planning and execution and greater protection for our customers. Prospective clients have already shown interest in these applications.

Indian mining sector scenario: Although the sector has been somewhat dampened by regulations and tax issues, it has development potential. Also, there are few mining companies, which explains why only 10-15 per cent of mining area has been explored. A lot still needs to be done on the execution side; processes need to be speeded up. The next five years will be an exciting time for mining companies with new policies set to make the mining sector a major economic growth driver.

Growth targets and strategies: Our key focus area in India is to improve our operations. Whatever we do, we can always find a better way to do it. We need to maintain our relations with distributors and customers, and make sure the transition to Epiroc goes smoothly. When it comes to growth, I do not expect less than double digits in a few years' time.

ESCORTS CONSTRUCTION EQUIPMENT



“We are growing at about 30 per cent.”

With the market growing at 12-15 per cent overall, the compactor segment is at over 23-25 per cent. “In the case of Escorts, we are growing at about 30 per cent,” says **Ajay Mandahr, Chief Executive, Escorts Construction Equipment**. “We cater to material handling, earthmoving and road construction. All our served segments are currently on the growth trajectory thanks to the infrastructure investments taking place. We are witnessing demand from all these sectors,” he says, as he shares more...

Technology innovation: At Excon, we showcased the CT Smart 15, compact crane with 6 m turning radius. The second product we launched is a compactor, which basically addresses clients looking for 12-tonne class compactors. The name is EC 3212 where – 32 (kg per cm), which stands for the static linear load and 12 (tonne) for operating weight of the machine. It is designed to give optimum performance. With this, we expect to set a new benchmark in the soil compaction market. The parameters on the machine are set to improve its productivity. At the same time, care has been taken in terms of reliability and reparability. In addition, changing filters is easy, so every point is accessible on the machine. CT Smart 15 offers a lift height of around 17 m. As you articulate, the load capacity of the machine adjusts automatically. There is a load movement indicator on the machine, besides which we are also adding an anti-lift device, thus taking the safety on site to new standards. Both these machines are developed by our R&D, keeping in view the customers' requirements in India. This dovetails well with our government 'Make in India' initiatives.

Market growth: The pick-and-carry segment has grown at 39-42 per cent over the past year. The compactor segment is over 23-25 per cent. In backhoe, the growth is just about 3-5 per cent. So, the overall market has been witnessing a growth of about 12 to 15 per cent. Amid this, we are growing at about 30 per cent. India is still an infra deficit country, and as per a study, infrastructure investment is expected to be around US\$ 7 trillion by 2025. Over US\$1.0-1.5 trillion is expected to be invested in infrastructure in the next five years. The current growth of 12 to 15 per cent is the result of the investments and activities happening on ground. The potential available for the construction equipment segment is about US\$ 20-25 billion over the next five years and hence we feel the growth of 10-12 per cent should be sustainable over the next couple of years. Another big opportunity is the housing sector, which is showing early shoots of recovery after demonetisation. Growth in the housing sector can be another big enabler for growth in construction equipment. Our current focus is to achieve sustainable growth in our strength areas and be profitable.

GMMCO



(L-R) V Chandrashekar, Robinson Devaprasad and P Ravishankar

“Caterpillar and Gmmco marching ahead!”

Gmmco has been successfully growing at about 25 per cent and is a leading player in the construction and mining industry. **P Ravishankar, Senior Vice President (Allied Business); V Chandrashekar, Vice President (CE-Sales)-MBG; and Robinson Devaprasad, Executive Vice President-HR, Training and 6 Sigma, Gmmco,** share more on the company's success factors...

On the company: Gmmco is a CK Birla group

company, in existence for over 50 years. The company has been representing Caterpillar for over 31 years. This has been one of the strongest partnerships in the industry. Caterpillar has a product portfolio to provide solutions for construction, power and the mining industries.

In addition to the Caterpillar business, Gmmco is representing other major brands such as Daimler, Kress, IMT, Sennebogen, Terex Finlay, Junttan, Allu, Trimble, etc, and is a one stop solution to meet customers' requirements.

Market scenario: Government is focusing on speeding up implementation of infrastructure projects in road, irrigation, hydro and other sectors with stringent timelines and high quality standards. Caterpillar and Gmmco brings in equipment, technology and support to meet this requirement.

People practices and training: We have over 1,800 technical people apart from functional specialists. We put them through a state-of-the-art, online training process. This happens over a period of two years and then they are put through rigorous examinations where they need to score around 80 per cent to pass, which is unusual. Further, we support customers and monitor the response time and solutions provided, and how they ensure that the client is supported the first time without error. Recently, we have also got the highest level of Product Specialist Certification by Caterpillar. We provide the same quality of services to our allied products as well. Gmmco's employee engagement is on par with industry best as rated by AON Hewitt. We are above national best on several parameters on McKinsey's Organizational Health Survey. Our Leadership Development Practices are comparable to global standards. We keep on improving as we go by.

USP of the Gmmco and Caterpillar association: Caterpillar has one of the most modern manufacturing facilities in Chennai, where it manufactures excavators, backhoe loaders, skid steer loaders, dumpers for India and certain other countries. Prime focus of Gmmco is to supply high quality equipment and support the same. Gmmco has 5-star rated state-of-the-art machine and component rebuild centres. The company has its own Scheduled Oil Sampling Lab, which enables Gmmco to proactively predict failures leading to repair, replacement of components before failure, which ensures lower down time and higher availability of equipment. It offers a range to product support programmes tailored to meet customer needs. Gmmco takes up complete responsibility on supporting the equipment and allowing customers to focus on timely execution of projects.

FEATURE-EXCON 2017

SANY HEAVY INDUSTRY INDIA



“About 5-7 per cent of the overall business is invested in R&D.”

In 2017, Sany has recorded a growth of 60 per cent. “And, we are certain that long-term gains would be much higher than the short-term pains we have today,” says **Deepak Garg, CEO, Sany Heavy Industry India**. Elaborating on the company’s launches and market opportunities, he shares more...

On product launches: At Excon, we launched the concrete equipment range. Our new transit mixers ranging from 7 cu m to 8 cu m are for a higher platform. We have just launched a whole range of concrete and road equipment. We have introduced a new 11-tonne compactor for the Indian market. We have also launched the SY500, which is a 50-tonne excavator with a 3.1-cu-m bucket, made for the mining of open cast mines. This is a popular model for us globally and this is the first time we are launching it in India. Apart from this, we have launched a small excavator called SY 120; it’s a 12-tonne excavator. Another product for display is the piling rig, which is important when it comes to building flyovers, bridges and road projects.

Technological innovation: About 5-7 per cent of the overall business is invested in R&D. We have made use of PTO high-capacity truck chassis in the transit mixers. This includes the use of Mercedes Benz chassis. We have also reduced overall material consumption in the whole equipment. For example, in SY 500, the machine is rugged and fuel economy is higher. We have made use of generation hydraulics from Japan. Operator comfort is important. Our equipment is comfortable for the user.

All cabins protect the user from rolling or falling over.

Market opportunities: The largest infrastructure opportunity is the roads industry, which includes state and national highways. Railway is another booming sector. These sectors are resulting in great demand for the infrastructure-centric equipment market. Irrigation is another area that has plunged. The rise in the construction of ports has led to huge potential for freight corridors.

Outlook for 2018: The industry is anticipating a growth of over 20 per cent in 2018. The year is expected to be a good one for us. Speaking of GST, the reduction of the tax slab from 28 per cent to 18 per cent by the government is definitely going to be beneficial.

L&T CONSTRUCTION & MINING MACHINERY



“Telematics and intelligent machines have increased productivity.”

“L&T’s Construction Equipment business has performed quite well during 2017, with good traction and growth. We have been successful in bagging many project orders for Komatsu and L&T equipment, and are upbeat on another successive year of growth,” says **Arvind K Garg, Executive Vice President & Head, Construction & Mining Machinery, Larsen & Toubro, and President, ICEMA**. He shares more...

Market scenario: Presently, the road sector offers immense opportunities for construction equipment, driven by the impetus from the Central Government

ACE

AG-176
Motor Grader

High Performance & Rugged Motor Graders

ACE INDIA'S NO. 1
MOBILE & TOWER CRANE CO.

Road Construction Equipment from India's Most Trusted Brand



Toll Free Service Help Line
1800 1800 004

www.ace-cranes.com



Tandem Rollers



Soil Compactors

Action Construction Equipment Ltd.

4th Floor, Pinnacle, Suraj Kund, NCR-121009
Ph. : 0129-4550000 (100 Lines), Fax : 0129-4550022
Mail : marketing@ace-cranes.com

| Cranes | Loaders

| Forklifts | Road Equipment

| Agri Machinery



on increasing the pace of road construction to beyond 30 km per day. Railways is another growth sector for our industry. In the southern states, major irrigation projects are on the anvil, which promise good offtake for the construction equipment. On account of ban on river sand mining, we have witnessed a number of quarries opening up across states. This will prove to be a good demand driver for the growth of the equipment market. The Bharatmala project, championed by the Government of India, will also provide a huge opportunity for us to grow.

Current trends: Apart from the focus given on road sector, Government of India is also working on development of smart cities, the Sagarmala project and improving airport connectivity to smaller towns. There is a lot of optimism attached to the river linking project and dedicated rail corridors. L&T has launched a range of vibratory compactors in early 2016 with a view to expanding its product offering in the road segment. At Excon, we launched new models of machines for the road sector, viz, skid steer loader, pneumatic tyred roller and hydraulic paver helping us in our endeavour of providing comprehensive solutions to our customers. Technologies such as telematics and intelligent machines have immensely helped in increasing the productivity and efficient utilisation of machines, and we are aggressively moving in that direction. Localisation, in line with Make in India, in my opinion, will drive expansion of employment opportunities and specialisation of sector skills. We are spearheading various training initiatives under Infrastructure Equipment Skill Council to enhance the skill levels of Operators and Mechanics, in line with the Skill India initiative.

Reforms and growth: The year so far has been good for the industry, though demonetisation did have a marginal impact on the business, for some time. There was a huge upsurge in demand pre-GST introduction, but the rates have now been rationalised for a majority of construction equipment; the ministry and policy makers have been very supportive in this respect. The system has become transparent, and that has been a boost for the industry. We are currently projecting a CAGR of around 10-13 per cent over the next three to four years, but we have to now see whether the government's focus on infrastructure development can boost growth further. India is one of the bright spots across the globe for infrastructure development and in my view, the industry and our customers have to work closely to scale up with speed.

PUTZMEISTER CONCRETE MACHINES



“We grew 30 per cent from 2016 to 2017.”

Putzmeister Concrete Machines is celebrating its 10th anniversary in India – and how! “We are showing our customers that we are closer than ever to their business by developing the machines they need, and not just by selling machines but supporting them on ways to do their business, applications, service and support,” says **Wilfried Theissen, Managing Director, Putzmeister Concrete Machines**. He shares more...

What's new: Traditionally, Putzmeister focused on concrete pumps but at the end of 2015 – pushed by our customer requests – we introduced the PM batching plants.

In 2016, we extended our product portfolio by PM mortar machines to help our customers improve the speed and quality of plastering, followed in 2017 by PM tunnelling equipment for mining and infrastructure and industrial pumps, to help cleaning India's mighty rivers, back filling mines and evacuation coal power stations solid waste.

Smartly equipped: All our products are also suitable to the smart urbanisation and infrastructure development, particularly boom pumps, which are ideal for houses up to five to six storeys and are flexible and easy to use. Also mortar equipment is great for large housing projects to speed up finishing and bring in quality. We also have concrete batching plants that stand apart with respect to design and built features.

Technological innovations: We have engineered our machines more environment-friendly by improving the engines, thereby reducing emissions as well as consumption. In addition, we have developed new cooling systems for our hydraulic circuits and reduced the hydraulic oil dramatically – from about 350 litres,

which the competition is using, to about 70 litres. Furthermore, we have been doing a lot on telematics so that our customers are able to get access to data to improve fleet management.

Operator efficiency: We provide specific services with every machine, which includes commissioning and training. Also, we can provide Putzmeister trained operators to customers who are new in the segment and do not have trained operators available. PM train's about 1,500 to 2,000 operators for its customers and above that, we train 500 additional operators. We are members of the Infrastructure Equipment Skill Council, which is the Government of India Initiative for developing skill all over India. Under this initiative, we have trained over 100 operators and will continue to do so for next year as well.

Big opportunity: The year 2017 has been excellent for us, probably the best year ever since we have been in India. We grew 30 per cent from 2016 to 2017; the market growth rate is about 10 per cent.

At present, the big opportunity is in infrastructure, mainly roads, considering that 50 per cent of the roads are concrete roads and that we are in the concrete manufacturing equipment segment. The boost will come even more for our type of equipment in the development of affordable housing as well as the smart city projects and the government's plan to develop 800 km of metro lines over the next five years.

VOLVO CE



“Infrastructure development continues to be key.”

Volvo CE offers a range of equipment across the infrastructure equipment segment such as mining and earthmoving, road building and general construction.

Dimitrov Krishnan, Vice President and Head, Volvo CE India, shares his thoughts on how his company is gearing up to meet market demands.

Industry scenario: In terms of demand volume, 2017 will be the peak year in India. The total market demand is high this year. We will cross more than 2,000 machine sales this year for the first time. In India, we are seeing most activities in the road building sector with numerous projects progressing. Understandably, we are seeing the highest levels of demand for excavators, compactors and pavers for this application and its associated industries. For other sectors, such as mining and general construction, activity levels have not been so high and so has the demand for equipment.

Infrastructure development continues to be the key growth driver in our economy and while the country is making strong progress, there is still much to be done. We remain the only major manufacturer present in all equipment sectors: Mining, road building or general construction. Whatever the demands of the job, Volvo's equipment offer the company's hallmark qualities: industry-leading fuel efficiency and productivity levels.

Product innovations: Volvo CE is at the forefront of technological development and, each year, our parent company, the Volvo Group, invests billions of dollars in research and development to drive new innovations. The newer models in our D-series excavators are equipped with G4 work modes that optimise fuel efficiency and performance. These work modes – Idle (I), Fine (F), General (G), Heavy (H) and Power max (P) – are integrated within the throttle control, so that operators can easily select the best one for the task at hand. In addition, an ECO mode automatically switches off the engine, further reducing fuel consumption.

Two of our biggest excavators, the EC950E and the EC750D, also come with an electro-hydraulic system, which enhances fuel efficiency while increasing productivity and performance. The electro-hydraulic system uses intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This provides superior digging force, shortens cycle times, and increases controllability.

Our sensor pavers have intelligent operating technology that help control the machine in terms of mat thickness as well as the level of the mat and the grade required in the finished road. The paving quality of any road is defined by the ability of the paver to satisfy these three requirements in line with the highway design.

Response at Exxon: The new EC200D excavator was the star of our lineup. We also saw great interest in the

FEATURE-EXCON 2017

21.5-tonne-rated excavator tailored for heavy-duty applications whether mining or quarrying. Our largest excavator, the 90-tonne rated EC950E, earned the title of “Selfie Machine” on the first day at Excon, drawing large crowds to our Mining Pavilion. Excon was not only a great way to conclude 2017 but also a great way to mark the 20th anniversary of Volvo CE in India.

SCHWING STETTER



“We have oriented ourselves in five major areas of construction.”

As an 84-year-old German company, Schwing Stetter has ample experience in the development trends happening in India now. **VG Sakthikumar, Managing Director, Schwing Stetter Sales and Services**, explains more on the emerging trends in the Indian construction market and how the company is preparing itself to meet market demands.

Market trends: India is a special market because we have a high population, and we have to respond to the evolving market. Today, a lot of projects are coming in, including national highways and metro-rail. Metro projects are coming up in 15 cities. This is a new reality and we have to be ready to meet the requirements of these projects. Being a German-based company, we are well aware of these situations. We have seen the growth curve of many countries, which gives us an opportunity to bring the appropriate product at the right time. We need to see how the market is evolving; when we realise there is an opportunity, we offer the particular products for the market. We have oriented ourselves in five major areas of construction, such as urban infra, rural infra, expressways, tunnels and

airport infra, metro and high speed rail and the Swachh Bharat mission. These are the areas where the government is investing heavily.

Project execution and equipment demand: Generally, there is a trend to increase the size of the machine output to speed it up. But you cannot do that just by picking a machine and making its output bigger than the rest. Project execution requires a set of different machines. So once you increase equipment capacity in one area, you have to match the capacity with other areas. It is then that the machines will produce the desired output. Even road construction can be much faster. Higher-capacity compactors and excavators of bigger sizes can play a role in faster execution. The transport minister is also interested in this. But contractors have to adapt to the new reality of completing projects faster.

BKT



“We are determined to deliver the best quality.”

“There are new opportunities that are coming up in the Indian construction industry, either for vendors or new product or technology,” says **Ashok P Chhajer, General Manager-OE Sales, BKT**. He shares more...

Suiting market requirements: BKT is a off-the-road tire manufacturing company. The most important aspect is to provide a proper solution to the client when new equipment is in the market. Our idea of working is based on this thought. We are introducing almost 162 new tire sizes every year in the market. We are determined to deliver the best quality. Currently, projections are positive and optimistic. Each segment and sector is on the rise front.

About Excon: The ninth edition of Excon was an

excellent show for the Indian market condition, and this year, we have witnessed the highest number of exhibitors and highest number of quality visitors. The show was our best one in the last 17 years, and I am confident that the next edition will be better than this.

Key takeaways: Speaking about the expo, our main aim is to display our manufacturing capability and product range to existing clients and connect with prospective clients. This is a platform where we can get leads and have a one-on-one interaction with clients. We also reach out to OEMs as we are present with every equipment manufacturer.

SANY HEAVY INDUSTRY INDIA



“About 6-7 per cent of the group turnover is invested in R&D.”

“The growth we are anticipating this year vis-à-vis 2016 is around 15 per cent,” says **Dheeraj Panda, Vice President & Business Head, Excavator Business Unit, Sany Heavy Industry India.** He shares more...

Market trends and opportunities: While there was a surge till June 2017, the market fell silent in the initial months after GST. The rates were low owing to the high tax rates, which changed after the tax slab was brought down to 18 per cent. We anticipate double-digit growth in the range of 17-20 per cent to continue for the next three to five years. Our aim is to augment wherever we find gaps. In motor graders, we have products in the range of 120 hp, 160 hp and 200 hp. We have introduced excavators of 2 tonne and 3.5 tonne. Mining has been a little sluggish, but of late, we see demand coming from the roads and irrigation sector.

Technological innovations: There are around nine

series of excavators. Majority of the manufacturers or some of them assemble the product and supply it to the market. In Sany, the group philosophy is that 6-7 per cent of turnover is invested in R&D. The application in India is fixed to granite or marble or blue metal application, in which smaller machines are deployed. Worldwide, the demand is for machines ranging in the size of 20 tonne or 35 tonne. However, in India, we have a 14-tonne machine getting deployed into these sectors. All our machines are microprocessor controlled, which means that the machine is synchronised for the right amount of force and flow coming into the application. Our cabins are designed ergonomically and operator levers are optimally designed to ensure comfort. The decibel levels inside and outside the cabin are also monitored so the operator does not get distracted by the machine or engine noise.

COLUMBIA MACHINE ENGINEERING (I)



“We are geared up to meet market requirements.”

“In India many new projects are coming up in the next few years like new ports, 100 airports, flyovers and other major infrastructure projects. Equipment sales are being driven by the construction and infrastructure sectors,” says **Ashwani Kumar Tandon, Head-Sales & Marketing, Columbia Machine Engineering (I).** With the growing requirement for concrete products, in the coming five years, there will be a lot of equipment of such nature,” he adds, as he shares more...

Products displayed at Excon: We have our equipment in the small-scale sector. Our machines are categorised under small board machines for concrete

block making. We have some new products coming up next year. We have displayed our latest model SPM 30 at Excon, which is a fully automated machine for producing all types of concrete products. Customers can produce solid concrete blocks, hollow concrete blocks, flyash bricks, all types of paver blocks, Kerb stones, retaining wall blocks, etc. This machine is much faster, bigger and with more output. It will cater to the needs of the people looking for high volume and high-quality products, and for them this machine would be ideal. Columbia has acquired Techmatic company from Poland. This company makes many products like high performance block making machine, concrete mixing plants, moulds for production of paving blocks and decorative concrete products. The big board machines have pallet size of 1,400 × 1,100. The complete line is automated. So we are geared up to meet this kind of requirements in the market.

Product innovations: Techmatic will be a new product in India. The machines are advanced, meeting all European norms, and those standards are now going to be implemented in India. The machines are designed for high performance and efficiency production with the use of steel pallets. Complete after-sales service will be provided to all customers as we have trained technicians. Indian customers will be able to get high technology equipment manufactured with high precision and superior quality. All machines are state-of-the-art technology products.

MB



“Engineering and development are essential.”

MB has been studying the Indian market and that is the reason why we are able to offer Indian companies

the right product for their needs. We are sure about our product’s quality and are also ready to expand our product portfolio,” says **Piero Guizzetti, CEO, MB India**. He shares more...

Market demand: The sector that has been getting the largest investment is the roads sector. However, we need a holistic view of growth and development in infrastructure. It is interesting to have a look at the new wave of infrastructure development. Railways and ports are also getting developed. Urban infrastructure is also booming. The Smart City programme has boosted the urban infrastructure sector. There is also a lot of activity in water treatment and solid waste treatment. Although we are not into all these sectors, we are looking at the demolition, road construction, railways and other urban transportation sectors. We have some experience in waste management. India, for the next 30 years, will be the most attractive market for urban and infrastructure development. To meet market demands, we have initiated with distributorships.

Technological advancements: Our recently launched S4 series for our BF90.3 bucket crusher has taken the unparalleled breadth of experiences garnered through years of being global market leaders, and incorporated the improvement areas based on such direct market feedback. Our product in itself is a breakthrough for the mobile crushing industry, going beyond traditional mobile crushing units with a much lower capex while at the same time meeting the performance parameters of alternate solutions. Our products are attached directly onto any excavator model and extend its utility into areas never before deemed possible. Our solutions not only provide savings on transportation, but also drastically reduce the amount of complementing equipment required at site and at the mine or quarry where the materials are sourced.

This edition, we looked for a latest product, which is a drum cutter. We can apply these machines from 6 tonne to 35 tonne range. It caters for works such as digging, tunnelling and piping. Drum cutters are a good solution for large-scale tunnelling works.

Efficiency guaranteed: Fuel and operator efficiency is an important point for us. Our crusher bucket is flexible and based on the requirements, the outboard can be adjusted. Fuel-efficiency is simple; no additional fuel is consumed by the excavator. Our products use only the highest quality materials. This not only ensures our compatibility with all types of materials, but also extends the life of the product and hence the clients’ return on investment. Furthermore, our patented jaw crushing technology has been designed and consistently

improved based on the specific requirements of the bucket crushing segment, which has a set of requirements that are different from alternative methods of crushing. From the elliptical movement of the jaw crusher to the balance of the machine, we retain our leadership thanks to the unwavering focus that we have in our product categories.

SSAB INDIA



“We develop new products keeping in mind the market and customers’ future needs.”

The construction equipment sector is poised to grow at about 12-14 per cent CAGR every year for the next four to five years. “Undoubtedly, this is the right time for any serious contender to be here today,” says **Sharad Rastogi, Director, SSAB India**. He shares more...

Big opportunity: When we compare Indian infrastructure to the developed world, say Europe, we are much behind. So, we have to catch up fast. The government has already announced the Bharatmala programme, with about Rs 7 trillion investment in roads and highways itself. Thus, the demand for earthmoving equipment for this kind of infrastructure will be tremendous. Mining, too, starts to look promising after a gap of six to seven years.

Technological innovations: We have a futuristic approach. We develop new products based on market needs and by estimating what the market and customers would need in future.

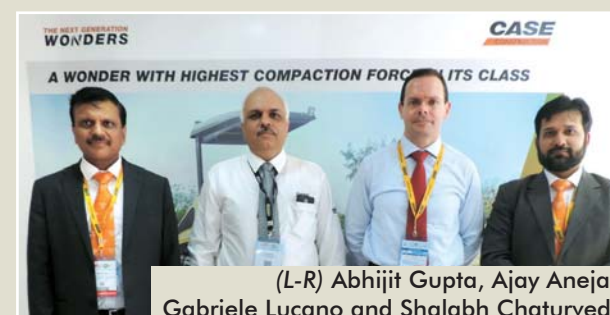
For instance, at Excon, we launched a new product HARDOX 500 TUF, which is the right product for heavy

transport, tippers and buckets, etc. It has a hardness of 500 BHN; and it has the impact toughness equivalent to 450 BHN material. Hence the name 500 TUF that makes it tough and hard. Generally, with high hardness, the toughness comes down and material becomes brittle, but Hardox 500 Tuf is 500 BHN hard and as tough as 450 BHN. We have launched this product after many years of R&D, and it is already getting an excellent response worldwide.

As a responsible supplier, one needs to assess what the industry will need for applications in future, and we do exactly that. HARDOX is the brand for hard steel, ie, lightweight high strength steel. By using this steel, customers can reduce thickness and weight from mild steel; they can reduce 30-40 per cent weight in their trucks, machines or vehicles.

If you see mobile cranes, most booms use our high strength steels branded as Strenx. Similarly, concrete pumps have to reach heights of may be 30-40 storeys, so these too use the high strength steels. Strenx finds huge application in the construction, cement, lifting and even transportation industry for making long members and cross members of the commercial vehicles. Reducing weight is a way to increase payload. Also there is less fuel consumption and less wear of movable parts when idling since the total machine is light weighted with use of high strength steels.

CASE NEW HOLLAND CONSTRUCTION EQUIPMENT (INDIA)



(L-R) Abhijit Gupta, Ajay Aneja, Gabriele Lucano and Shalabh Chaturvedi

“Where there is business, we participate.”

CASE celebrated 175 years of operations in 2017, with a presence in India for the past 28 years. In a

closed media interaction, **Abhijit Gupta, Brand Leader & Managing Director**; **Shalabh Chaturvedi, Marketing Head**; and **Ajay Aneja, Head-Sales (India and Other Asia)**, **CASE New Holland Construction Equipment (India)**; and **Gabriele Lucano, Country Head-India, CNH Industrial (India)**, share more on the company and future opportunities in a press interaction at the expo...

The Indian market: India for us is an extremely important market. We strongly believe the development of infrastructure will be an important phase in the development of the country over the next 10 years. So, there is a great opportunity for companies like ours. We really would like to be a part of it and have the country develop for the future. We have been proud and happy about how our heavy machine graders and dozers are being received in India over the past few years. We launched the grader about two to three years ago and heavily invested in the machine. At the expo, we have launched a new 20-tonne dozer machine and our customers are extremely happy with its performance. We have also launched a soil compactor 752EX, one of our flagship products. We are launching a new version of our soil compactor machine with a cab – it is one of the most advanced machines in terms of design with striking features and a lot of glass around it offering great visibility for drivers and comfort with air-conditioning.

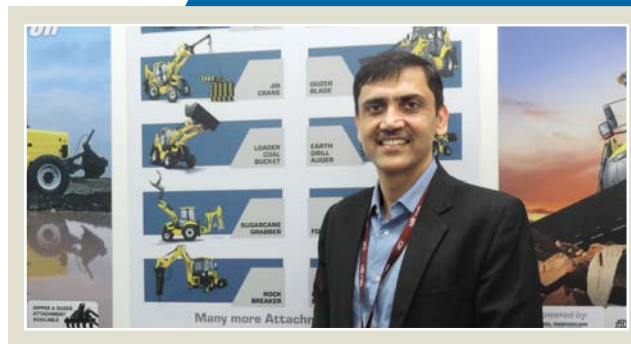
Sector focus: We have majorly focused on the road sector with our compactors, both soil and tandem; this is critical equipment from the reliability point of view. The reason why we are able to sustain our market leadership in compactors is that the product has been time-tested for over a decade and we have continuously undertaken product improvement understanding production requirements. Aligned to this is the grader, which we launched two years ago; to our good fortune, the response has been fantastic.

Fuel-efficiency: This is a variable subject in terms of terrain, application, soil condition and operator skill. So, on a 76 HP, we have observed fuel efficiency as low as 3.7-4.25 litre an hour; if it is a loader application and the machine is operating in full throttle, it can go as high as 4.5-5.5 litre an hour. That is the kind of range available. It is difficult to pinpoint specific fuel efficiency. But 3.8 litre to 5.5 litre could be considered the highest depending on the application.

Bharatmala programme: The government has started awarding several road projects along the international inland territorial borders of India under the ambitious Bharatmala project. This, in addition to the work being executed by the Border Roads Organisation, will help build road infrastructure in these

areas at a rapid pace. Several tenders are in the process of getting formalised and will be taken up by capable contractors. Where there is business, we participate, we will be eyeing these tenders closely, and at the right opportunity, we will be more than willing to contribute by supplying our world class equipment to the selected contractors or organisations for these projects.

MAHINDRA & MAHINDRA



“With BS-IV norms coming in, most engines will become electronic.”

Mahindra believes in bringing out products that are different from others. “Speaking about technological innovations, the buzzword today is connectedness,” says **Sachin Nijhawan, Vice President and Business Head, Construction Equipment, Mahindra & Mahindra**. He shares more...

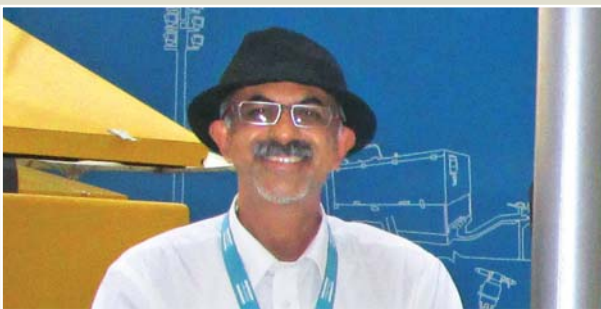
Technological innovations: Our prime focus is on the product image. Technological advancements will happen in two phases. First, we already have a DigiSense in our backhoe and our Roadmaster. All the products we launch will have that DigiSense. This telematics solution helps keep the machine connected to the customer and service sector using sms and mobile apps. They take care of maintenance and the basic parameters of the machine. The biggest technological change in the construction business in India will happen only in 2020. With BS IV norms coming in, most engines will become electronic. Once that happens, you can experiment on the equipment. So, being in the automobile segment, we already have these technologies and engines. The work has already

started. As and when the engines are required, we will bring them into the market.

Demand driver: Everyone knows that roads and city infrastructure is on the rise today. There is also growth in metros and bridges. However, the real-estate sector is slightly down. So, infrastructure and related projects are bringing in a lot of money.

Focus at Excon: Our prime objective at Excon is to showcase to people that construction does not mean only construction machines. We offer all products utilised at a construction site including tipplers and DG set. We want to showcase disruptive products as our RoadMaster G75 and other attachments that are unique and not available elsewhere. In the first one-and-a-half days, we can confidently say that we got good traction because of the uniqueness of the range showcased. In our current range, we have SX and VX standard models in backhoes, which are augmented with the newly launched SX90 higher hp backhoe loader designed based on the needs to the contractor. Here, we have also displayed a host of attachments as well. We have now 30 different attachments, making the backhoe loaders a completely versatile equipment. In addition, we have a front-end loader that is another offshoot of the backhoe assembly. Now, we have a specific machine, DrillX, which is a customised solution for piling, drilling and ramming applications.

ATLAS COPCO POWER TECHNIQUE



“We will launch advanced technology products to grow faster than the industry.”

Atlas Copco undertakes a lot of field trials and more than a year of R&D before launching any products.

A customer always sees the value he will get from the product he is buying. So, other than launching new products, technology advancements are always in our pipeline,” says **Nitin Lall, General Manager, Atlas Copco India, Power Technique Customer Center**. He shares more...

What’s new: At Excon, we launched the new HiLight V5+ LED light tower which as a full unit is compliant to CPCB II (Central Pollution Control Board II) norms. We have designed a strong patented HardHat TM canopy specially designed to withstand tough conditions in tough terrains. This light tower can be used to illuminate a cricket ground, in the pharmaceutical industry for movement of logistics at night, and at airports for luggage handling besides other applications.

Technological innovations: From our compressor range at Atlas Copco Power Technique, we are focused on small and medium air compressors, which are used for applications such as quarrying and dimensional stone, which are on the increase right now. We also offer power drills with which you drill rock, which is a key ingredient for all infrastructure projects. A large part of what we sell in compressors also goes for drilling for water. And, that is used for irrigation primarily and for home consumption. In any industry, people like to have two technologies: Focussing on how fast drilling can be done and how much less energy can be consumed. A portable compressor can be powered by a diesel engine or an electrical motor using electricity. So, in both cases, it is some form of energy. And, Atlas Copco always wishes to consume less energy while rendering higher output.

Another product we have launched is the XRHS650 dual pressure compressor. Strata with higher depths of drilling need more pressure, which can sometimes mean higher consumption of energy. If you go deep 20 bar from the first meter, you are actually burning extra diesel. That’s what customers don’t need – rather, they need that when you go shallow depths you do 17 bar pressure selection and when you go deeper you do 20 bar. We are working on two to three different electric models as well; we are constantly working on different concepts and innovations.

Big opportunity: I am buoyant that this year at Excon is good overall. Right now, infrastructure is playing a key role for everyone. In general, there is an increased focus in this segment, driven by roads and partly from railways and metro-rail as well. There is some action happening in every segment of infrastructure: Flyovers, roads, sea links, ports. I am bullish about the industry growing at 15-20 per cent in the next two to three years. And, I expect Atlas Copco as a company to grow

FEATURE-EXCON 2017

faster than the industry. We will launch advanced technology products to grow faster than the industry; for that, we will continuously innovate.

ACTION CONSTRUCTION EQUIPMENT



“For cranes, we have a whole new range of next-gen machines.”

Action Construction Equipment (ACE) has its own strong R&D. “We have no collaboration or JVs, as technology and capacity are both sufficient to meet demand. We are all working at 40-50 per cent capacity utilisation,” says **Pradeep Sharma, President, ACE**. He shares more...

Growing sectors: Infrastructure is a wide term. Projects such as Bharatmala, construction of expressways and highways have given a boost to the roads sector. Water transportation is another area that will bring in large demand for equipment and investment. Metro construction projects are also increasing. All this means that there are good days ahead. We will see tremendous progress in the next five to ten years. Talking about new trends in construction or infrastructure equipment, we have progressed a lot. We now have truck suspension, and with these, safety, stability, feasibility, everything has improved. So, there is an evolution in infrastructure equipment.

Technological innovations: Excon is a platform to talk to the right kind of customers who are looking for the technology. We have had a range of machines in the past five to seven years. However, in the last two to three years, we have been growing the technology. For cranes, we have a whole new range of machines, known as next-gen machines.

Fuel efficiency and productivity: We are bound by BS norms. The requirements are not for equipment on roads. We are planning to have BS-IV by 2020. BS-IV itself is regular emission. So, our equipment will keep pace with that.

AJASHY ENGINEERING SALES



(L-R) Amit Nagpal and Sushil K Vasishat

“We want to come up with solutions no one has provided.”

“We always provide a one-stop solution to customers right from design, manufacturing, delivery and after-sales support,” says **Sushil K Vasishat** and **Amit Nagpal, Directors of Ajashy Engineering Sales**. “We cover each and every aspect related to supply including timely delivery, commissioning, training and after-sales support.” They also share their views on different relevant topics.

Market scenario: Construction industry has a bright future with the demand continuously growing due to large number of projects coming up in the concrete and infrastructure industry. Metro and Railway projects are also contributing to the growth of industry. It is expected that the demand for the construction equipment will keep growing at accelerated phase with entry of new players as well.

New launch: In line with our strategy of coming up with new and innovative products we launched Tree Spade at EXCON 2017. Tree spade is an attachment, which is used to transplant the tree from one location to other thus avoiding cutting of tree. It uproots the tree with roots and transplants it at a different location. Launching of product like tree spade also reflects our commitment to protection of

environment. With restriction on cutting of tree in infrastructure projects and increased awareness towards environment, we expect great potential for this product.

Environment-friendly: Hybrid Lighting Mast is another product that reflects our innovation and commitment towards environment. With the arrangement in our Hybrid Lighting Mast, we only have to run the engine for three to four hours at night, while it will run on battery backup for the next four hours, thus, saving fuel and environment. In addition, there is lot of R&D going on in lithium batteries to increase battery backup time further as we want to come up with solutions that rarely anyone has provided.

Innovative Ideas: In the case of Mobile Service Van that we manufacture, we have completely eliminated the diesel generator from the van and we use hydraulic generator with hardly one using this technology. It converts hydraulic power to electric power; consuming one-third of the space a conventional DG set would take. In addition, we are also saving fuel, as with others there are two engines on the same machine thus having higher fuel consumption and increased maintenance requirement.

'Reliable product, Competitive pricing and delighted customer' is our company's motto.

WIRTGEN INDIA



“Operator efficiency is critical for manufacturers.”

Wirtgen Group has been acquired by John Deere, thus transferring ownership from the Wirtgen family to John Deere. “However, Wirtgen will operate independently,” says **Ramesh Palagiri, Managing Director & CEO, Wirtgen India**. Hence, there will be no change for customers. In fact, the

partnership is seen as a win-win situation for both companies-while John Deere caters to construction and earthmoving, Wirtgen caters to road building. The handshake of these two companies will lead to the growth of both of them, says Palagiri as he shares more...

Products at Excon: Wirtgen has a range of products for concrete roads in India and there are a lot of Wirtgen pavers working in the country. The SP 62 by Wirtgen is a two-track paver for city jobs and small roads; it is a more compact machine compared to big pavers like SP 94, which is more for high rises. We have also displayed some new technologies that are already applicable in Europe and other areas, and are expected to be relevant in India as well.

Technological innovations: We have a two-layer concrete machine. This helps save time and money. Also, we are in serious talks with many government agencies and ministries to bring technology in India. In the Vögele section, we have introduced a new technology where the operator will know the temperature of the asphalt just behind the paver before the compactor plays its role. This helps the operator take necessary action as asphalt can be worked on only when it is warm.

Operator efficiency: Operator efficiency is critical for all manufacturers. In addition to the paver machine, many parameters have to be right to get the desired quality. To bring in operator efficiency, we have introduced an operator school. Also, we are in talks with the India Skill Development Council for training engineers. We want to provide training to project managers and civil people, especially before the arrival of the machines. This will equip them for road projects carried out again and again.

Opportunities: While there have been major opportunities in the previous six months in the northern part of India, recent developments indicate a lot of opportunities in the states of Maharashtra, Jharkhand and the southern states as well. The vision and mission of the road minister have brought in a lot of project opportunities in the Northeast. As of today, we have enough projects awarded to keep us busy for the next three years. I expect these projects to turn into action on the ground; from our point of view, in terms of supplying machines and making them work, it will be at least another two years.

- SHRIYAL SETHUMADHAVAN, SERAPHINA D'SOUZA & SUDHEER VATHIYATH | CW |