

# EQUIPMENT TIMES

VOL. 8 ■ ISSUE: 09 ■ ENGLISH - MONTHLY ■ THANE ■ NOVEMBER 2022 ■ PAGES: 94 ■ PRICE: ₹ 100

## BREAKING NEW GROUND

OPPORTUNITIES FOR UNDERGROUND  
AND SURFACE MINING EQUIPMENT



**INSIDE:**

**SPECIAL FOCUS:** Wheel Loader

**FEATURE:** Compaction Equipment

**CAS**  
COMPONENTS & ACCESSORIES

AIR COMPRESSORS

Page No.: 81





# Building India with **smart technologies** in mining and construction

Visit us in  
**IMME**

STALL  
LOCATION :  
**Hangar A**

STALL NO: **32**

**United. Inspired.**

Epiroc is a vital part of a sustainable society and a global productivity partner for mining and infrastructure customers. With ground-breaking technology, Epiroc develops and provides innovative and safe equipment, such as drill rigs, rock excavation and construction equipment and tools for surface and underground applications. The company also offers world-class service and other aftermarket support as well as solutions for automation, digitalization and electrification.

**We are Epiroc – Your productivity and sustainability partner.**

Mail us: [miningtechnique.india@epiroc.com](mailto:miningtechnique.india@epiroc.com) | Call us: 1800120 1558

**[epiroc.com](http://epiroc.com)**



*Superior compaction  
and paving solutions...*



***From the smallest trail  
to the biggest highway!***

**Dynapac Road Construction Equipment (India) Pvt. Ltd.**

Plot No. 1, Gate No. 163 to 168, Alandi Markal Road, Village - Fulgaon, Taluka - Haveli,  
Dist. Pune - 412216 Maharashtra, India.

Phone : +91 7030626222 | Website : [www.dynapac.com/in-en](http://www.dynapac.com/in-en)



Contact us



Visit our website

**SOARING TO NEW HEIGHTS...**

Ministry of Mines is making continuous efforts to encourage mining activities pan India. An increase in urban population drives up demand for oil and natural resources, which is predicted to drive up demand for mining equipment and propel the expansion of the mining equipment market.

The demand for minerals and metals is being driven by global industrialization, urbanization, and population expansion. In the coming decades, demand for renewable, clean energy, and even some conventional energy is predicted to rise dramatically, putting even more attention on supply, security, and environmental effect issues.

The growing number of construction activities around the world has boosted mining equipment sales. Another factor boosting the mining equipment industry is the increased demand for underground mining equipment. The increasing adoption of technologically advanced equipment due to its benefits such as cost savings, time savings, and efficiency is also fueling the market growth. Then again, rising natural resource consumption in the electronic industry will accelerate the industry's growth in the future.

However, high machinery and operation costs may stifle market growth. Furthermore, strict government regulations and tariffs are expected to shrink the market in the coming years. Furthermore, rising investment in digitalization and innovation is expected to generate significant growth opportunities for the mining market between 2022 and 2030.

Wheel loaders are being widely used in various industries for unloading, loading, excavation and earth-moving. The use of these wheel loaders is rapidly increasing with the expansion of construction industry and small and medium-sized enterprises (SMEs). The use of the compact wheel loaders in wide range of industrial applications such as loading and off-loading, landscaping, digging, material handling, and waste management in congested areas accelerate the market growth.

The increasing construction activities owing to the rapid urbanisation, increasing population, and rising disposable income is driving the demand for the compaction equipment. In addition to this, the increasing investments by the government aimed towards improving infrastructure by repairing roads and increasing highway standards are further propelling the market growth.

The rising demand for compaction equipment from residential and commercial construction projects is further propelling the demand for the machine. The increasing focus of key market players towards increasing investments and growth strategies is likely to lead to an increase in mergers and acquisitions.

We are sure this edition gives you an opportunity to find yourself feeling gratified with information and insights from the construction and mining equipment industry.

Happy Reading!

Ramamurthy Mayavan

# ET

## EQUIPMENT TIMES

**EDITOR-IN-CHIEF**

**Ramamurthy Mayavan**  
editorconstructiontimes@gmail.com

**EXECUTIVE EDITOR**

**Philip Varghese**  
editorial@equipmenttimes.in

**SALES & MARKETING**

**Anoop Sidharth**  
General Manager - Sales & Marketing  
anoop@constructiontimes.co.in  
Mob.: + 91 9833365454

**Subodh Tambe**

Regional Head - Sales & Marketing  
subodh@constructiontimes.co.in  
Mob.: + 91 9819980495

**FOR SUBSCRIPTION**

subscription.arkeventsandmedia@gmail.com

**REGISTERED OFFICE**

**M/S. ARK EVENTS & MEDIA PVT. LTD.**  
A-603, Bhumiraj Costarica, Sector-18,  
Sanpada- 400705, Navi Mumbai, District Thane.  
Website: www.equipmenttimes.in

**RNI NO.**

MAHEGN/2014/55822

**ADVISORY BOARD****Priyan Naik**

Associate Professor- Dept of MBA at Sai Vidya  
Institute of Technology, Bengaluru. Ex Director  
(Defence) with BEML Limited.

**D. K. Narang**

Consultant. Past - MD, Case New Holland  
Equipment India Pvt. Ltd

**H. S. Mohan**

Former CEO – Infrastructure Equipment Skill  
Council (IESC)

**D Prasad**

Project Director – India International Infrastructure  
Engineers Ltd. (NICE Ltd).

\*Responsible for selection of news under the PRB Act, 1867. All rights reserved. While all efforts are made to ensure that the information published is correct, **EQUIPMENT TIMES** holds no responsibility for any unlikely errors that might occur.

**Printer, published and owned by**

Mr. Ramamurthy T. Mayavan

**Printed at**

**M/s. Prudent Arts & Fab Pvt. Ltd.**  
Plot No. A-221, TTC,  
MIDC Industrial Area, Mahape,  
Navi Mumbai - 400701. Maharashtra.

**Published from at:**

A-603, Bhumiraj Costarica,  
Sector-18, Sanpada - 400705,  
Navi Mumbai, District Thane.

Editor:- Mr. Ramamurthy T. Mayavan

V O L V O



# BIG ON PROFITABILITY

Volvo's new beast on the block is Excavator EC550E, that brings the IMVT Technology to the Industry. The first to do so in India.

**VOLVO CE CALL CENTER**

**1800-108-6586**

[www.volvoce.com/india](http://www.volvoce.com/india)

Connect with us on: [Twitter](#) [Instagram](#) [Facebook](#) [YouTube](#)

## 22 COVER STORY



# BREAKING NEW GROUND

The major drivers for the growth of mining equipment market are growth in mining activity, increasing demand of metal and mineral commodities, and rapid urbanization. **Equipment Times** looks into the demand drivers, autonomous machines, electric power, productivity, fuel efficiency and safety in mining equipment.

## EXPERTS' VIEWS

30



**Amit Banerjee**  
CMD, BEML

34



**Dimitrov Krishnan**  
Managing Director  
Volvo CE India

36



**Dheeraj Panda**  
Chief Operating Officer  
(Sales, Marketing &  
Customer Support) Sany  
Heavy Industry India

38



**V Senthilkumar**  
Managing Director  
Propel Industries

40



**Sooraj Cherukat**  
Business Development  
& Sales, Hailstone  
Innovations

42



**Navin Mishra**  
Chairman-cum-  
Managing Director  
Metallon Group

44



**Rajiv Poddar**  
Joint Managing  
Director, BKT Tires

46



**Kennady Kaippally**  
Country Manager  
Bonfiglioli India

48



**Hrishikesh Kulkarni**  
CEO, Nandan  
Petrochem

50



**Hemant Mathur**  
AVP (Sales & Marketing)  
Tata Hitachi  
Construction Machinery  
Company

# Explore Our Innovative Technology Solutions for Mining

**WE ARE PARTICIPATING**



**INTERNATIONAL MINING &  
MACHINERY EXHIBITION**

**16<sup>th</sup> - 19<sup>th</sup> November, 2022**

Eco Park Rajarhat, Kolkata, INDIA

TRACK MOUNT CONE  
BAHNTRACK - HTC SERIES

TRACK MOUNT SCREEN  
BAHNTRACK - HTS SERIES

TRACK MOUNT JAW  
BAHNTRACK - HTJ SERIES


Come visit us @ Hangar

**B-125**

**Crushing | Screening | Washing | Recycling solutions**

## **HAILSTONE INNOVATIONS PVT. LTD**

KINFRA Integrated Industrial Park, Kanjikode - 678 621, Kerala, India  
Mob: +91 81118 36555, +91 81130 91091 | E-mail: salesist@hailstoneinc.com  
www.hailstonein.com

 @hailstoneinnovations



Scan here to reach our site

## RESEARCH REPORT

54



**Ujjwal Parwal**  
Director and Co-Founder  
RationalStat LLC

## 58 SPECIAL FOCUS - WHEEL LOADER



**Equipment Times** digs into the demand and application trends, factors to be considered while choosing the right wheel loader, design parameters, challenges would the industry face to move to completely electric wheel loaders, the government's plans in infrastructure creation and reforms in mining policies.

## EXPERTS' VIEWS

62



**Deepak Shetty**  
CEO & MD  
JCB India Limited

64



**BKR Prasad**  
Head - Marketing &  
Product Development  
Tata Hitachi Construction  
Machinery Company

66



**Surat Mehta**  
Head of SDLG  
Business - India

## 68 FEATURE - COMPACTION EQUIPMENT



## LAYING the GROUNDWORK!

Advancement in compaction equipment and introduction of stringent government regulations are expected to positively impact the growth of the compaction machines market over the coming years. **Equipment Times** looks into the latest offerings, technological upgradation, future of compactors in India, long term vision for companies, suggestions for improving the market for compactors in India.





# L&T Construction Equipment

## PROVEN PERFORMERS



Sturdy Machines for Road Construction

# L&T 1190

## Soil Compactor

**CEV-IV**  
compliant



**Operating Weight : 11,000 kg | Frequency : 34 / 31 Hz | Gross Power : 100 HP @ 2200 rpm**

*Presenting Perfect Partners! An exclusive range of Road Construction Equipment that are reliable, durable and gives you more value. Highly suitable for highways, expressways and road projects. Manufactured to perfection and to provide the customers with superb productivity and unmatched benefits, these machines incorporate world-class features and are backed by nation-wide network of L&T Dealers who provide after-sales service and genuine parts.*

**RUGGED  
RELIABLE  
UNBEATABLE**

MADE IN **india** MADE WITH **PRIDE**

Conditions Apply

## L&T Construction & Mining Machinery

Larsen & Toubro Limited  
Lakshminarayan Complex, First Floor  
10/1, Palace Road, Bengaluru - 560 052  
Tel : 080 4040 1700  
E-mail: CMB@larsentoubro.com www.lntcmb.com

**EQUIP CARE : 1800 833 9990**



Visit our website  
[www.lntcmb.com](http://www.lntcmb.com)

## FEATURE - COMPACTION EQUIPMENT

70



**Alok Jha**  
Director - Sales & Marketing, India & SAARC, CASE Construction Equipment

72



**Ramesh Palagiri**  
Managing Director & CEO, Wirtgen India

74



**Vishwesh Rai**  
General Manager Dynapac India



88



**Dasika Ramarao**  
General Manager Sales & Marketing Doosan Portable Power

90



**Piero Guizzetti**  
CEO, MB Crusher India

## PLUS

DESK .....	04
NEWS - National .....	14
NEWS - International .....	18
TECHNOLOGY – VDMA .....	52
RESEARCH REPORT - Rationalstat LLC.....	54
CASE STUDY – EIRICH .....	76
PROJECT – NEWS.....	78
MACHINE UPDATE .....	80
CAS-NEWS .....	82
CAS - Air Compressors .....	86

# ESCORTS



## HD 85<sup>PLUS</sup>

# BUILD YOUR OWN ROAD TO SUCCESS



**Fuel  
Efficient**

**Highest Working Speed  
0-8.5 KM/HR**

**Highest Traveling Speed  
0-13.8 KM/HR**

**High Kerb Clearance  
730 MM**

**Tiltable  
Steering**

Escorts Kubota Limited (Formerly Escorts Limited) Construction Equipment  
Plot No. 219, Sector-58, Ballabhgarh-121 004, Faridabad, Haryana (INDIA). Tel.: 0129-2306574/2306598/2306571 Fax: 0129-2306572 Website: [www.escortsgroup.com](http://www.escortsgroup.com)

**Toll Free No.: 1800-180-4488**

## JCB INDIA LAUNCHES THREE NEW EXCAVATORS

JCB India, India's leading manufacturer of earthmoving and construction equipment, launched three new excavators for infrastructure and mining and quarrying applications at Udaipur. These machines will be built at JCB India's state-of-the-art factory in Pune and will be sold to customers not only in India but also in global markets.

The new series known as the premium line consists of The JCBNXT 225LC M, JCB315LC HD and the JCB385LC. These machines are designed for arduous and tough Indian operating conditions in the most demanding of applications. They are capable to perform large-scale earthwork applications, quarries, and mining applications. JCB NXT 225 LC was showcased at Rajsamand.

Speaking at the occasion, JCB India CEO and Managing Director, Deepak Shetty said, "India is going to be a



growth driver for the world in the coming decades, and much of this growth will come from Infrastructure development in the country. There are projects of significant National Importance that are gaining encouraging momentum across the country. Large-scale Infrastructure development will require larger and more productive machines, and this new range of Excavators addresses that need. Projects such as Bharatmala, Sagarmala, new Ports and Logistic Hubs will future create greater opportunities"

## KOBELCO SELECTS IFS CLOUD FOR GREATER AGILITY AND CUSTOMER RESPONSIVENESS

IFS, the global cloud enterprise software company, today announced that Kobelco Construction Machinery CO., LTD. (Kobelco Construction Machinery), the global leader in construction equipment, has selected IFS Cloud™ to improve their ability to respond to customers. The solution will introduce advanced digital transformation in the field and improve market responsiveness within its entire supply chain, from procurement to manufacturing, sales, and service management, at a time of continuing disruption worldwide.

This major agreement will see IFS Cloud implemented for 8,000 users across Kobelco's operations in 11 countries, starting with its home market

in Japan.

Its construction equipment can be customized in the field and requires individualized management even after sale, and Kobelco found its previous platform was unable to support the required functionality without the development of a huge add-on system. IFS Cloud, by contrast, provides unmatched functionality, the ability to handle customer's customization management and integration with services, improving the quality and speed of service Kobelco provides to customers. The IFS suite of solutions will optimize all of Kobelco's global operations in production, supply chain management, logistics, final assembly, service and sales.

## TATA MOTORS REGISTERED TOTAL SALES OF 78,335 UNITS IN OCTOBER 2022, GROWS BY 15% OVER LAST YEAR

Tata Motors Limited sales in the domestic & international market for October 2022 stood at 78,335 vehicles, compared to 67,829 units during October 2021.

Domestic sale of MH&ICV in October 2022, including trucks and buses, stood at 13,251 units, compared to 11,612 units in October 2021.

Total sales for MH&ICV Domestic & International Business in October 2022, including trucks and buses, stood at 13,940 units compared to 12,723 units in October 2021.

A planned shutdown of the Pune plant for preventive maintenance and debottlenecking actions led to reduced production in Oct'22.

## ESCORTS KUBOTA SOLD 384 CONSTRUCTION EQUIPMENT IN OCTOBER 2022

Escorts Kubota Limited Construction Equipment Segment in October 2022 sold 384 machines as against 462 machines sold in October 2021. Going forward we expect with Growing public & private infrastructure spends and growing economy will lead to the overall surge in demand for construction equipment in India. Shares of Escorts Kubota Limited was last trading in BSE at Rs. 2008.30 as compared to the previous close of Rs. 2039.80. The total number of shares traded during the day was 29014 in over 2903 trades. The stock hit an intraday high of Rs. 2052.00 and intraday low of 1975.25. The net turnover during the day was Rs. 57935935.00.

## SCHWING STETTER LAUNCHES NEW SERVICE CENTRE AND SPARES OUTLET IN KOCHI

Schwing Stetter India, one of India's largest manufacturers of concreting and construction equipment has now launched a new service centre and spares outlet in Kalamassery, Kochi, Kerala. Schwing Stetter India, a 100% subsidiary of the Schwing Stetter Group of companies GmbH, Germany, incorporated in the year 1998, is a pioneer of concrete construction equipment manufacturing in India. The company has been catering to its customers with world-class concreting equipment since inception and has introduced path-breaking products in the Indian concrete industry. In a move to support the increased availability of maintenance service, repair works and ready availability of genuine Schwing spare parts, Schwing Stetter has launched and inaugurated a brand-new service centre and spares outlet in Kochi, Kerala. The event was presided by VG Sakthikumar, MD, Schwing Stetter India.

Speaking about the event, VG Sakthikumar, Managing Director of Schwing Stetter India said, "With this new service centre and spares outlet in Kochi, we believe that our customers would benefit through the maintenance and repair, as well as our genuine Schwing parts which would be available at the outlet. We also hope to reach our customers more through outlets such as this."




**TATA HITACHI**

# POWERING INDIA OF TOMORROW



## Tata Hitachi Construction Machinery Company Private Limited

Jubilee Building, 45 Museum Road, Bengaluru – 560 025 | Telephone: +91 80-66953301 / 02 / 03 / 04 / 05 | Email: info@tatahitachi.co.in

 [www.tatahitachi.co.in](http://www.tatahitachi.co.in)

Toll Free Number  
**1800 121 6633**



**EXTENDED WARRANTY**



CERTIFIED USED EQUIPMENT  
TATA HITACHI PREMIUM USED **VALUE**



**THE 10TH EDITION OF TRAFFICINFRA TECH EXPO, SMART MOBILITY EXPO, PARKING INFRA TECH EXPO AND ROAD INFRA TECH EXPO THIS MONTH.**

The 10th edition of TrafficInfraTech Expo along with Smart Mobility Expo, Parking InfraTech Expo and Road InfraTech Expo will take place in Mumbai from November 16-18, 2022 at Hall no. 4, Bombay Exhibition Centre, Mumbai. Organised by VIS Group, the Show is in tune with the Government's vision of strengthening all node of transport – Roads, Railways, Airports, Ports, Mass Transportation, Waterways, and Logistics Infrastructure- and of providing safe mobility with the inclusion of technology. In 2022-23, the National Highway Network would be expanded by 25000 kilometres, with a budget of Rs. 20000 crore (US\$ 2.67 billion).

With so much of focus on strengthening India's mobility space, the event will be the perfect place for solution seekers to meet the technology/product providers in Traffic Management/Technology, ITS, Tolling, Telematics, Parking, Mass Transport, EVs and new Mobility.

With participation from over 200+ brands, 5000+ business visitors, from 20 countries including USA, the UK, UAE, Germany, Israel, Australia..., the Expo will have latest products and systems in ITS, IoT. AI & Blockchain, Logistics, Vehicle Telematics, Delineator; Road Safety, Traffic Monitoring, Smart Parking App, ATCS, New construction technology, New Mobility and many more will be on display under one roof.

**VOLVO TRUCKS INDIA COMMENCES COMMERCIAL TRIAL OF LNG TRUCK**

Volvo Trucks India initiated its switch towards alternate fuels in India with the commencement of commercial trials of its liquified natural gas (LNG) powered class leading FM 420 4X2 Tractor. Aimed at offering alternate fuel solutions for demanding long-distance haulage



applications, the commercial trial was flagged off from Nagpur in the presence of senior executives from Dehlivery - a leading Indian logistics provider for e-Commerce, Gas Authority of India Ltd

(GAIL), BLNG - the providers of LNG, and Volvo Trucks executives.

B Dinakar, EVP and Business Head - Volvo Trucks - VE Commercial Vehicles Ltd, said, "Our BS VI compliant Volvo FM 420 4x2 tractor-trailer solution is already the industry benchmark for express cargo clocking over 25,000 Kms every month with exceptional uptime. This LNG powered Volvo FM 420 4X2 solution will help our customers to reduce vehicle emissions and improve fuel efficiency levels in their operations even further. We are particularly proud to be introducing such solutions at a time when the Government of India has defined its vision for modernizing logistics in India, as laid out in the recently released National Logistics Policy and Gati Shakti program."

**INDIAN CONSTRUCTION EQUIPMENT IMPORTS TO CREATE MARKET OPPORTUNITIES**

Maximize Market Research has published a report on the India CE Market that provides a detailed analysis for the forecast period of 2022 to 2029. According to the report, India Construction Equipment Market size was valued at USD 6.66 Bn. in 2021 and the total market revenue is expected to grow by 8.9 percent from 2022 to 2029, reaching nearly USD 12.4 Bn. Various

economies are placing their confidence in Indian Construction Equipment, importing large amounts of equipment, and carrying out various development operations, and these aspects support the industry in India and give prospects for growth. The federal government of the United States has made large expenditures in the development of highways, railway tracks, airports, and other infrastructure.

**SANY BHARAT SETS SIGHTS ON LOCALISATION IN INDIA**

Construction equipment maker Sany Bharat, a wholly owned subsidiary of Shanghai Stock Exchange-listed Sany Heavy Industry Co Ltd, will increase its localisation to 50 per cent in the next two years to reduce dependence on imports, a company official said on Tuesday.

The Indian arm of the Chinese firm currently achieved 35 per cent localisation in equipment manufacturing, he said.

It is expanding its reach in the eastern part of India, and has opened an integrated sales and service division in West Bengal's Howrah district to tap growth opportunities in the region, the official said.

"We now have a localisation level of 35 per cent for products manufactured at our Pune facility. We have decided to increase this to 50 per cent in the next two years. We import from Japan, Korea and China. During the Covid period, we faced cost escalation and supply chain disruptions that affected margins," Sany Bharat Managing Director Deepak Garg.

**INDIAN CONSTRUCTION EQUIPMENT MARKET TO WITNESS 23.3% CAGR BETWEEN 2021 TO 2027**

India Construction Equipment market is capitalizing on rapid development of infrastructure and construction sector in the country. Growing public & private infrastructure, FDI reforms for construction sector, highway projects and growing economy has led to the overall surge in demand for construction equipment in India. In addition, ambitious government projects such as Smart city, Golden Corridor, Housing for all, restructuring and expansion of railways, etc. are further fueling the growth of India construction equipment market.

The market witnessed a slowdown in 2020 owing to the COVID-19 pandemic, which resulted in halt in construction projects, suspension of economic activities and lockdown across the country. However, with the gradual recovery of economic activities and relaxation in lockdown measures, the market regained its momentum and is expected to rise during the forecast period.



# GET THE GROWTH CATALYST BY YOUR SIDE. GET CASE.



With over 180 years of innovations, CASE offers excellence at work with its world-class machines. Our machines are made in India, and exported across the world - maintaining the highest standards of safety, reliability and efficiency. Contact your nearest CASE dealer or call us on our toll-free number to know more.

**EXPERTS FOR THE REAL WORLD**  
**SINCE 1842**

**CaseCE.com**  
**1800 4199 770**

## ROMANIAN RAIL AWARD FOR WEBUILD CONSORTIUM

A consortium headed by Italian contractor Webuild has been awarded a €490 million contract to construct Lot 4 of the Cluj-Napoca to Episcopia Bihor railway in Romania.

Webuild takes a 50% stake in the project; the other members of the consortium are the Italian civil engineering firms Pizzarotti (30%) and Salcef (20%).

The scope of work will include the modernisation and electrification of approximately 50km of existing railway in the country's north-west, as well as the construction of five new stations.

The wider programme of modernisation will see almost 170km of the line modernised and electrified, with funding coming as part of the European Union's Recovery and Resilience Plan.

On completion of the project, passenger trains are expected to travel on the line at speeds of up to 160km/h, with freight trains achieving speeds of up to 120km/h.

Webuild said its project would create around 1,000 direct and indirect jobs, while the upgrade is expected to significantly reduce CO2 emissions and improve safety.

## CASE CELEBRATES 50TH ANNIVERSARY OF LECCE PLANT

Italian manufacturer Case Construction Equipment has marked the 50th anniversary of the opening of its Lecce plant.

The plant, which produces a range of construction equipment including wheel loaders, graders, backhoe loaders and compact wheel loaders, opened in 1972.

Celebrations took place between 28 September, when an olive tree was planted to signify the company's roots in the Salento region and finished on 2 October with a family day that was attended by more than 1,500 people, including 800 employees and their families.

Among those in attendance included Apulia region president Michele Emiliano, Angelo Corallo, professor at the Department of Innovation Engineering at the University of Salento and Federico Bullo, head of Europe for CNH Industrial

Construction businesses.

The plant was converted into a party venue and featured inflatables and a raffle with prizes, in addition to live music by a band made up of CASE employees.



Speaking during the celebrations at the plant, Federico Bullo said, "Case has always believed and believes in the development of this plant; that is why we have boosted investment in technology, facilities, training, occupational safety and ongoing innovation."

## MAGNI EXPANDS TELEHANDLER RANGE

Magni has unveiled its new telehandler models available for 2023 deliveries, presenting them at the Bauma construction trade show in Munich, Germany. The models include two new additions to the company's TH range; the TH 4,5.15 and the TH 4,5.19, and the RTH 10.37.

Key features of the Magni RTH 10.37 telehandler include a maximum lifting height of 36.7m (120ft) and a reach of 30.5m (100ft). It is also fitted with a Stage V-compliant, 175kW engine from Volvo. While the rotating machine offers a lifting capacity of 10.3 tonnes, both

the the TH 4,5.15 and the TH 4,5.19 have maximum lifting capacities of 4.5 tonnes. With a lifting height of 15m and 19m, respectively, the TH 4,5.15 and the TH 4,5.19 telehandlers are available in two Deutz engines versions of 55kW and 75kW. These new TH models, designed for construction and light industry are engineered to ensure maximum performance. The cab has a large windscreen that extends from the operator's head to their feet, to ensure full visibility of the load both when suspended and completely lowered.

## PUTZMEISTER SHOWCASES FUTURE OF CONCRETE CONSTRUCTION

Putzmeister Group showcased a range of innovations in concrete construction equipment at the recently concluded bauma 2022 in Munich, Germany.

Concrete pumping with zero emissions – with the innovative hybrid iONTRON Truck Mounted Concrete Pump: The iONTRON



makes it easy to work in an environmentally friendly manner: Simply unwind the cable, plug it in and utilise the power supply on the construction site (125 A). Machine operators only need to a brief instruction and can then connect the power supply themselves. Switching from the familiar diesel drive to electric mode is also very simple and can be done during operation. Simply press a button to utilise the full power of the electric motor – from the support configuration right through to pumping concrete. Depending on the local electricity mix, this makes it possible to reduce emissions by up to 100%. Operating the truck-mounted concrete pump remains just as intuitive for the machine operator, whether the machine is running in diesel or electric mode.

## CATERPILLAR SEES DOUBLE-DIGIT RISE IN Q3

Sales and revenue numbers for Caterpillar reached US\$15 billion for the third quarter of 2022, with construction sales of US\$6.27 billion amounting to the largest percentage of the total.

The OEM's construction activities saw a 19% sales increase from the same period



in 2021. According to the company, which unveiled a range of electric prototype machines at trade show Bauma, higher sales volumes and "favourable price realisations" played a key role in the increase.





# 856H<sup>MAX</sup> WHEEL LOADER

CEVIV  
STAGE



HIGHER  
PRODUCTIVITY



HIGHLY RELIABLE  
& FUEL EFFICIENT



LOW OWNING &  
OPERATING COST



IMPROVED OPERATOR  
ENVIRONMENT



MAXIMUM  
UPTIME

## A LEGACY THAT WORKS

Mera Liugong Mera Vishwas  
**1800 1033 852**

**TOUGH WORLD. TOUGH EQUIPMENT.**

india@liugong.com www.liugong.com

## MANITOU REVENUES RALLY

Manitou has reported a 33% revenue increase in the third quarter of 2022, compared to the same quarter last year, amounting to €575 million.

Michel Denis, CEO of Manitou, said the revenue rise was the result of the company's ability to accelerate its deliveries amid the supply chain crisis, which he said remains tense and uncertain. "Our teams are fully mobilised to respond to the pressing expectations of customers in markets that show no signs of slowing down.

"The increase of our order book and inflation are pushing customers to anticipate their orders to secure their

future supplies. Given the depth of our order book, the implemented sales price increases will have full effect only after 2022."

At the end of the quarter, the group's order book stood at €3,666 million, in comparison to €2,295 million at the end of the third quarter in 2021. With quarterly revenues of €476 million, the Product Division recorded an increase of 36% compared to third quarter 2021 and 16% for the first nine months of the year. The division is focusing its efforts on making its production more fluid due to unpredictable supply chain issues and the rising cost of components and energy.

## RECORD REVENUE FOR PALFINGER

Austrian crane manufacturer Palfinger said it will achieve a revenue mark of EUR 2 billion (\$1.98 billion) in 2022.

"Despite the volatile economic environment worldwide, impending recession, and supply chains that are still unstable, [it] is within reach," the company said.

Palfinger said that whilst its order backlog remains at a high level, uncertainty is increasingly affecting demand, particularly in EMEA. In Q1 to Q3 of 2022, the Bergheim based group recorded revenues of EUR 1,580.9 million (\$1.57 billion).

While geopolitical developments are weakening the market in EMEA and the Covid pandemic continues to negatively impact the market in APAC, NAM and LATAM stand out as growth drivers due to their positive market environment,

the company said. It noted that the Latin American market is undergoing a significant upswing as a result of strong demand, particularly in mining.

It said the North American market benefits from its lower energy costs, more stable supply chains and high demand on the domestic market and its repositioning of its truck mounted forklifts (TMF) has been popular in the USA.



Palfinger also entered the offshore wind market in Vietnam and has expanded its Löbau production site into a hub for access platforms.

## MECALAC LAUNCHES ELECTRIC MACHINES

France-based Mecalac has launched a new range of zero-emission medium-sized electric machines for urban worksites at global trade show Bauma.

According to the company, the launch of the e-series - which consists of the 11 tonne e12 excavator, the 1,000-litre es1000 swing loader and the six tonne ed6 dumper, represents the first time its electric machines have been designed for use on urban sites.



Designed to carry out earthmoving operations such as digging, loading, and transporting that mini electric machines are unable to do, Mecalac says as much as 64 tonnes of CO2 could be saved on a jobsite each year by using the machines, while also reducing noise pollution. The e12, an electric version of the 12MTX excavator, can be charged in eight hours, according to Mecalac, and can last the same amount of time when in operation.

## NEW BATTERY TECH ADDED TO ELECTRIC LOADERS

Finland-based manufacturer Avant Tecno has launched two electric compact loaders equipped with its new battery technology. Presented at the Bauma 2022 construction exhibition currently taking place in Munich, Germany, the Avant e5-27 and Avant e5-13 compact loaders are part of the manufacturer's e-Series range and are variants its existing e5 machine - which is itself based the diesel powered Avant 500 series machines. The electric machines, which have a load capacity of 900kg and a lift height of 2.8 metres, feature the new OptiTemp battery packs produced by Avant Tecno's new subsidiary, Avant Power.

Said to have twice the capacity of similar products from other manufacturers, the new OptiTemp battery packs feature a new thermal management system that ensures the machines can operate with the same capacity in both hot weather and in cold weather - in temperatures as low as -30°C (-22°F). Mikko Piepponen, Chief Operating Officer at Avant Power, said, "After working with electric loaders and batteries for decades, we realized that there was no battery pack in the world that would be perfectly optimized for compact loaders. That's why we decided to start making batteries ourselves."

## KOMATSU REAFFIRMS CARBON GOALS WITH ELECTRIC LAUNCHES

Komatsu showed six electric machines at Bauma - from a 1 tonne micro excavator up to a 20 tonne class machine - as it reaffirmed its goal to be a carbon neutral business by 2050.

The company, which showed 22 new machines in Munich, said its electric PC210E 20 tonne excavator will be launched in Japan and Europe next year. It uses a 123 kW lithium ion battery pack developed by Proterra and will operate for up to 8 hours on a single charge.

At the other end of the spectrum, the PC01E-1 is the company's first battery operated micro excavator. This machine has been developed as a rental machine in Japan, where it was introduced earlier this year. The PC01E-1 uses a Honda Mobile Power Pack.

# India's Biggest Road Project **Delhi- Mumbai Expressway**

and Its Link Road is Being Paved by **Alltech Asphalt Plant**,  
India's Most Reliable and Only Company With  
6 Asphalt Batch Mix Plants installed.



**DND-Faridabad-KMP Expressway**

**59KM** Total Length | **6** Lane Wide

**ALLTECH INDUSTRIES INDIA PVT LTD**  
MANUFACTURERS OF ROAD & CIVIL CONSTRUCTION MACHINERY

# BREAKING NEW GROUND

The major drivers for the growth of mining equipment market are growth in mining activity, increasing demand of metal and mineral commodities, and rapid urbanization. **Equipment Times** looks into the demand drivers, autonomous machines, electric power, productivity, fuel efficiency and safety in mining equipment.

**T**he future of the mining equipment market in India looks good with opportunities in underground mining and surface mining. Emerging trends which have a direct impact on the dynamics of the mining equipment industry are underground automation systems for efficient mining, automatic power crushers for crushing and compacting operations, multi-functional excavators for construction and demining functions, use of hybrid electric motors for cost effective operations, and rail-veyor technology for bulk material hauling solutions.

A resource-rich country, India has a wide variety of mineral deposits across its geographical expanse. However, the sector's true potential lies largely untapped, reflected in its contribution of 2-3% towards the national GDP. That said, the past 12-15 months have brought some degree of optimism. But more recently, the spread of the Covid-19 pandemic has resulted in a wide scale disruption across the mining value chain.

With a nation-wide lockdown imposed to stem the spread of the pandemic, progress of projects is reported to have taken a hit, at least for the time being. Minerals that are traded have also suffered, as global supply chains have come to a halt. As the situation continues to unfold rapidly, the mining industry, like other sectors, awaits resumption of economic activities to overcome the disruption. Over the past year, notable steps have been taken on the policy and regulatory front. The Mineral Laws (Amendment) Act, 2020 for amendments in Mines & Mineral (Development and Regulation) Act 1957 and The Coal Mines (Special Provisions) Act, 2015 came into force from March 2020.

With this, the coal sector has been thrown open for anyone willing to invest (including foreign participants) and end-use restrictions have been done away with. For non-coal minerals (such as iron ore, for which, licenses of many operating mines were due for expiration



**Nirmala Sitharaman, Finance Minister** launched the sixth tranche of the auction for commercial coal mining recently in New Delhi and at the launch event complimented the coal ministry for conducting “a layered exercise for commercial mining in less than two years.”

“First tranche had 64 blocks, today 141 blocks are being opened up in one go. It is a landmark development,” she said.

Coal Minister Pralhad Joshi, the ministry’s additional secretary M Nagaraju and secretary Amrit Lal Meena were also attending the event.

Earlier, the coal ministry had said in a statement that the mines to be auctioned were fully and well as partially-explored coking and non-coking mines.

“A total of 140 mines have been covered across 12 states, including 72 explored mines, and 69 partially explored mines,” said Nagaraju.

Nagaraju said that the coal mines would give Rs 20,000 crore in revenue to states once they become operational. They were expected to generate over 2 lakh jobs and bring in an investment of Rs 22,000 crore.

Meanwhile, Meena said that 11 percent coal was from auctioned blocks in the last fiscal year and the share of coal from captive mines has been growing yearly.

in March 2020) amendments have been made to ensure seamless transfer of requisite approvals/clearances from extant mine owners to new owners, after the auctions have been successfully carried out in the recent months. The year also witnessed introduction of the National Mineral Policy 2019, which aims to enhance the country’s mineral output by 200% in seven years. On the mineral exploration front, vexed issue for long, concerted efforts towards deep-seated exploration are required, as surface deposits are nearing exhaustion.

While data for 2019-20 is awaited, in 2018-19, the country’s mineral production (excluding fuel and atomic minerals) measured in terms of

value stood at Rs 1.2 trillion, clocking a CAGR of 6.28% between 2014-15 and 2018-19. In 2018-19, the bulk of value of mineral production (excluding fuel and atomic minerals) of about 91% was confined to 10 states. For the coal segment, 27 coal block were put up for auction under the three rounds - eight, ninth and tenth rounds, with only six eventually getting awarded on the back of tepid response owing to large distances between location of blocks offered and the location of potential end use industries. Poor market sentiment are mired the landscape. On the other hand, iron ore blocks that were recently offered in Odisha were very well received; preferred bidders for over 15 blocks have been declared by the state government.

#### IMME...

India is the world’s third-largest producer of Coal, behind China and the U.S. and it is the largest producer of mica blocks and mica splitting’s ranks third in production of crude steel, 4th in production of Chromite, iron ore, 5th in Aluminium, 6th in manganese ore and also 7th in bauxite. CII - India’s Premier Industry Association and Largest Exhibition organizer, is organizing the 16th edition of International Mining and Machinery Exhibition (IMME) - India’s only focused fair for the Mining Industry from 16 to 19 November 2022 at Rajarhat, Kolkata, India.

IMME 2022 will showcase the Latest and diverse range of Mining machinery, Equipments, advanced technology solutions, services and supplies from India and abroad. Since its inception in 1984, IMME has been the largest mining exhibition which brings together the key players of the segment, contributing to the growth of the Mining sector in India.

#### MINING EQUIPMENT MARKET

According to India Infrastructure Research, the mining industry’s contribution to the overall economy has stands at around 2.7% of GVA in 2018-19, down from 3% in 2014-15. Mineral production in India (excluding fuel and atomic minerals) measured in terms of value has grown at a CAGR of 6.28% between 2014-15 and 2018-19. Mineral imports grew at a CAGR of 8.5% during 2012-13 to 2017-18, while exports registered a 4.4% growth.

The impact on the mining equipment segment is likely to be subdued in the long term. The market size of the mining equipment industry is expected to be around Rs 219 billion for the year 2024-25 with highest investment likely in dumpers, followed by crushing, pulverizing and sizing equipment. The demand and market size

projections for the mining equipment industry is based on the bottom-up approach for the period 2020-25.

Several challenges exist in the mining equipment segment. The level of automation and IT adoption is yet to mature, although some companies have started making progress in this regard. With incompatible and disconnected IT solutions being used in silos and most of the data generated being unused, the level of technology deployment is yet to mature. Some of the pressing concerns such as shortage of skilled manpower, financial constraints, low equipment utilisation, and environmental issues continue to impact the sector and warrant immediate attention. The mining industry has relatively low equipment utilisation level as compared to other industries. The average annual utilisation hours of some key equipment in large mines (both opencast and underground techniques) stands at around 70-80%, at best. Thus, there is a significant scope for improvement in effective utilisation of key equipment. Possible solutions include better planning for mine development, scenario-based standard operating procedures, geo-tagging vehicles to monitor slippages and software-based scheduling and redundancy planning.

**INDUSTRY LEADERS SPEAK...**

**Amit Banerjee, CMD, BEML**, says, "IMME 2022 is a prestigious institutionalized biennial international exhibition of the Mining, Minerals, Metals and Machinery industries in India. It is an



**AMIT BANERJEE**  
CMD, BEML

Ideal platform for display and launches of new initiatives, machinery products and technologies, establishing joint ventures, developing and renewing international and regional contacts. For BEML it creates and provides an opportunity to display and showcase the existing and latest developed & manufactured mining & construction equipment to the buyers in Domestic as well as International Mining Industry. Apart from the opportunity to exhibit the products, the event also creates a platform to interact with various Coal and Non-Coal mining related customers, understand their present and future techno-commercial requirements and also with various component/spare parts' manufacturers,

policy makers, government officials and media to promote our equipment that helps the industry to grow."

**Dimitrov Krishnan, Managing Director, Volvo CE India**, said, "Mining in India is set to witness some of the most exciting and



**DIMITROV KRISHNAN**  
Managing Director  
Volvo CE India

transformative years ahead. A surge in demand for power, metals and critical minerals is giving rise to a spate of new mining ventures across the country. But this time around, it's completely different. The new ventures are embracing state-of-the-art digital technologies, world-class machines, remote operations and best business practices to achieve higher productivity and efficiencies without any compromise on low-carbon, low-waste, health and safety goals."

**Dheeraj Panda, Chief Operating Officer (Sales, Marketing & Customer Support),**



**DHEERAJ PANDA**  
Chief Operating Officer  
(Sales, Marketing &  
Customer Support)  
Sany Heavy Industry India

**Sany Heavy Industry India**, said, "The Metals and Mining sector in India is expected to witness a major reform in the next few years, owing to initiatives such as Make in India Campaign, Smart Cities, Rural Electrification, and a focus on building renewable energy projects under the National Electricity Policy as well as the rise in infrastructure development. We are also witnessing a remarkable growth in the mining sector especially after the introduction of mining reforms. All these factors have cumulatively spurred the demands for mining equipment."

**V Senthilkumar, Managing Director, Propel Industries**, said, "The construction



**V SENTHILKUMAR**  
Managing Director  
Propel Industries



## **METALLON HOLDINGS LIMITED**

*"Single point contact for Supply of Full Range of  
Equipment in Industrial Sector"*

- ***Design & Engineering***
- ***Projects Implementation***
- ***Technology Support***
- ***Equipment – Critical & Heavy machinery***
- ***Third party inspection***
- ***Spares from OEM & Non OEMs'***

				
<b><i>Tunnel Boring Machine</i></b>	<b><i>Filter Press</i></b>	<b><i>Mine Hoist</i></b>	<b><i>Furnace &amp; Conveyor</i></b>	<b><i>Slag Pot and Carrier</i></b>
				
<b><i>Wagon Tippler</i></b>	<b><i>Cone Crusher</i></b>	<b><i>Vibratory Screen</i></b>	<b><i>Mobile Crushing</i></b>	<b><i>Conveyor System</i></b>

- ***USP of Personalized & Customized solutions for our clients***
- ***Caters to the requirements of its satisfied clients from 'concept to commissioning' from Mining to Finished products***
- ***Has developed expertise in international trade on a global platform***
- ***Has strategized Sourcing \ Manufacturing utilizing the Forte***

**USA**

**China**

**Hong Kong**

**India**

**Contact Us - +919831442320 / +919831174614 [info@metalloncorporate.com](mailto:info@metalloncorporate.com)**





industry is growing at a faster pace in India compared to mining sector, but demand for mining equipment remains steady. Propel is India's fastest growing Crushing and Screening equipment manufacturer and our sales are largely to the construction industry but our share of the mining equipment market has been rapidly increasing. We have designed equipment, specifically mobile solutions, for the needs of the iron ore and coal mining industries. Our ProFast (Semi-Mobile) range of machines is designed to need minimum of civil construction at site. We expect to see a rapid growth in these segments in the near future."

**Sooraj Cherukat, Business Development & Sales, Hailstone Innovations**, said, "Biggest



**SOORAJ CHERUKAT**  
Business Development  
& Sales, Hailstone  
Innovations

demand for crushers and screens are from the Aggregate industry both commercial and retail, but also from the minor minerals too. Recent trend shows an increased demand from mining

as well. In crushers, major demand is for the Jaw and Cone crushers mainly Jaw crusher being used for the primary purposes and cones in secondary. Previously there was demand for secondary Jaw also which is getting replaced these days by Cone in a predominant basis. VSI crushers also used for shaping purposes and more sand production. Project Technical Demands for meeting various standards determines the exact usage of crushers and screens in the circuit."

**Navin Mishra, Chairman-cum-Managing Director, Metallon Group**, said, "Mining



**NAVIN MISHRA**  
Chairman-cum-Managing  
Director, Metallon Group

precedes almost all manufacturing activity, and hence an integral and indispensable sector across the industries, being the source of the main component, namely raw material. Post Covid pandemic there has been a drastic change in the working style, level of precautions and safety guidelines in every industry, and more so in mining which is already risk prone. Safety of workforce and protection of environment and keeping the operations within the ambit of the laws governing the industry has been given a rethinking and renewed importance. There is much positivity about the growth chances in the Mining Equipment industry, when the mining industry is shrugging out of the stagnancy of yesteryears. Our conservative assessment is that the Mining Equipment industry should grow at a minimum rate of 15 to 17% over the years which may be even more if the Mining Industry growth is robust and higher which is highly probable.

Presently, remote operations and commissioning, health and safety, collaboration, decarbonization or pollution control are the four key trends that we predict will continue to be the top agendas of mining companies and their service providers like us."

**Rajiv Poddar, Joint Managing Director, BKT Tires**, said, "Investment is an ongoing subject at



**RAJIV PODDAR**  
Joint Managing Director  
BKT Tires





propel

# NEW GENERATION

VERSATILE & ADAPTABLE

# TURNKEY SOLUTIONS

Feeders | Crushers | Impactors | Screens | Washing System | Classifiers | Mobile & Semi Mobile Series





BKT. There are two things in investment; one is creating new and the second is upgrading. So, both these aspects are looked at separately at BKT. Because it's easy to set up something, but it's difficult to maintain and upgrade it. Today, all our infrastructure at BKT is at par with any player across the globe. We are the only ones who have our own R&D center in India, along with a testing facility and a test track in addition to our own carbon black and mold plant as backward integration. This could happen because of the forward-thinking and investment made in this direction. Speaking about number – a capex of INR 450 Crores for modernisation, automation and technology upgradation of certain existing equipment and installation of automated material handling systems at Rajasthan and Bhuj leading to further improvement in quality and efficiency.”

According to **Kennady Kaippally, Country Manager, Bonfiglioli India**, “Even though we have witnessed a substantial growth in the Indian Construction Equipment & Mining Sector, one of the key challenges faced by the sector is the cyclical nature of the demand. Commodity prices



**KENNADY KAIPPALLY**  
Country Manager  
Bonfiglioli India

and government spending remain the key drivers for the growth in this sector, thus the industry is dependent on global demand and state of government finances and its priorities at any given point of time. This makes the industry notoriously difficult to predict, which has implications for attracting fresh long-term investments in this sector. A policy certainty along with government initiatives, encouraging local manufacturing of mining and construction equipment both for domestic use and exports, could go a long way in ironing out these challenges.”

**Hrishikesh Kulkarni, CEO, Nandan Petrochem**, said, “The mining sector in India is expected to witness a major reform in the next few years, owing to reforms such as the Make in India Campaign, Smart Cities, Rural Electrification,



**HRISHIKESH KULKARNI**  
CEO, Nandan Petrochem

and a focus on building renewable energy projects under the National Electricity Policy as well as the rise in infrastructure development. Coal production increased by 12% in September 2022 over September 2021. Its cumulative index increased by 21% from April to September 2022-23 over the corresponding period of the previous year. Over the years we have developed expertise in manufacturing tailor-made Genuine Oil for major OEMs. Depending on their design, application & engineering, suitable oils are formulated with optimum performance levels to meet the OEM-specific requirements, benchmarking on this expertise Velvex is expanding its portfolio of Off-Highway Lubricants, particularly in the synthetic and long-life lubricant range.”

**Hemant Mathur, AVP (Sales & Marketing), Tata Hitachi Construction Machinery Company**, said, “The use of AI for Hitachi mining




**HEMANT MATHUR**  
AVP (Sales & Marketing),  
Tata Hitachi Construction  
Machinery Company

equipment has been implemented in autonomous high-capacity Dumpers (190T/240T/300T) which are being used in countries like Australia and the Americas. The excavators used with these dump trucks are connected through the fleet monitoring systems, which enables the trucks to be scheduled as per the availability of the excavators every time the truck is unloaded. This helps to enhance the utilization of the trucks and the efficiency of the dumper and excavator fleet. This fleet is remotely monitored by a Control Room via GPRS/GPS devices fitted on the trucks and excavators. This technology has been successfully implemented and running for over 5 years in those markets.” ■

# FLEXIBILITY MEETS PRECISION



- More than 1000 Screens Successfully  
MADE IN INDIA and supplied to the world
- Capacity 500 tph & 350 tph
- Number of Screen Deck- 2 & 3
- Available in diesel & electric versions



Bio Mining Extract



Aggregate



Iron Ore Extract

**MOBISCREEN  
EVO**

MOBILE SCREENING PLANTS

MOBISCREEN EVO MS 702 | MS 703 | MS 952 | MS 953

## CLOSE TO OUR CUSTOMERS.

KLEEMANN crushing and screening plant systems are cleverly designed down to the finest detail and always have the overall process in mind. The mobile screening plants MOBISCREEN are used for screening almost all types of natural rock and in recycling. The classifying and coarse screens are available in a double- or triple-deck version, with hydraulic or diesel-electric drives. The applications of the MOBISCREEN plants are diverse. There is a variety of appropriate screen media available for obtaining different grain sizes and for different feed material.

 [www.wirtgen-group.com/india](http://www.wirtgen-group.com/india)



## The Metals and Mining sector in India is expected to witness a major reform in the next few years.

**AMIT BANERJEE**  
CMD, BEML

### What is your focus at IMME this time?

BEML Ltd., with its three business verticals i.e., Defence & Aerospace, Mining & Construction and Rail & Metro is serving the core sectors of the economy, is a regular exhibitor at International Mining & Machinery Exhibition (IMME).

In the forthcoming 16th edition of the IMME 2022 Exhibition, BEML would be showcasing the features and technology of the high-end mining equipment developed and manufactured indigenously by BEML under Atmanirbhar Bharat mission. With regards to Construction equipment, BEML would be showcasing its recently developed equipment.

### What is your view of IMME as a trade show in terms of value it offers to the stakeholders of construction equipment sector and the allied sectors – particularly the mining sector?

IME 2022 is a prestigious institutionalized biennial international exhibition of the Mining, Minerals, Metals and Machinery industries in India. It is an ideal platform for display and launches of

new initiatives, machinery products and technologies, establishing joint ventures, developing and renewing international and regional contacts.

For BEML it creates and provides an opportunity to display and showcase the existing and latest developed & manufactured mining & construction equipment to the buyers in Domestic as well as International Mining Industry.

Apart from the opportunity to exhibit the products, the event also creates a platform to interact with various Coal and Non-Coal mining related customers, understand their present and future techno-commercial requirements and also with various component/spare parts' manufacturers, policy makers, government officials and media to promote our equipment that helps the industry to grow.

### How do you look at the mining sector in terms of construction and mining equipment?

In India, the mining sector, as a key economic activity, contributes significantly to the country's economy. The Metals and Mining sector in India is expected to witness a major reform in the next few years, owing to Make in India Campaign, Smart Cities, Rural Electrification, and a focus on building renewable energy projects under the National Electricity Policy as well as the upsurge in infrastructure development.

With the above futuristic infrastructural developmental plans of the government and the requirement for coal companies to achieve the targeted production would escalate the demand for equipment in both Mining as well as Construction segment and it would continue in the near future.



**At a time when there is so much discussion around artificial intelligence and machine learning, do you see construction and mining equipment gradually becoming autonomous?**

The Artificial intelligence (AI) is gaining momentum in every field of work and is already being used in various aggregates. BEML has already introduced the same in Operator Fatigue monitoring and warning the surrounding, AI is used in Lighting and 360 degree camera display to identify Human/animals and objects and to bring to the notice of operator. AI is used to help to communicate with the operator in his native language for better equipment maintenance. These features are already being tried on our mining and construction equipment.

Autonomous feature using AI & ML is developing very fast in automobiles like cars trucks and trying to reach level five in the near future. The learning's from the automobiles are being used on mining trucks in few mines already. The remote or multiple equipment operation from the comfort of room near the mining activity is started on Dozers, Excavators, Loaders and Drills.

Complete Autonomous feature on mining and construction equipment may take a longer time as lot and lot of data is required for the controller to take its own decision. The terrain and the mix of men and machinery are unique in the mining and construction area. The absence of sign board, road markings are some of the few examples. The Autonomous feature is definitely coming in various forms in stages.

**How do you look at the concept of hybrid and electric power in construction machinery?**

Electrically driven equipment has many advantages over diesel driven equipment, such as:

- Zero emission – environmental friendly equipment.
- Reduced noise levels
- Life span of electric motor is more compared to diesel engine.
- High efficiency compared to diesel drive
- Less energy consumption compared to diesel drive.
- Very few initial checks and maintenance, no regular diesel filling – Reduces maintenance staff.



- In-built cooling fan system compared to external radiator in diesel engine.
- Lubrication: Only greasing of end bearing required.
- Auxiliary system – only HT/LT system is required.
- In diesel drive; Fuel System, Lubrication System and Cooling System required.
- Electric Drive equipment has low operating cost compared to diesel drive equipment.

However, electrically driven equipment has limitation of working area as they are connected with power cable and are less mobile.

In mining projects where the working area is defined and requires less mobility of equipment and where there is regular electric power supply; electrically operated equipment (Electro-Hydraulic Excavators) find more application.

BEML has developed and manufacturing high end electrically driven Electric Hydraulic Excavators of 100 Ton & 180 Ton class for mining application. These equipment are working satisfactorily in the mines.

Also, low end electrically driven equipment (Electric Motor or Battery) market is yet to pick up due to mobility restrictions.

**What engineering improvisations have been carried out in your machine in the recent past to improve productivity, fuel efficiency and safety?**

Following safety features are added to BEML's equipment:

- Operator Fatigue monitoring system
- Seat belt warning system
- All-round mirror / Camera
- ROPS and FOPS integrated operator cabin

The productivity is linked to operator comfort also, in addition to the improvements in the power line aggregates.

BEML has improved the operator comfort by introducing low vibration operator seats, ergonomically positioned display and control systems. Viscous mounts are added in the cabin to reduce the operator fatigue.

BEML is engineering emission compliant customized engines on the construction and mining equipment to reduce the fuel consumption and improve the performance of the machine.

**How is your company addressing the issue of operator training/skill development?**

BEML organises product wise periodical training at its manufacturing plants to the operators and maintenance staff of customers with regards to overall equipment

features an on periodical maintenance of equipment.

To develop the skill of operators, BEML has adopted the latest simulator based training technology both at selected project and at manufacturing plant.

BEML's factory trained service representatives are posted all over the country, who in turn train the operators and maintenance staff at customers project site.

Trained maintenance staff adopts the proper maintenance practices and minimize the equipment failures; which in turn increase the availability of equipment and reduce the overall operating cost.

Please give information on your dealer network and new markets you plan to be present in.

BEML has its own marketing network with 12 Regional Offices, 15 District Offices, 6 Activity Centres and 5 Service Centres spread across the country, to provide total product support for its Mining & Construction equipment.

The 5 service centres are located based on population of equipment in those areas to provide continuous support to customers and to avoid logistic issues. Further, to provide effective solutions & services to Mining sector, BEML has deployed service engineers at pit heads to monitor the equipment at proximity.

BEML having its full-fledged products for the open cast mining has now geared to produce high-capacity equipment which are currently being imported and also planning to venture further in underground mining sector. ■

---

In India, the mining sector, as a key economic activity, contributes significantly to the country's economy.

---

## EQUIPMENT TIMES

DON'T FORGET TO  
**FOLLOW US** ON  
**SOCIAL MEDIA** FOR THE  
**LATEST UPDATES** ON  
**EQUIPMENT INDUSTRY**



Visit the **Equipment Times**  
website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)

**TAKE ON CHALLENGES  
BIG & SMALL WITH THE**

**SELF LOADING MIXER  
SLM4600**



INBUILT INCLINATION

**SENSOR**

**HIGHER OUTPUT    MORE FUEL SAVING    LESS MAINTENANCE    HIGHER WEIGHING ACCURACY**

**SCHWING Stetter (India) Private Limited**

Reg. Off : F71/72 SIPCOT Industrial Estate, Irungattukottai, Sripurambudur, Kanchipuram District - 602117, Tamil Nadu, India.  
Contact/Whatsapp- +91 91766 01882 | Toll Free : 1800 123 1479 | Email : enquiry@schwingstetterindia.com | Website : www.schwingstetterindia.com

SCAN FOR ENQUIRY





## At Volvo CE, our R&D is constantly at work on futuristic mining equipment.

**DIMITROV KRISHNAN**  
Managing Director, Volvo CE India

### How have the recent policy reforms had a positive impact on mining sector?

Considering that mining sector plays a vital role in the country's economic growth, the recent policy reforms announced by Government are steps in the right direction to make India a US \$5 trillion economy by year 2025. These reforms will open up more mining sites and streamline processes, foster much-needed competitiveness to improve overall productivity and efficiency, promote the use of sustainable technologies to accelerate environmental performance, and set new benchmarks in health and safety for the sector.

### What are the latest market trends in Indian mining sector?

Mining in India is set to witness some of the most exciting and transformative years ahead. A surge in demand for power, metals and critical minerals is giving rise to a spate of new mining ventures across the country. But this time around, it's completely different.

The new ventures are embracing state-of-the-art digital technologies, world-class machines, remote operations and best business practices to achieve higher productivity and efficiencies without any compromise on low-carbon, low-waste, health and safety goals.

### How are you prepared for the future demand push of mining equipment?

At Volvo CE, our R&D is constantly at work on futuristic mining equipment. These range from battery-operated excavators and loaders to hydrogen fuel-cell based products and grid-connected machines. At present, our mining machines are already compliant with CEV IV emission norms and are capable of running on bio-diesel fuel. Volvo CE is working on ambitious targets by the year 2030: reduce carbon emissions by 50% in overall operations and achieve 35% electro-mobility of total solutions.

### What opportunities do you visualize for your equipment range in the current and upcoming industry scenario?

Volvo CE offers a complete range of mining equipment – including excavators and wheel loaders of all classes with customised attachments – to handle mining operations anywhere in the country on any scale. Our large class excavators come with Vibro Ripper – an original patented Volvo product featuring noiseless 'vibro-isolation' technology. It protects the excavator from vibration and shock while delivering at least three times higher productivity compared to breakers. Volvo CE also offers high-end, low cap wheels loaders for underground mining. ■





# Robustness that guarantees a sparkling performance.

Smart designs. Robust build quality.



Series PL  
Planetary  
Geared Motor



Series F  
Parallel Shaft  
Geared Motor

GEARED MOTORS | GEAR BOXES  
CUSTOMIZED GEARS | DRIVE SOLUTIONS

- Robust design • Modular construction • User-friendly interface • Quick installation
- Economical operation • Easy maintenance





## Our machines are productive, fuel efficient and have intelligent fault-diagnosis technique to monitor the mining machinery real time.

### **DHEERAJ PANDA**

Chief Operating Officer (Sales, Marketing & Customer Support)  
Sany Heavy Industry India

#### **What is your focus at IMME this time?**

We are proud of the fact that Sany mining machinery is being used by top mining companies across India as it meets all their requirements in terms of efficiency, reliability and versatility.

Having said that, we will display our Dump Truck - SKT 105, Excavators - SY215 with drill attachment, SR500, SY580, SY870 and SY980 at the exhibition

#### **What is your view of IMME as a trade show in terms of value it offers to the stakeholders of construction equipment sector and the allied sectors – particularly the mining sector?**

IMME 2022 promises to showcase the Latest and diverse range of Mining machinery, Equipments, advanced technology solutions, services and supplies from India and abroad, so the value it offers to stakeholders is immense. As a construction equipment manufacturer, we have high expectations from this event, more so because the focus being the mining sector, we are confident of attracting new customers and forge business deals at IMME.

#### **How do you look at the mining sector in terms of construction and mining equipment?**

The Metals and Mining sector in India is expected to witness a major reform in the next few years, owing to initiatives such as Make in India Campaign, Smart Cities, Rural Electrification, and a focus on building renewable energy projects under the National Electricity Policy as well as the rise in infrastructure development. We are also witnessing a remarkable growth

in the mining sector especially after the introduction of mining reforms. All these factors have cumulatively spurred the demands for mining equipment.

#### **At a time when there is so much discussion around artificial intelligence and machine learning, do you see construction and mining equipment gradually becoming autonomous?**

Technology has impacted every facet of our life and there is no escaping, especially when technology can increase efficiency and productivity. With a general shift in the mining industry towards newer technologies – the equipment is bound to witness technologically advancement. The role of artificial intelligence and machine learning in this sector is still at a nascent stage in India, so the question of becoming autonomous is premature.

#### **How do you look at the concept of hybrid and electric power in construction machinery?**

It certainly creates a positive impact on the environment as hybrid and electric power construction machinery is known to reduce carbon emissions and greenhouse gases.

#### **What engineering improvisations have been carried out in your machine in the recent past to improve productivity, fuel efficiency and safety?**

Our mining equipment adopts genuine components provided by world famous manufacturers and advanced technologies which is more or less the best choice at demanding jobsites. Our machines

---

Skill development plays an important role in CE operations. People with industry knowledge and the right skill sets are better equipped to face challenges and work efficiently.

---



are productive, fuel efficient and have intelligent fault-diagnosis technique to monitor the mining machinery real time, supporting projects progress. Today we can see that all the equipment that is made and sold in India has got internet connectivity for getting data about the equipment's performance. Customers have access to that data on a daily basis or it is available to customers through portals. Such data is being utilised by customers on a daily basis to improve the efficiency of their operations.

Looking into the technological advancements, we have already moved ahead with Sany's Telematics system, which helps monitor the key operational parameters and provide timely intimation to the users. At Sany, we ensure that our customers always get extra value for their money through our cutting-edge technology and innovation.

#### **How is your company addressing the issue of operator training/skill development?**

Skill development plays an important role in CE operations. People with industry knowledge and the right skill sets are better equipped to face challenges and work efficiently. At Sany, skill building is an integral part of our company's ecosystem wherein digital fluency, resilience and

adaptability, emotional intelligence and other skill-based learning techniques are imparted on a regular basis.

Sany Bharat has successfully designed a detailed training course for equipment operators which is certified by the National Skill Development Corporation (NSDC) of India. We are also the Vocational Training Provider (VTP) or partner of NSDC. These expert-led training sessions ensure that machine operators, technicians and supervisors gain expertise in certain skills that help them operate machines safely and efficiently. After the training is complete, the Government of India issues training certificate to the participants with proper assessment done by a third party

#### **Please give information on your dealer network and new markets you plan to be present in.**

We have established a strong network of around 42 dealers and 260 touch points across India to cater to the growing demand and provide support to all our customers & associates. We are present in all metro cities and major towns across India. We have recently opened 4S offices in seven locations across India. Moving forward, we plan to open 4s offices in untapped markets to solidify our presence and extend best services to our customers. ■

---

With a general shift in the mining industry towards newer technologies – the equipment is bound to witness technological advancement.

---



## Hybrid and electric powered machinery are definitely the future of the construction and mining industries.

**V SENTHILKUMAR**  
Managing Director, Propel Industries

### **What is your focus at IMME this time?**

The focus for Propel at IMME 2022 will be to showcase our latest equipment and innovations. We have recently given inventive solutions for the Iron ore Industry and we have successfully commissioned crushing plants for big corporates in this sector. Crushing plants for the coal industry will also be a focus at IMME.

### **What is your view of IMME as a trade show in terms of value it offers to the stakeholders of construction equipment sector and the allied sectors – particularly the mining sector?**

IMME is India's largest expo for the mining and allied sectors. Propel's range of crushing and screening equipment are used in both construction and mining industries and IMME offers tremendous exposure to both these sectors. As it is being held in Kolkata it will be a good chance to attract customers from North and North East India and also from Bhutan and Nepal.

### **How do you look at the mining sector in terms of construction and mining equipment?**

The construction industry is growing at a faster pace in India compared to mining sector, but demand for mining equipment remains steady. Propel is India's fastest growing Crushing and Screening equipment manufacturer and our sales are largely to the construction industry but our share of the mining equipment market has been rapidly increasing. We have designed equipment, specifically mobile solutions, for the needs of the iron ore and coal mining industries. Our ProFast (Semi-Mobile) range of machines is designed to need minimum of civil construction at site. We expect to see a rapid growth in these segments in the near future.

### **At a time when there is so much discussion around artificial intelligence and machine learning, do you see construction and mining equipment gradually becoming autonomous?**

The use of IoT and AI is rapidly increasing in every field and the same is true for the construction and mining industry. At Propel, our IoT architecture is driven by three goals-reducing process variability, increasing productivity and improving plant uptime. We use a data driven proactive method to help analyse the condition of our plant and predict problems before they occur. This helps us prevent sudden outages, machine trips etc., and reduces maintenance costs and manpower required. This has proved to be a big success and we enable customers to increase machine uptime and prevent breakdowns. This helps customers achieve higher ROI's and efficient, trouble free operations at site.





**How do you look at the concept of hybrid and electric power in construction machinery?**

Hybrid and electric powered machinery are definitely the future of the construction and mining industries. Propel offers a range of hybrid multi configuration, high capacity dual powered track plants. Our dual powered track equipment use hydraulic power for plant set-up and crawler movement and electric motors are used 100% for plant operation. This results in a saving of 8 to 10% in fuel costs. We don't see a scope for complete electrification in the near future in India, it will happen in the long run.

**What engineering improvisations have been carried out in your machine in the recent past to improve productivity, fuel efficiency and safety?**

Propel has a dedicated R&D centre which constantly gauges the needs of the ever evolving crushing and screening industry and designs inventive solutions to improve plant efficiency and productivity. Safety is also one of our foremost concerns. As the current market trend is towards higher capacity machines we have introduced higher TPH equipment across all segments. A 1200 TPH Jaw Crusher is set to be launched soon. These higher capacity machines offer quicker return on investments as the production cost per ton

is significantly reduced.

Propel has introduced Motorized Pulleys that offer many advantages like power saving and ease of maintenance. Level sensors, automation, design to improve product shape- there are many such small innovations constantly being designed to help improve plant productivity. To improve plant safety we have designed wear parts that are easy to change and we offer operator training to enable safe operations.

**How is your company addressing the issue of operator training/skill development?**

At Propel we conduct regular training sessions for operators aimed at improving their skills. We are planning to hold operator orientation and training programs in every state in India, one session per month. We plan to give operators a certificate on completion of the training module.

**Please give information on your dealer network and new markets you plan to be present in.**

Propel has an extensive pan India dealer and service network. We have dedicated team's for every region across India and the team is rapidly increasing in size and reach. We are present in 15 countries worldwide mostly in Middle East, Africa and South East Asia. We are looking to foray into newer markets like Australia and South America in the near future. ■

**EQUIPMENT TIMES**

DON'T FORGET TO FOLLOW US ON SOCIAL MEDIA FOR THE LATEST UPDATES ON EQUIPMENT INDUSTRY



Visit the Equipment Times website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)



## Biggest demand for crushers and screens are from the aggregate industry both commercial and retail, and also from the minor minerals.

**SOORAJ CHERUKAT**

Business Development & Sales, Hailstone Innovations

### What is your focus at IMME 2022?

Hailstone is more focused and keen in participating IMME 2022 because of it being the largest machinery expo of its kind happening in India in Mining segment and as well conducted by CII. Mining industry is in a good growth in India and international segment, so we see a good opportunity for all in the market. We wish to introduce us to the industry and showcase our capabilities to all stake holders. Various other initiatives taken to make mining industry profitable shall also add a momentum to the market.

### Which segments drive the demand for crushers and screens? How do you compare the demand trends of various crusher types?

Biggest demand for crushers and screens are from the Aggregate industry both commercial and retail, but also from the minor minerals too. Recent trend shows an increased demand from mining as well. In crushers, major demand is for the Jaw and Cone crushers mainly Jaw crusher being used for the primary purposes and cones in secondary. Previously there was demand for secondary Jaw also which is

getting replaced these days by Cone in a predominant basis. VSI crushers also used for shaping purposes and more sand production. Project Technical Demands for meeting various standards determines the exact usage of crushers and screens in the circuit.

### What is the current scenario of aggregate and M-sand production?

Due to India's expanding residential market as a result of the country's quick population movement to urban areas, product demand is rising in the market. This is furthered by the fact that increased environmental worries over riverbed mining for natural sand have increased the use of synthetic sand. Government initiatives to use manufactured sand instead of natural sand because of a greater emphasis on environmental development in all major infrastructure projects (Industrial, residential, commercial) are also boosting the industry. India's sand production is expected to reach around 1000 million tonnes by 2025 at an average growth of 7-8% year on year. Same is the case of aggregates also due to the increased

---

From construction of roads to a greater extend per day, National Infrastructure Policy, Atma Nirbhar Bharat, Bharat mala Projects add a lot of market potential.

---



demand of raw materials due to the various projects happening in line.

**How do you look at the long-term market opportunities for crushers and screens considering the government’s National Infrastructure Pipeline plan and the policy reforms in mining?**

Current environment is remarkably doing a great job, lot of infrastructure growth is seen everywhere. From construction of roads to a greater extend per day, National Infrastructure Policy, Atma Nirbhar Bharat, Bharat mala Projects add a lot of market potential. Express ways being proposed and ongoing add speed to the growth of the nation. We can see a good growth in the coming years especially 2023 and 2024 in the industrial segments. Mining area the initiatives to make more profitability like OB conversion to Sand and usage of same in Pradan Mantir Awas yojana and all will add more business to market players.

**Nowadays, customers are become focused on green initiatives and savings in fuel costs and leaving a lesser carbon footprint. Can you tell us the green initiatives on product**

**development undertaken by your organization?**

A lot of new initiatives and methodologies have come up in the market due to the developments coming up in the sustainable growth. We have come up with better sand washing options for converting the dam deposited materials in the Dam reservoirs to usable IS grade Sand. Also we have come up with some more initiatives in converting the over burden materials in coal mines to be converted into Sand.

Other initiatives mainly is the concrete recycling solutions which includes converting the Construction and Demolition waste into fine and coarse aggregates and shall be used for building mainly in Green buildings. We have improvised our machines through continuous R&D to optimize the power usage and increase the efficiency there by saving more power and reduce the wastage being thrown out to environment.

We also have started providing Hybrid Track machines which work in both Diesel and electricity that saves carbon production. Solar powered plants we are promoting to customers to get a sustainable plants which never hampers the environment. ■

# SUBSCRIBE DIGITAL MAGAZINE



## on Construction Equipment sector

- News • Expert Opinions
- Advances in Technology
- Product Updates and many more...

## SUBSCRIBE DIGITAL MAGAZINE TODAY!!!

[www.equipmenttimes.in](http://www.equipmenttimes.in)





## Metallon Group is known in the industry as a mega equipment supplier for mining equipment and related projects.

### NAVIN MISHRA

Chairman-cum-Managing Director, Metallon Group

#### What are the current market trends for mining equipment in India?

Mining precedes almost all manufacturing activity, and hence an integral and indispensable sector across the industries, being the source of the main component, namely raw material. Post Covid pandemic there has been a drastic change in the working style, level of precautions and safety guidelines in every industry, and more so in mining which is already risk prone. Safety of workforce and protection of environment and keeping the operations within the ambit of the laws governing the industry has been given a rethinking and renewed importance. There is much positivity about the growth chances in the Mining Equipment industry, when the mining industry is shrugging out of the stagnancy of yesteryears. Our conservative assessment is that the Mining Equipment industry should grow at a minimum rate of 15 to 17% over the years which may be even more if the Mining Industry growth is robust and higher which is highly probable.

One of the major demand driver is the indicative increase in demand for underground mining equipment.



Presently, remote operations and commissioning, health and safety, collaboration, decarbonization or pollution control are the four key trends that we predict will continue to be the top agendas of mining companies and their service providers like us. All of these need to be enabled by electrification, digital and automation technologies. Since digital and automation tools have also empowered miners to maintain production and protect workers, it has now been proved to be a highly effective way to minimize set-up time, reduce both labour and equipment costs. Artificial intelligence will be apart in mining operations too.

This is indicative of companies' willingness to adopt new technologies, to orient them to rethink their approach, replacing traditional practices with new, innovative ways of working. This trend is set to continue.

#### How equipped are you to meet the demand the surge in mining and what are the demand drivers in the sector?

There are positive signs in the manufacturing and mining activities across the country showing a relatively higher growth and we are fully braced up to grab the opportunities available to increase our business volume. Metallon's commitment to its customers is unflinching. Quality and on time delivery and competitive prices have been the cornerstones of our business ethics since inception. Even during the pandemic, we have ensured timely delivery of equipment and machinery to our esteemed customers strategising our sourcing and logistics.

One of the major demand driver is





the indicative increase in demand for underground mining equipment. Along with that demand for loader-backhoes, compactors as well as excavators are expected to grow more over the next couple of years.

Metallon Group is known in the industry as a Mega Equipment supplier for mining equipment and related projects. We are equipped to work for various mining control system as well as latest mining equipment. We can import from China, South Africa, Poland, Brazil, Australia, Italy, USA, etc. We are ready to take challenges for equipment in the mining sector in Indian subcontinent.

**With evolving technologies in the mining sector, what are the latest trends in your range of mining equipment?**

We are equipped to supply benchmarked equipment both Critical & Heavy machinery like:

- Mining Truck
- Hydraulic Shovel,
- Dozers
- Electric Rope Shovels
- Mining Drill Rigs
- Motor Graders
- Dump trucks
- Crushers
- Skidders
- Log loaders

And many more as needed

Along with that we are capable to deal with

- Projects Implementation
- Technology Support
- Third party inspection
- Spares

**According to you, which key maintenance practices are followed for the upkeep of mining equipment?**

For maintaining mining equipment, we feel that mines should

- Ensure Proper Lubrication.
- Keep Equipment Clean, especially large machinery
- Address Wear and Tear Immediately
- Train Workers Properly
- Maintain a clean environment
- Check for signs of wear and tear
- Have a maintenance and repair schedule, and keep good records.

**What are the challenges as a major player you face and what are your suggestions to iron out these challenges in the mining equipment space?**

As a sourcing partner/associate to the mining sector, we need to complete different formalities and clearances to have a smooth completion of the operations but often the process faces the bottleneck of legal formalities. Also, disruption in commodity prices and procurement policies are at times huge challenges for completion of target. Remote location and the road conditions too cause hindrance in managing time as also natural calamities that are beyond human control.

In spite of all challenges, we are capable of supplying equipment of excellent quality, be it standard type or tailor-made, at competitive prices both for open cast and underground mining. We assure complete quality guarantee and the products can be benchmarked with any international quality mining equipment. Our strength, resilience and preparedness has withstood the most difficult times and we are happy that we ensured that our customer's production was not affected even during the lockdown period due to our meticulous planning and foresight.

Our USP is Personalized & Customized solutions for our clients and we assure to endure to uphold our integrity, values, safety and sincerity in service. ■

---

Safety of workforce and protection of environment and keeping the operations within the ambit of the laws governing the industry has been given a rethinking and renewed importance.

---



## BKT aims to launch 63-inch tires by next year.

**RAJIV PODDAR**

Joint Managing Director, BKT Tires

### **As a global OTR major, what are your strategies for the Indian and global markets to increase the percentage?**

Firstly, let's go back a little bit into history. From the product point of view - at BKT we have been taking small steps. It's like when you go to school, you can't become a graduate overnight. You need to do pre-primary, primary, mid, secondary, college, and then so on. Similarly, we started off in the smaller mode, doable 25 inches, then graduated up to 35 inches, then moved up to the complicated 47-inch, 49-inch, 51-inch, and now 57 inches. By the next EXCON, we will be coming up with the 63-inch also.

In terms of the availability of the product, we have built the infrastructure to match that capacity in India, we are the first and the only company to build tyres in the radial sector, which are built in-house. At BKT, we do not believe in buying technology. We believe in making and creating our own. Today, our products are doing exceptionally well. We have a distribution range and service-seeing partners across the globe who play an integral role in the life of a tyre. Eventually, an OTR tyre needs to be looked after throughout its life. Making a tyre is one aspect, selling a tyre is another aspect but the job of BKT does not end when it sells its tyres. Its job continues till the tyre is running.

### **What was your investment that was invested in recent times and your expansion plan?**

Investment is an ongoing subject at BKT. There are two things in investment; one is creating new and the second is upgrading. So, both these aspects are looked at separately at BKT. Because it's easy to set

up something, but it's difficult to maintain and upgrade it. Today, all our infrastructure at BKT is at par with any player across the globe. We are the only ones who have our own R&D center in India, along with a testing facility and a test track in addition to our own carbon black and mold plant as backward integration. This could happen because of the forward-thinking and investment made in this direction.

Speaking about number - a capex of INR 450 Crores for modernisation, automation and technology upgradation of certain existing equipment and installation of automated material handling systems at Rajasthan and Bhuj leading to further improvement in quality and efficiency.

### **What is the role of BKT in terms of environment and sustainability?**

It is rightly said - sustainability initiatives spark innovation and environmental progress - as sustainability requires companies to go beyond ordinary compliance with the law. Especially, for the tire industry, sustainability isn't a cakewalk, as tires are one of the polluting auto parts. The only way forward, therefore, is to focus on green manufacturing processes such as minimizing the consumption of natural resources and reducing CO2 emissions.

In fact, we are the first Indian tire company to adhere to the REACH compliance environmental requirement of the European Union way back in 2009.

We work on the principle of 'First Reduce'. So 100% of wastewater is recycled that being said all our plants are certified zero liquid discharge facilities. We have worked assiduously to ensure a downward trend in our waste by reusing and recycling the waste products in different stages of the



manufacturing process, as per technical guidelines.

Our R&D is constantly looking into more ways to reuse & recycle the waste materials that will help preserve the environment.

We employ alternate sources of energy – in our Chopanki Plant and Bhuj Plant we have a 1 MW rooftop solar power plant set up and rely on wind energy in our Bhiwadi Plant.

So we are continuously working towards taking drastic measures to integrate sustainability and protect the environment for future generations.

**Traditionally BKT has been into exports majorly. Now the trend is changing to the domestic market. How do you see this drastic change that is happening?**

I don't think there has ever been a drastic change. We made Tractor tyres in 1998 for the Indian market. However, we believe there is no use in approaching something when you can't service it. Once our Bhuj was set up, we got deeper into the whole Indian sector, and because it's so huge you need to have a proper capacity. That's when we started our journey to India.

As we are not into commercial space, we follow a disciplined approach with a lot of self-imposed rules. Additionally, we don't have commercial tie-ups and we don't believe in setting up our own franchise shops, but we worked through a conformist approach i.e. through distributors and dealers. So for the Indian market, we have the strategy as we have for the export market and thus we have developed specific products for India. We started with the product, followed by creating the distribution network, setting up the required investment for infrastructure, and then promoting the product in the market through various avenues.

**You have been focusing a lot on research and development now-a-days. Now I think your investment maybe moving larger into R&D. So, what is your annual investment?**

Even if you look at BKT's history, we have always worked toward the quality of our product. We have been able to churn out close to 80 to 100 tyre sizes every year. So, R&D has been a focus. Of late, our R&D has grown and we have become an innovator. We have our own R&D space; we have places where we can do technology

testing. So today, even if you look at the products that we are developing, they are in line with the international players. We are talking about noise level testing in our product line. So, we are already developing, we have a passion for R&D.

The BKT Research and Development Team deals with everything concerning tyre technologies and innovation: from designing a product novelty to creating new compounds to improve tyre performance, and to implementing more efficient manufacturing processes. We have 2 R&D centers for compound development in Bhuj and Chopanki. We have a tyre testing in-house capabilities for Indoor testing such as an analytical lab, chemical lab, physical Lab, in addition to the stimulation process to name a few and the specially designed outdoor Test Track at the R&D complex of Bhuj.

We have teams working in HO for designing all the molds and product specifications, supported by Tyre simulation team and the Field Engineering Team for feedback on product performance. Additionally, there are Process Technical Teams and Product testing teams in each plant. All these teams work in close cooperation with one another in every phase of the process to make the best performance of tyres. In fact, we have a 3D printer and stimulation system in HO for quicker turnaround on new tyre design ideation. Now coming to your question on investment – we invest around 3% to 5% investment in R&D annually.

**What is your vision for BKT five years down the line?**

Currently, we are about 6 percent global market share, when we started our journey back in 2005-06, we were at 2 percent. So, we have grown from 2 to 6 percent. Our vision is to be 10 percent. So that's where we are running towards and optimistically, in the next 5 years, we should be there.

Our CSR journey is where we focus a lot through our BKT We Care Foundation on health and education. We believe education is very important. So, our Founder Chairman always said that don't give people charity but give people the wings to sustain and empower them. We believe that education empowers them. In the coming five years we would like to amplify all our CSR. ■





## We remain Bullish on India and will be adding capacities to cater to the growing demands from this sector.

**KENNADY KAIPPALLY**  
Country Manager, Bonfiglioli India



**Combined Planetary Helical-Bevel Geared Units.**



**Cutter Drives.**



**Heavy-Duty Geared Units.**



**Track Drives.**

### What is your focus at IMME this time?

Bonfiglioli is perhaps the only Power Transmission company that has complete range of power transmission products serving the complete array of mining applications, right from the extraction of ore to its processing. Our gearboxes are the benchmark for the Mining Industry applications as under:

Extraction Equipment's : - Blast hole drills, Surface Miners, Mining Shovels etc.

Conveying and Material Handling Equipments : Stacker / Reclaimer, Apron feeders, Overland Conveyors, Bulk Reception Units etc..

Processing Equipments : - Pellet Plants, Sinter Plants, Thickeners, Clarifiers, Floatation Cells,

Our Wide range of products enable us to be a one stop shop for the mining industry. Our focus in the IMME this time will be to showcase the diverse range of drives that find applications across the value chain of mining industry.

### What is your view of IMME as a trade show in terms of value it offers to the stakeholders of construction equipment sector and the allied sectors – particularly the mining sector?

We have been participating in IMME now for many an editions. Over these editions we have gathered a positive experience and have watched this exhibition, mirror the growth of the mining, construction equipment and allied sectors industry in India. IMME gives us the chance of showcasing our solutions and latest offerings for the industry. It also giving us an opportunity to meet customers from different market segments under one roof. This broad range of interaction offers both tangible and intangible value to all the

stakeholders. IMME also provides us with a large platform to interact with, OEM's and end users. Such interactions make all of us more insightful to each other's outlook, besides gaining a broader perspective of the market.

### What are the challenges and the suggestions to iron out those challenges in the sector?

Even though we have witnessed a substantial growth in the Indian Construction Equipment & Mining Sector, one of the key challenges faced by the sector is the cyclical nature of the demand. Commodity prices and government spending remain the key drivers for the growth in this sector, thus the industry is dependent on global demand and state of government finances and its priorities at any given point of time. This makes the industry notoriously difficult to predict, which has implications for attracting fresh long-term investments in this sector.

### What is your company's future outlook and the way forward?

We have a very positive outlook on the future of power transmissions products in general and our products in particular, for the Indian market. Indian mining and construction equipment industry are witnessing a multi decadal structural uptrend. Growth in consumption coupled with enhanced infrastructure requirements, remain the key growth drivers for this uptrend. These growth drivers will generate a need for innovative power transmission solutions that must meet specific local Indian requirements. Challenge in such an environment remains in developing or adapting products and manufacturing capabilities that suit the specific demands of Indian market. ■

CC ELBA



# THE PERFECT SOLUTION

## WHAT MAKES ELBA CONCRETE PLANT SPECIAL AS PREFERRED CHOICE OF CUSTOMER ?

ELBA Concrete plants are designed with modular concept and cent percent mobility for transport from any location with no exclusive foundations, levelled and compacted surface of 250 kN/m<sup>2</sup> is required to place the compact folded plant with plug and play concept to erect and commission the plant within no time.

- Modular with mobility designed concrete plants give edge over competition
- Patented Single and Double Shaft Spiral Mixers – Ensure Mix quality with consistency with three zone counterflow mixing mechanism
- Auto Lubrication System – This ensures timely and effective lubrication to Shaft seals to enhance life and no breakdown time
- Easy removal of Shaft Seal – No need to take out shafts to replace Seals which reduces down time
- Elba patented interlocking mixer tiles design – Reduces laborious job to replace the tiles
- Control System – Unique Real time microprocessor based as1 control system ensures zero down time with extraordinary features to suit the entire requirements of management MIS

Ammann India Private Ltd., Block No. 157, AT - Ditasan, Post - Jagudan, State Highway,  
Ditasan, Mehsana, Gujarat, PIN Code: 382710  
Phone: +91 27 626 62 200, Toll Free Number: 1800 258 2233, [ankur.tiwari@ammann.com](mailto:ankur.tiwari@ammann.com)  
For additional product information and services please visit: [www.ammann.com](http://www.ammann.com)  
PMP-2383-02-EN | © Ammann Group

**AMMANN**  
**ELBA**



## The mining business relies on premium lubricants to help reduce downtime and prevent unscheduled maintenance.

**HRISHIKESH KULKARNI**  
CEO, Nandan Petrochem

### What is your focus at IMME this time?

Velvex (NPL) offers a broad range of high-performance lubricants for all types of mining & Construction equipment, providing end-to-end solutions to enhance productivity and maximize equipment life and performance used in harsh environmental conditions.

Along with lubricants, we are pioneers of AdBlue in India starting our journey in 2011, currently with 12 manufacturing plants operating in key cities and with a total capacity of over 4 Lk M.T. Per Annum

Our focus at IMME will be to network with key stakeholders to help them reach their optimum potential by :

- Maximizing Engine and Equipment Durability
- Extended Service Protection
- Improved overall Operational Efficiency

### What is your view of IMME as a trade show in terms of the value it offers to the stakeholders of the construction equipment sector and the allied sectors – particularly the mining sector?

IMME is the largest focused mining industry exhibition in India, featuring industry leaders across the globe showcasing their latest technologies. The primary focus is on accelerating the Momentum in Mining as well as private sector participation. It's the platform to showcase the latest and diverse range of mining machinery, equipment, advanced technology solutions, services, and supplies from India and abroad to address the critical issues that impact the industry.

### What are the challenges and suggestions to iron out those challenges in the sector?

One of the major challenges in the mining sector is sliding productivity and spiraling costs, therefore strategies are needed for reclaiming efficiency in the mining sector.

"VELVEX has a range of technologically advanced & premium lubricants that can help mining organizations enhance operational efficiency & meet their productivity challenges" says Mr. Hrishikesh Kulkarni, CEO at NPL.

Large construction excavators work in the harshest environments and require premium lubricants and coolants to achieve high-level reliability and performance at the lowest total operating costs. From bulldozers, dump trucks, and draglines to scrapers and shovels, heavy earthmoving equipment, excavators, and breakers, all construction, and mining equipment are subject to work in harsh, dusty, and



critical conditions. The mining business relies on premium lubricants to help reduce downtime and prevent unscheduled maintenance.

**Velvex with an extensive lubricants portfolio provides customers with solutions which cut cost and drive productivity.**

The other key challenge in the Mining & Construction industry which is going to face in near future is the availability of genuine Diesel Exhaust Fluid (DEF), this product has a significant impact on the performance of the equipment and low-quality DEF will also lead to higher cost of replacements and higher downtimes. VELVEX being a leading player in this space is looking at an innovative AdBlue range of product SKU's & dispensing units clubbed with services to meet this challenge of the availability of Genuine products in remote sites.

**What are your company's future outlook and the way forward?**

The mining sector in India is expected to witness a major reform in the next few years, owing to reforms such as the Make in India Campaign, Smart Cities, Rural Electrification, and a focus on building renewable energy projects under the National Electricity Policy as well as the rise in infrastructure development. Coal production increased by 12% in September 2022 over September 2021.



Its cumulative index increased by 21% from April to September 2022-23 over the corresponding period of the previous year.

“Over the years we have developed expertise in manufacturing tailor-made Genuine Oil for major OEMs. Depending on their design, application & engineering, suitable oils are formulated with optimum performance levels to meet the OEM-specific requirements, benchmarking on this expertise Velvex is expanding its portfolio of Off-Highway Lubricants, particularly in the synthetic and long-life lubricant range” says Mr. Hrishikesh Kulkarni, CEO at NPL

On the Diesel Exhaust Fluid (DEF) product line we are looking at innovative lighter versions of Automated dispensing units at sites and also mobile dispensing solutions for extremely remote locations with lower equipment populations. ■

**Experience the Digital Portal of  
EQUIPMENT TIMES Magazine**



- Construction Equipment
- Infrastructure
- Mining
- Equipment Technologies
- Authored Articles
- Project Report
- Site Report
- Product Launch
- Case Study
- Industry Update
- Components, Accessories & Spares

[www.equipmenttimes.in](http://www.equipmenttimes.in)



## Hitachi's electric excavators have been there in the portfolio for over a decade and are being used in mining applications.

### HEMANT MATHUR

AVP (Sales & Marketing) - Tata Hitachi Construction Machinery Company

#### What is your focus at IMME this time?

Tata Hitachi, in collaboration with Hitachi Construction Machinery, Japan, has been a pioneer in introducing the latest technologies in the Indian market.

IMME is a platform to showcase new offerings to the Indian mining equipment market. In this edition of IMME we plan to share information on the high-capacity electric drive dumpers - typically a 190T (EH3500AC-3) and the EX-7 series of large mining excavators which come with the FCO technology. Both machines aid in lowering carbon footprints due to better fuel efficiencies.

We will also be showcasing our mining class excavator ZX 870-5G and the newly launched Wheel Loader ZW225. On display will be other attachments and parts too.

#### What is your view of IMME as a trade show in terms of value it offers to the stakeholders of construction equipment sector and the allied sectors - particularly the mining sector?

IMME gives an opportunity for all OEMs to demonstrate their strengths by showcasing new products and services. More importantly, it provides OEM's a platform to interact with all stakeholders. Overall IMME as a trade show adds immense value by bringing together the key players in the segment and contributing to growth in the mining sector.

#### How do you look at the mining sector in terms of construction and mining equipment?

Coal contributes to over 50% of the overall mineral production in the country.

Coal usage is not restricted only to power plants, but is also required by cement plants, and other industries. The increase in demand for cement in India is, in turn, creating demand for both limestone and coal.

To accelerate the production of Coal, concepts like MDOs, Commercial Mining, etc. have been introduced. These trigger the demand for Construction and Mining Equipment. The government's efforts in its vision of Atmanirbhar Bharat are also expected to contribute to the growth in this segment.

#### At a time when there is so much discussion around artificial intelligence and machine learning, do you see construction and mining equipment gradually becoming autonomous?

The use of AI for Hitachi mining equipment has been implemented in autonomous high-capacity Dumpers (190T/240T/300T) which are being used in countries like Australia and the Americas. The excavators used with these dump trucks are connected through the fleet monitoring systems, which enables the trucks to be scheduled as per the availability of the excavators every time the truck is unloaded. This helps to enhance the utilization of the trucks and the efficiency of the dumper and excavator fleet. This fleet is remotely monitored by a Control Room via GPRS/GPS devices fitted on the trucks and excavators. This technology has been successfully implemented and running for over 5 years in those markets.

Also, there are remote-operated mini excavators developed by Hitachi. They can be used in applications such as garbage

---

Advanced features like auto idle, auto deceleration, EP and HP mode selection, dial type throttle, fuel saving pump system, and hydraulic regeneration system ensure the least fuel consumption by the machine.

---



handling, sewage treatment plants, and high temperature working zones.

### How do you look at the concept of hybrid and electric power in construction machinery?

Hitachi's electric excavators have been there in the portfolio for over a decade and are being used in mining applications. In fact, there are models like EX2600E-6, a 15 cum bucket capacity electric excavator running in coal mines in India.

However, the electric or hybrid concept is not yet established in construction machinery. With the target of Net Zero emissions by 2070 taken by the government of India, we expect the pace of the introduction of alternate fuels like hybrid/electric power in construction machinery to increase. With a strong partner like Hitachi Construction Machinery which is already ready with the latest technologies, we are confident that going forward we shall introduce them in the Indian market as well.

### What engineering improvisations have been carried out in your machine in the recent past to improve productivity, fuel efficiency and safety?

Our machines are equipped with Intelligent Hydraulic technology (iOHS)-intelligent optimum hydraulic system. This system ensures precise controls and efficient performance. Advanced features like auto idle, auto deceleration, EP and HP mode selection, dial type throttle, fuel saving pump system, and hydraulic regeneration system ensure the least fuel consumption by the machine. The introduction of the EX-7 series of Hydraulic excavators by Hitachi in the mining segment (Bucket capacity 10Cum – 45 Cum) with FCO (Fuel Consumption Optimization) will be helping to optimize the fuel consumption with production. Now customers can know all information about their machine from any location on their mobile phones and computers through the telematics suite provided. Machine HMR, utilization, Location, fuel levels, etc. can be easily monitored. Monthly and weekly reports of all Tata Hitachi machines can be accessed from one place to ensure smooth functioning and efficient performance. This system also alerts customers on the upcoming service dues and alarms if any which increases the machine's uptime.

Tata Hitachi machines also ensure the



safety and comfort of the operators through features like seat belts, front guards, anti-skid tapes for the operator's safety, battery cut-off switch, baffle plates to separate hot and cold zones, ROPS/FOPS cabin, etc.

### How is your company addressing the issue of operator training/skill development?

Tata Hitachi has a two-pronged approach when it comes to skilling and training. One for permanent employees and contractual staff, where on-the-job training in different trades like Welding, Fitting, Machining, Painting, and Mechanical and Electrical maintenance in our production setup is given. Along with this training is imparted through Skill Training Center inside the plant, which has world-class facilities and Hitachi-certified trainers.

The other initiative is Skill Development Training for youths from local communities. We have an Operator training center with a facility for training on operating Construction Equipment like Hydraulic Excavators, Backhoe Loaders, and Wheel loaders. This setup is elaborate with experienced trainers from across the country imparting training. This is backed up by a State-of-the-art simulator for machine operation conditions which gives near-real-life machine operating conditions for the trainees. Once the course is completed the participants are given certificates in collaboration with the Government of India which help them to get a job as Machine Operators easily across the country. ■

---

Coal usage is not restricted only to power plants, but is also required by cement plants, and other industries.

---

# DIGITALISATION of Heavy Earth Moving Machinery



Whereas other industries have already adopted digital processes, selling methods (e-commerce), service delivery etc. construction has so far remained an industry characterised by manual processes and traditional methods. Some aspects of construction are being digitalised faster than others, for example the design phase, for which Computer Aided Design (CAD) has been used for many years and is increasingly being replaced by Building Information Modelling (BIM).

One of the tasks for the future is the digitalization of the construction site. Although this is currently on everyone's lips, it has so far made little impact in the real world. A digital construction site is the vision of a fully digitalized, highly automated and customizable construction site.

## CONSTRUCTION 4.0

The construction industry is undergoing a significant transformation, which includes revolutionary new approaches such as digitalisation and automation. This "fourth industrial revolution", known for all EU

industry as "Industry 4.0", is known in our sector as Construction 4.0.

The big change brought by Construction 4.0 seems to revolve around a decentralized connection between the physical space and the cyberspace via ubiquitous connectivity. In the construction industry, the connection between these two worlds already exists through technological approaches. For example, it is possible to have complete numerical models of a construction project and even to create a bidirectional link between the construction site and these models. However, the presence of the human is necessary to maintain and manage this link. With the advent of Construction 4.0, a number of technologies will gradually replace this role of the human, so as to reduce human intervention and to tend towards a decentralized fusion between physical reality and its representation in the cyberspace.

## ASSOCIATED TECHNOLOGIES

While the basis of Industry 4.0 in many industries relies on the technologies which enable ubiquitous connectivity and

real-time decentralized decision-making, Construction 4.0 is not limited to those technologies but rather based on a broader spectrum, with the main ones being the Internet of Things, Digital Twin, additive manufacturing, cloud computing, Cyber-Physical Systems (CPS) and BIM.

The great promise of the Construction 4.0 revolution lies in the almost complete automation of the entire project life cycle. This automation involves the use of digital twins at every step, from planning to operation, including design and construction. In the design phase, the increased use of BIM models as digital twins makes it possible to question them through simulations of the physical product (the building, for example), its constructability and profitability options (4D, 5D), and its sustainability (e.g., energy analysis).

In the construction phase, BIM models continue to serve as digital twins, but are complemented by other technologies to automate their connection to the reality of the construction site. These technologies are mainly Cyber-Physical Production Systems (CPPS), including sensors, drones, embedded robotics and monitoring systems. In the operational phase, the BIM and the IoT, together with other CPS sensors, make it possible to monitor the performance of the facility and to set up an effective system for preventive maintenance management.

#### WAY FORWARD

Digitization is and will be the topic that will occupy companies in the coming years. Construction machinery (like HEMMs) and building material plants have also recognised this and took the first step a little over a year ago to tackle this topic in a regulated and organised manner within the industry. In order to solve the upcoming problems and shape this process, VDMA has set up a working group entitled "Machines in Construction 4.0" (MiC 4.0)



In the MiC 4.0 working group, manufacturers and operators jointly developed an identical interpretation of data content so that construction machinery can "communicate" with a uniform understanding in future, regardless of the manufacturer. MiC 4.0 is open to all who wish to participate in this process. Complicated regulations and requirements at national, EU and international level, standardisation, machinery directive, machine safety, cybersecurity and environmental legislation require companies as well as associations to cooperate more intensively.

The Heavy Earth Moving Machinery (HEMM) and construction machinery would have to meet the requirements with which the building contractors are confronted. These include legal regulations, occupational safety, health, and environmental protection. The operators are forced to act economically and legally sound in the construction market. The machines and equipment are tools to achieve these goals. An intensive cooperation between OEMs and construction companies, as it is currently taking place in the MiC 4.0 working group, is essential. ■



**RAJESH NATH**  
Managing Director  
Operations, VDMA - India  
(German Engineering Federation)

Keep up-to-date with the latest industry-specific news!

Visit the Equipment **Times** website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)



# INDIA MINING INDUSTRY



In India, the mining sector is one of the core industries of the economy and it has witnessed significant growth in the past few years. In terms of trends, positive signs in the manufacturing and mining activity recorded a higher relative growth performance last year. The mining policy has been introduced with the objective of increasing revenue, production, employment, and operations in order to boost economic output.

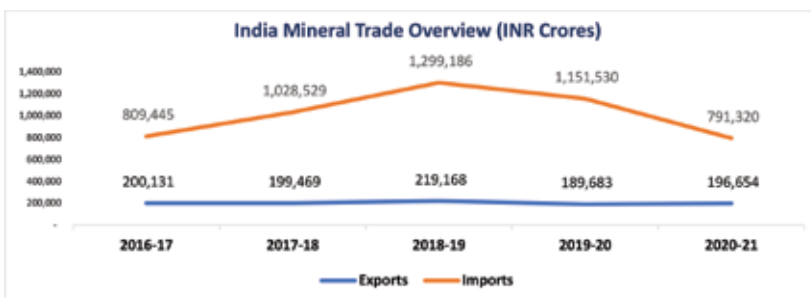
India produces nearly 95 minerals, including 4 fuel, 10 metallic, 23 non-metallic, 3 atomic, and 55 minor minerals (including building and other materials). During 2021-22, India's mineral & ore was reported from 21 States/Union Territories of which the bulk of the value of mineral production (excluding fuel and atomic

minerals, and minor minerals) of about 88% were confined to 4 States. Odisha spearheads the India mining sector, in terms of the estimated value of mineral production in the country and accounts for of 47% in the domestic output. Chhattisgarh follows Odisha with a share of 16.2%, followed by Karnataka (14.3%), Rajasthan (11%), and Jharkhand (4.5%) in the total value of mineral production.

In terms of production, India ranks 2nd in Steel (crude/liquid), 3rd in aluminium (primary) & Chromite; 4th in iron ore, lead (refined) & Zinc slabs; 5th in Bauxite, 7th in Manganese ore, 13th in copper (refined), 16th in apatite & rock phosphate and 17th in Magnesite.

## MARKET DRIVERS

The growth of the mining industry is driven by development in the automotive & transport industry, advancements in processing equipment and manufacturing technologies, and an increase in the usage of minerals in various industries such as building & construction, and packaging. In terms of consumption growth, India is one of the leading regions, due to massive urbanization, growth in income of people living in urban areas, and rapid industrial



Source: Ministry of Mines, Government of India.

development. Additionally, continuous advancements in the automotive and aerospace industry and ongoing R&D activities to develop innovative, cheaper, and effective products fuel the growth of the market.

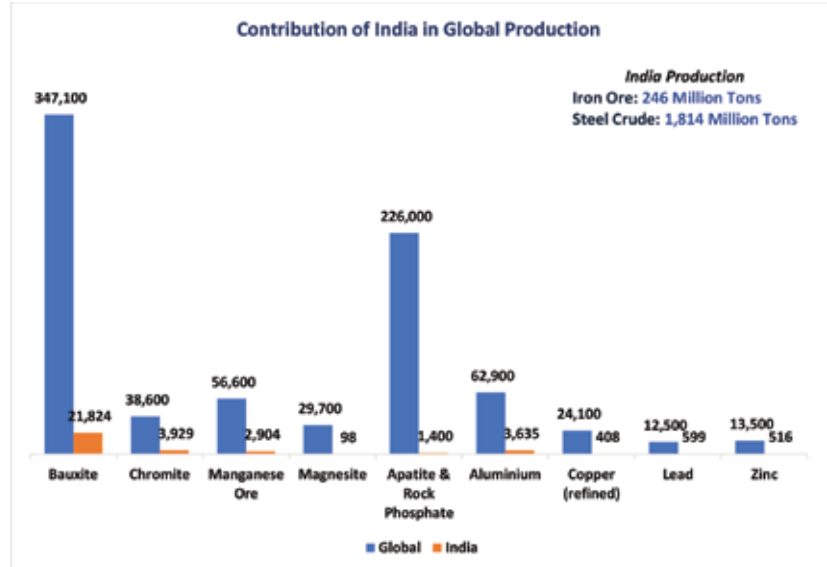
Furthermore, domestic demand for Copper and Aluminium is expected to be strong on the back of an improved outlook for industrial and infrastructure growth. The government's thrust on the energy and power sector, smart city, Housing for all, harnessing renewable energy resources, electric vehicles, infrastructure development, Atmanirbhar Bharat Abhiyan, and Make in India spells good news for the India mining industry. The per capita copper consumption in India is expected to increase from the current level of 0.6 Kg to 1 kg in the coming years. Importantly, the average per capita copper consumption in the world is 3.2 kg.

#### ATTRACTIVE MACROECONOMIC SCENARIOS

- In June 2022, the industrial performance index of eight core industries stood at 143.4, mainly driven by the production of coal, cement, electricity, refinery products, fertilizers, steel, and natural gas.
- In FY 2021-22, exports of iron ore stood at US\$ 2.5 billion as compared to US\$ 5.0 billion in FY 2020-21.
- The steel production in India is projected to increase by 18% to reach 120 million tonnes by the end 2022.
- Between April 2021 and February 2022, exports of coal, mica, and other minerals including processed minerals, stood at US\$ 2.9 billion.
- The metals & mining sector has seen some developments, investments and support from the Government in the recent past.

#### CHALLENGES IN INDIA'S MINING INDUSTRY

With huge mineral deposits, India's mining sector is still suffering from legacy issues. According to the assessment, 1% growth in the mining sector pushes up the growth rate of industrial production by 1.2-1.4%. Some of the protuberant challenges across the India mining market include the exploration of mineral resources, land acquisition forest and environment, capital investment, and the latest technology & modernisation.



#### MINING EQUIPMENT MARKET IN INDIA

India is one of the fast-growing economies in Asia and the world. Currently, the India mining equipment market is estimated at 620-630 units per year for the last 4 years. Nevertheless, RationalStat expects the India mining equipment market to observe a healthy demand and expects the market to grow by more than 12%. The tailwinds for different demand drivers are expected to ensure that such growth continues at least for 6 years till 2028.

In terms of segment share, Dump Trucks constitute around 65% of the total fleet of mining equipment in India. Other prominent mining equipment used in opencast mines are Hydraulic Equipment, Wheel Loaders, and support equipment including Dozers, Motor Graders, etc.

#### INDIA'S COMPETITIVE ADVANTAGE

India holds a strong foothold in the mining sector across the world against the backdrop of a fair advantage in production and conversion costs in steel and alumina. India's strategic geographic location enables export opportunities to develop. It is estimated that the number of reporting mines in India is 1,425, of which mines for non-metallic minerals are 720, and mines for metallic minerals were estimated at 525.

#### KEY EVENTS AND DEVELOPMENTS IN THE INDIA MINING INDUSTRY

- The government plans to monetize assets worth INR 28,727 crore (US\$ 3.68 billion) in the mining sector over FY 2022-25.
- In November 2021, JSW Steel

India holds a strong foothold in the mining sector across the world against the backdrop of a fair advantage in production and conversion costs in steel and alumina.



**UJJWAL PARWAL**  
Director and Co-Founder  
RationalStat LLC

- announced a 6% YoY surge in crude steel production at 1.42 million tonnes in October 2021.
- In November 2021, AMNS India announced that it is planning to manufacture specialty steel under the production-linked incentive (PLI) scheme.
  - Vedanta Limited is planning a US\$ 20 billion investment across its operations, including increasing silver production and steel capacity.
  - In June 2021, Mr. T.V. Narendran, the CII President and Managing Director of Tata Steel, stated that steel firms have firmed up plans to invest INR 60,000 crore (US\$ 8 billion) over the next three years in this sector.
  - In May 2021, Vedanta Ltd. announced its plan to invest INR 10,000 crore (US\$ 1.34 billion) in setting up an aluminium park in Odisha to facilitate companies that use metal to set up their manufacturing units in the facility.
  - In May 2021, ArcelorMittal Nippon Steel (AMNS) signed a contract with Total (a France-based energy company) for the supply of up to 500,000 tons of liquefied natural gas (LNG) per year until 2026.
  - In February 2021, ArcelorMittal-Nippon Steel India, in agreement with the Odisha government, planned to set up an integrated steel plant (with 12 MT capacity) in the state's Kendrapada district for INR 50,000 crore (US\$ 6.89 billion).
  - In February 2021, two new iron ore mines were inaugurated in Odisha, with a production capacity of 15 lakh tonnes per month and ~275 million tonnes of consolidated iron ore reserves. These mines will bring in INR 5000 crore (US\$ 680 million) in annual revenue for the state and employment opportunities for locals.

#### TECHNOLOGICAL TRENDS

The government-run Coal India recently announced that it is exploring green mining options to minimize adverse environmental impact by leveraging eco-friendly technologies in its underground and open-cut (OC) mines. Coal India is striving to ramp up its UG production by 4 times to 100 million tonnes by FY 2030 from 25.6 million tonnes in FY 2022. CIL is planning to deploy 10 high wall machines in its open-cut mines during the upcoming year with a projected production potential of 5 million tonnes per year.

Furthermore, BEML is also developing the newest technology in mining equipment and upgrading old equipment with advanced technical characteristics based on equipment appropriateness and market input.

#### MAINTENANCE PRACTICES

The mining industry is a capital-intensive industry and a continuous increase in demand for mineral/ore as per production target requires high productivity and increased availability. Most mines are subjected to implementing checklists, changing work schedules, improving training, enhancing emergency response plans, and launching new safety programs. The best single way to improve maintenance safety is to use safer equipment.

Some of the cited maintenance practices based on research:

- Using high-reliability equipment with the ruggedness
- Timely preventive maintenance
- Scheduling the maintenance cycle
- Introducing newer KPIs for the maintenance
- Timely change/refill of consumables
- Constant communication and consultations with equipment distributor or OEM
- Use of genuine parts. ■

Keep up-to-date with the latest industry-specific news!

Visit the Equipment **Times** website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)





# IMME



## INTERNATIONAL MINING AND MACHINERY EXHIBITION 2022

### 16<sup>th</sup> - 19<sup>th</sup> November 2022

Eco Park Rajarhat, Kolkata, India

# INDIA'S LARGEST EXHIBITION FOR THE MINING SECTOR



### The Event

<b>4 Days</b> International Exhibition	<b>250+</b> Exhibitors	<b>5</b> Country Pavilions <b>8</b> Countries	<b>50,000</b> Exhibition Display Area	<b>10,000+</b> Business Visitors	<b>300+</b> B2B Meetings	<b>2 Days</b> Global Mining Summit	<b>700+</b> Delegates	<b>50+</b> Speakers
---	---------------------------	--	--	-------------------------------------	-----------------------------	---------------------------------------	--------------------------	------------------------

#### Event Sponsors



#### Principal Sponsor



#### Co-Sponsors



#### Registration Sponsor



#### Associate Sponsor




#### Patron Sponsors



#### Corporate Contributors



# MASTER at WORK!



**Equipment Times** digs into the demand and application trends, factors to be considered while choosing the right wheel loader, design parameters, challenges the industry face to move to completely electric wheel loaders, the government's plans in infrastructure creation and reforms in mining policies.

**T**he market for wheel loaders is seeing fresh traction due to the buoyancy in road construction activities. Fresh off take of coal due to a surge in thermal power production is adding to the demand. Users want wheel loaders that deliver higher productivity and lesser operating costs, along with enhanced servicing of their machines across their work cycle.

Wheel loaders are mobile shovels with multiple uses. They may move goods from stockpiles to trucks, haul big loads, and move items about job sites. Construction, agriculture, forestry, and mining are just a few industries that use wheel loaders. The public sector also uses wheel loaders, businesses that rent equipment, sand and gravel pits, and businesses that deal with industrial waste for site preparation work, digging, and moving and putting items. They are also used to dig, remove debris, install pipes, and load commodities into trucks, among other things. Since the backhoe loader

bucket is primarily utilized as a piece of digging equipment, the front loader bucket capacity is significantly higher than the backhoe loader buckets.

The wheel level of the machine cannot be reached with the backhoe's digging apparatus. The development of the transportation infrastructure and large-scale construction projects, among other activities, has been driving the market's overall growth. Another element influencing the market's expansion is the introduction of new products by the major players. The market's expansion has been hampered by the high price of wheel loaders and the substantial upfront investment required to manufacture them.

#### **AFTER COVID IMPACT....**

With the rigorous lockdowns and social segregation implemented to stop the COVID-19's spread, the market for wheel loaders suffered. The market for compact wheel loaders





was hurt by the lack of customer confidence, the partial company shutdown, and the uncertain economic climate. Operations in logistics and the supply chain were hampered during the outbreak. The speed at which the COVID 19 issue has intensified has shocked the global economy. The epidemic has had an effect on people's social well-being, economics, and public health all around the world.

The economic stagnation brought on by the lockdown orders issued by government authorities in several nations also affected the construction equipment industry. However, because of the relaxing of the restrictions, it is anticipated that the market for compact wheel loaders would pick up steam in the post-pandemic scenario.

#### **GROWTH OF THE MARKET**

Rapid infrastructure development will enhance the growth of the market. The market for wheel loaders will expand due to rising infrastructure

investments. Increasing public infrastructure spending is essential for a country's economy to remain stable and flourish. The public sector and government organizations handle most infrastructure development projects in Asia. Investments are expected to expand rapidly throughout Asia, especially in the transportation industry. During the forecast period and beyond, it's anticipated that nations like Indonesia and the Philippines will spend significantly on road and highway construction. Thus, these advancements are anticipated to stimulate significant investment in the construction sector, thereby increasing demand for wheel loaders.

#### **RISE OF THE MARKET**

Wheel loaders market is expected to witness an impressive CAGR of 9.5% during 2022-2027. Increasing investment in infrastructure is driving the growth of the market. Wheel loaders are mainly utilized to transfer stockpiled materials from one place to another. They are also used to

load materials into the truck, clear rubble, place pipes, dig, and execute other such activities. Increasing urbanization and industrialization are providing great support to construction activities. There are certain activities where bulldozers are replaced by wheel loaders due to their large size. The replacement of bulldozers with wheel loaders in situations where flexibility is required to travel across any construction site will support the market growth during the forecast period.

### **RENTAL MARKET WILL RESTRICT THE GROWTH OF THE MARKET**

The market for renting construction equipment has a high penetration rate. Renting construction equipment is a trend that is quickly spreading to emerging countries as well. At reasonable rates, wheel loaders and other construction equipment are frequently offered for rent. The expansion of equipment available for rental may persuade small end users to choose such products. As a result, fewer new pieces of equipment will be bought, hurting wheel loader sales. Thus, increased rental company rivalry could negatively impact market vendors' capacity to draw in and hold on to customers and their ability to generate income. This would impact the expansion of the worldwide wheel loaders market.

### **LEADERS SPEAK...**

**Deepak Shetty, CEO & Managing Director, JCB India**, said, "JCB India has pioneered the integration of digital technology in its range of



machines through advanced Telematics called 'LiveLink'. JCB machines work in off-road and often remote locations and LiveLink helps in remote monitoring and fleet management on the key parameters of Service, Operations and Security of equipment. LiveLink now helps over 2,10,000 JCB machines communicate in real-time on machine location, operations, performance, downtime, service alerts and security. The technology enables better site management and equipment utilisation, thereby improving operational efficiency and cost-saving. Geo-fencing and Time-fencing have enhanced the security of these machines."

He further added, "Technology has been transforming the way Machine-to-Machine and

Machine-to-Customer business is being done. All vital information about the machine is available to customers on their mobile devices through a web browser or also through the 'LiveLink' mobile application. Additionally, the system also sends out alert SMSs to registered mobile numbers. LiveLink benefits customers in better fleet and fuel management by enabling remote monitoring and management of their machines. It incorporates GPS, Telecommunications, Machine Electronics and IoT, enabling the equipment to remain in contact with the owner, dealer and JCB. Accurate monitoring of machine hours and service alerts improve maintenance. Technical alerts and maintenance history data help customers manage the machine health to keep their machines running or maximum uptime and return on investment. Early warnings with detailed machine history enable users to plan work effectively."

Speaking about the factors to be considered while choosing the right wheel loader, **BKR Prasad, Head – Marketing & Product Development, Tata Hitachi Construction Machinery Company**, said, "There are five



important factors to be considered while choosing the right Wheel loader. Firstly, it is important to understand the application needs before choosing any Wheel loader specification. Different applications have varied requirements with the need for different machine configurations, buckets, and features.

The next thing to look for in a Wheel loader is the payload and tipping load. Payload is the amount of material that can be carried by the bucket, measured in Tons. The tipping load is the material that a machine can carry before tipping off. The bigger this number, the more material you can carry at once. It is important to choose a bucket according to material density and payload. Using oversize bucket capacity leads to machine failure in long term as well as safety issues. Also, the benefit of a high-capacity bucket is reduced by lower cycle time leading to less production. Transmission and axles are also important factors to consider. Most Wheel loaders come with one of two kinds of transmission: hydrostatic or mechanical. The main difference between the two is that a



hydrostatic transmission moves by hydraulic power, while a mechanical transmission relies on gears and cogs. Manual transmissions are cheaper but require constant attention from the operator while operating the machine whereas hydrostatic models require less effort on behalf of their operators since they work automatically after adjusting certain settings such as speed and incline angle etc. Tata Hitachi offers India's only hydrostatic made-in-India wheel loader in 3-ton class, TL340H Prime. ZW225, Tata Hitachi's 5.5-ton class wheel loader uses hydrodynamic technology.

He further added, "The weight of the machine is another key factor to consider when choosing a wheel loader. The weight of the machine will not only determine how much space it takes up on the truck but also how much fuel will be needed, and the number of drivers required to safely operate it. The next thing to consider is the power output and reliability. It is important to optimize engine size to match machine power requirements. Hydrostatic wheel loader needs lower power thus leading to lower fuel consumption. The type of work that is done will also affect how much fuel the loader consumes per hour – for example, if operated in sandy areas or wet conditions (like mud), then chances are high that the loader will use more fuel than if it were operating on dry ground with loose soil. Tata Hitachi sources a reliable engine from Cummins to give a trouble-free performance. Easy to maintain engine and after treatment device on Tata Hitachi engine lower down maintenance cost. Another important aspect to consider while buying a Wheel loader is its warranty. Tata Hitachi wheel loader offer standard and extended warranty. Pan India support network, genuine high-performance original parts, easy parts availability, and

competitive prices are other key considerations for Wheel loaders.

Tata Hitachi dealer network and touch points ensure seamless support so that machines can work uninterrupted for longer durations."

**Surat Mehta, Head of SDLG Business in India**, said, "We expect robust and sustained



**SURAT MEHTA**  
Head of SDLG Business  
in India

demand for wheel loaders in the near future, thanks to multiple initiatives undertaken by Government of India on the infrastructure front. Foremost among these is a massive increase in capex which will accelerate road construction and infrastructure building activities powered by PM GatiShakti Master Plan, National Infrastructure & Monetisation Pipeline, and National Bank for Financing Infrastructure & Development. Other initiatives include new mining policy to attract fresh investments under PPP model, various PLI schemes for manufacturing & production related sectors, increased mechanization at ports for bulk material handling, thrust on affordable housing, focus on mass transit projects and more. Traditionally, the 3-ton segment has commanded dominant market share for wheel loaders in India. However of late, we find demand shift to 5-ton capacity and increasing interest in 7-ton and 8-ton machines as well. SDLG Wheel Loaders cater to every segment of the market – from 3-ton up to 13-ton. They are preferred by contractors, mining players and infrastructure developers across the country." ■

# POWERFUL, PRODUCTIVE, ECONOMICAL



**T**he Construction Equipment and Infrastructure industry in our country is directly connected to the nation's development. Not only does it create investment opportunities across various related sectors but also contributes to the nation's GDP as well as to the gross capital formation. There is an ever-increasing demand for innovative machines and solutions in the construction equipment industry that can cater to different applications in the field. JCB, being one of India's leading construction equipment manufacturers, offers indigenous, world-class, and versatile solutions to ease the groundwork for the construction industry. With an exceptional range of construction equipment. JCB India introduced three new Wheeled Loaders at EXCON 2021 : 433-4, 437-4 and 455-4.

#### **JCB 433-4 WHEELED LOADER**

Powerful. Productive. Economical. The new JCB 433-4 Wheeled Loader is designed with the aim to boost success.

The JCB 433-4 Wheeled Loader is made with a focus on fuel efficiency and high productivity. On average, this best-in-class machine could bring down fuel cost by 10% and increase productivity by 8%.

With a Maximum Engine Power of 93 kW (125hp) and Maximum Operating Weight of 11,000 kg, this machine has a standard Shovel range of 1.8 -3.1 cum. With proven aggregates like transmission, engine & axle, the new JCB 433-4 Wheeled Loader boasts of a higher uptime. The new JCB 433-4 Wheeled Loader is easy to operate with fully automatic transmission and comes with 15% Bigger ROPS/FOPS ready cabin with improved visibility.

#### **JCB 437-4 WHEELED LOADER**

Designed to deliver under the toughest conditions, the new JCB 437-4 Wheeled Loader is loaded for performance. One of the most efficient wheeled loaders ever made, the new JCB 437-4 Wheeled Loader performs the 'extraordinary' on an 'everyday' basis.

This incredible machine can bring down fuel cost by 10% while offering excellent productivity. With a shovel capacity of 2.2-3.4 cum, the machine's Maximum Operating Weight is 12,040 kg and Maximum Engine Power is 108kW (145hp). 437-4 offers greater fuel efficiency, ease of use with fully automatic transmission and improved operator comfort and Visibility with FOPS / ROPS ready cabin.

**JCB 455-4 WHEELED LOADER**

The extremely reliable JCB 455-4 Wheeled Loader is built to cope with the most demanding work conditions and still achieve the biggest goals, this new wheeled loader is a remarkable machine that ensures long-term performance.

455-4 has a Cummins engine and ZF axles & fully automatic transmission. With an increased output of up to 5% in Power mode and a fuel efficiency improvement of up to 10%, this machine is designed to perform in the most arduous of applications. A shovel capacity of 3.3 -5 cum, Maximum Operating Weight of 18,000 kg and a Maximum Engine Power of 168kW (225hp) the new JCB 455-4 Wheeled Loader is easy to operate and much safer, with High Comfort FOPS / ROPS ready cabin.

Apart from enhancing productivity and fuel efficiency like no other machine, the new JCB 433-4, 437-4 and 455-4 Wheeled Loaders are empowered with intelligent technologies like Advanced LiveLink, Intelliload and Centralised Lubrication System (CLS). These smart features ensure complete control over the machine.

**TECHNOLOGY**

JCB India has pioneered the integration of digital technology in its range of machines through advanced Telematics called 'LiveLink'. JCB machines work in off-road and often remote locations and LiveLink helps in remote monitoring and fleet management on the key parameters of Service, Operations and Security of equipment.

LiveLink now helps over 2,10,000 JCB machines communicate in real-time on machine location, operations, performance, downtime, service alerts and security. The technology enables better site management and equipment utilisation, thereby improving operational efficiency and cost-saving. Geo-fencing and Time-



fencing have enhanced the security of these machines.

Technology has been transforming the way Machine-to-Machine and Machine-to-Customer business is being done. All vital information about the machine is available to customers on their mobile devices through a web browser or also through the 'LiveLink' mobile application. Additionally, the system also sends out alert SMSs to registered mobile numbers.

LiveLink benefits customers in better fleet and fuel management by enabling remote monitoring and management of their machines. It incorporates GPS, Telecommunications, Machine Electronics and IoT, enabling the equipment to remain in contact with the owner, dealer and JCB.

Accurate monitoring of machine hours and service alerts improve maintenance. Technical alerts and maintenance history data help customers manage the machine health to keep their machines running or maximum uptime and return on investment. Early warnings with detailed machine history enable users to plan work effectively.

This cutting-edge technology can help lower servicing and running costs by ensuring machines are operated to their optimum performance, reducing fuel consumption and unnecessary machine wear. By monitoring idle-time and real-time fuel consumption, LiveLink helps manage the whole life cost of ownership, driving down costs, driving up productivity. It also helps keep machines safe and improves control over machine misuse. Alerts can be set up for when a machine is moved out of or into a predetermined zone, these geofences are customisable to the space required. ■



**DEEPAK SHETTY**  
CEO & Managing Director  
JCB India Limited



## Tata Hitachi ZW225 is made in India with proven Japanese technology making it suitable to work globally.

### **BKR PRASAD**

Head – Marketing & Product Development  
Tata Hitachi Construction Machinery Company

### **What are the demand and application trends for wheel loaders in mining, construction, etc.?**

Wheel loader market has been 3000-3100 units for the past 2 years & this is despite Covid19. As it is a material handling equipment, it is well used across a range of applications in infrastructure as well as mining & material handling in ports.

In infrastructure, it is widely used in building roads & highways, railways, tunnels, real estate as well as a stand-alone stone quarries & crushers supplying aggregates to a variety of end use segments. In mining, demand is driven mainly by coal handling as well as iron ore mining. It is also used in other mining applications involving bulk material handling. The other major application is various types of material handling in ports & inland waterway terminals – coal, iron ore, limestone etc.

If you look at the structure of the wheel loader market, 3 Ton payload segment comprised > 80% of the market in the early part of the last decade.

With the increased demand for production as well as time constraints of projects, the 5 Ton payload Wheel loader

segment has steadily increased over time & now constitutes around 25% of the market.

This shift is because of customers graduating from smaller crushers to medium or large-sized crushers, mechanization of ports and higher production demand from the mining sector.

Wheel loader demand continues to be robust inspite of CEV-IV emission norms – introduced last year for CE that can ply on road - leading to an increase in price due to the up-gradation of the engine.

The govt is pushing economic growth through increased Capex in infrastructure. It has announced a 35% increase in Capex to Rs.7.5L Crs for this fiscal with Water supply, railways, PMGSY & Swach Bharat Mission having significant increase in allocation.

On the mining front, Coal block auctions continues & total of 56 mines have been auctioned till date. Coal India Ltd has set a target of 700MT production this year ↑12% YoY & is further targeting 1BnT production by 2024.

In addition, auctioned iron ore mines in Odisha that are yet to restart are expected to add to the demand. More auctions are planned.

Further 111L Crs of investment through NIP till 24-25, Bharatmala now likely to be completed by 26-27, Bharatmala 2 in the works, investment in Sagarmala, the continued increase in investments in mining for commodities driven by economic growth, consumption & energy demand all will drive the demand for wheel loaders in the future.

The elections & transition to CEV5 norms in FY 2024-25 might act as a temporary speed breaker, but growth is expected to continue thereafter.

In line with the current trends, the



market will increasingly transition to higher capacity loaders, although the 3 payload Ton segment will still be the largest in the foreseeable future.

**To what extent has concepts such as low life cycle cost, faster ROIs, lowest cost per tonne had an impact on the design parameters of the range of wheel loaders on offer?**

While developing the machine the customer needs are identified and accordingly the correct product is chosen. Priority is given to LCC where utilization and production demand is high, and returns are benchmarked against a tonne of material handled. Even the maintenance and repair components are selected to lower the operation cost. Thus, faster ROI is achieved.

Recently, Tata Hitachi launched a 5 Ton payload wheel loader- ZW225 (CEV-IV). A machine specially designed for higher productivity and reliability. Tata Hitachi ZW225 is made in India with proven Japanese technology making it suitable to work globally. As explained above, needs were taken into account & the machine is equipped with features like DSS (Down Shift Switch), Automatic bucket leveler, Auto float, and Bucket kick out. Customers are appreciating these features because it enhances their productivity and working efficiency contributing to faster ROI.

For the higher class of 7 tons and above Tata Hitachi has ZW310 (7 Ton), ZW370 (9 Ton), and ZW550 (11 Ton) as offering to meet requirements of mining, port, block handling, etc.

**Nowadays customers are focusing on green initiatives by reducing fuel efficiency. What is your company doing to match these requirements?**

On the technology front, Tata Hitachi was the first OEM to introduce indigenously designed & manufactured fuel efficient hydrostatic Wheel loader TL340H which gives 20% lower fuel consumption in keeping with evolving customer needs.

Tata Hitachi TL340H Prime is a 3.4 Ton payload Wheel loader with best-in-class fuel efficiency, is a good choice for customers who prefer low running costs. Customers can save up to Rs. 5 to 8 lacs per annum with this machine. Automatic gearless drive, superior operator comfort (Air conditioner, single lever operation,



bucket type seat, etc.), higher safety (Front guard, rearview camera, battery cut off switch, etc.), InSite (Telematics system), and a variety of buckets and attachments make TL340H the best choice for customers. Further, Tata Hitachi continuously upgrades its machine to reduce carbon footprints. Tata Hitachi machines use long-drain oils to reduce environmental impact.

All machines are compliant with CEV-IV (BS-IV) regulations. It uses the latest ATD devices to lower pollution. Using CRDi technology for the engine gives lower emissions and higher fuel efficiency. By Apr'24 when CEV-V(BS-V) regulation will come into place, Tata Hitachi will offer Wheel loaders that will comply with the norms.

**What challenges would the industry face to move to completely electric?**

The industry to move completely to electric has a few challenges in terms of commercial and operational needs. The electric Wheel loaders are expensive, and not a viable option for all the customers to use them at this moment. In the future if the cost comes down, then it might be beneficial over the life cycle of the machine.

Another challenge is with respect to the operation. As the Wheel loader is highly mobile during operation it is not possible to use the tethered machine. Also, since these machines require high power, the battery size and capacity also have limitations

Electric charging infrastructure is challenging for some applications. Since these machines work in remote locations it's difficult to develop charging infrastructure for these machines at all places.

Hence a change in powering technology in wheel loaders will be driven mostly by economic & regulatory considerations rather than pure electric or otherwise by customers here. ■

---

On the mining front, Coal block auctions continues and total of 56 mines have been auctioned till date.

---



## SDLG Wheel Loaders of all classes are designed to ensure maximum productivity and profitability over a long period.

**SURAT MEHTA**  
Head of SDLG Business - India

### **What are the demand and application trends for wheel loaders in mining, construction, warehousing, industrial etc.?**

We expect robust and sustained demand for wheel loaders in the near future, thanks to multiple initiatives undertaken by Government of India on the infrastructure front. Foremost among these is a massive increase in capex which will accelerate road construction and infrastructure building activities powered by PM GatiShakti Master Plan, National Infrastructure & Monetisation Pipeline, and National Bank for Financing Infrastructure & Development. Other initiatives include new mining policy to attract fresh investments under PPP model, various PLI schemes for manufacturing & production related sectors, increased mechanization at ports for bulk material handling, thrust on affordable housing, focus on mass transit projects and more. Traditionally, the 3-ton segment has commanded dominant market share for wheel loaders in India. However of

late, we find demand shift to 5-ton capacity and increasing interest in 7-ton and 8-ton machines as well.

SDLG Wheel Loaders cater to every segment of the market – from 3-ton up to 13-ton. They are preferred by contractors, mining players and infrastructure developers across the country.

### **What are the factors to be considered while choosing the right wheel loader?**

As the demand to produce more work in less time at lower cost grows, key quotients such as productivity, fuel efficiency, overall flexibility and reliability of a wheel loader come into play. India is now experiencing an unprecedented expansion of infrastructure which in turn, is testing the limits of wheel loaders of various payloads to overcome production and time constraints.

As Growth Machines, SDLG Wheel Loaders stand out in terms of productivity, fuel efficiency, versatility, reliability and overall safety. Time and again, they have risen to customer expectations by frequently moving big loads across sites - easily, effectively and efficiently.

### **To what extent have concepts such as low life cycle cost, faster ROIs, lowest cost per tonne had an impact on the design parameters of the range of wheel loaders on offer?**

The primary purpose of a wheel loader is to rapidly move material piled up in one location to another. This impacts design parameters in terms of weight-bearing capacity, fuel-saving ability, hydraulic systems, advanced steering mechanism and controls, easy manoeuvrability and





overall service life. Because, at the end of the day, what really matters is customers realise faster and better returns on their investment.

SDLG Wheel Loaders of all classes are designed to ensure maximum productivity and profitability over a long period.

**Nowadays customers are focusing on green initiatives by reducing fuel efficiency. What is your company doing to match these requirements?**

Over the years, SDLG has taken several initiatives related to design, technology and production to reduce the carbon footprint. Today, every SDLG wheel loader is compliant with CEV IV emission norms. As a rule, all SDLG wheel loaders offer best-in-class fuel efficiency. They are also capable of running on eco-friendly bio-fuels.

**What challenges would the industry face to move to completely electric?**

While total electrification of wheel loaders is perhaps the future, it is a daunting task and will take time. An in-depth understanding of diverse applications and the challenges customers face in daily operations is required. An all-new, stable and well-tested design and systems architecture is a must to ensure machines deliver consistently – both in the short term and over the long haul.

SDLG is actively exploring all the ways and means to go fully electric.



**The long-term outlook of the market looks positive with the government's plans in infrastructure creation and reforms in mining policies. In this scenario, how do you look to reap the real benefit for the wheel loader market?**

SDLG is looking at comprehensive solutions to complement the mining, construction & infrastructure projects of the future. Apart from best-in-class machinery and spares support, SDLG also provides productivity services, consultancy services, fuel efficiency services, uptime services, training services including operator training at site, and a full range of financial services. The whole idea is to ensure that customers, anywhere and everywhere in the country, are able to increase overall efficiency in operations and create more value for their businesses. ■

**Experience the Digital Portal of  
EQUIPMENT TIMES Magazine**



- Construction Equipment
- Infrastructure
- Mining
- Equipment Technologies
- Authored Articles
- Project Report
- Site Report
- Product Launch
- Case Study
- Industry Update
- Components, Accessories & Spares

[www.equipmenttimes.in](http://www.equipmenttimes.in)

# LAYING the GROUNDWORK!



Advancement in compaction equipment and introduction of stringent government regulations are expected to positively impact the growth of the compaction machines market over the coming years. **Equipment Times** looks into the latest offerings, technological upgradation, future of compactors in India, long term vision for companies, suggestions for improving the market for compactors in India.

**C**ompaction machines are powerful equipment used for compaction purposes during construction and building activities. These machines are used to compact or reduce the size of the soil, gravel, concrete or asphalt used in the construction of roads, dams, airports, and other structures. They help users to increase overall productivity and reduce labor cost. Thus, growing usage of compaction equipment to compact paving materials, such as asphalt mixes and roller-compacted concrete will continue to push demand in the global market. Similarly, rising investments in construction activities is anticipated to boost the growth of the compaction machines market during the forecast period. As the construction industry is developing, many upcoming projects require advanced construction equipment such as tandem rollers and pneumatic rollers, which can work efficiently in less time.

## MARKET...

Increasing construction spending is emerging as a key factor accelerating growth of the global compaction machines market. Governments of various countries have proposed new policies and plans to connect rural areas to urban areas. To accomplish this, they are outlaying significant capital expenditure to make concrete roads. This is expected to push compaction machines sales. The construction sector for residential remains largely supported by low lending rates, rising demand for bigger homes, and low housing

inventory globally.

As the construction industry continues to grow, so does the demand for construction equipment. The infrastructure development in emerging and developed countries is propelling the demand for building and road construction. This has led to an increase in demand for compaction machines and the trend is likely to continue during the forecast period.

Similarly, easy availability of compacting machines on rental services and growing global popularity of electric compaction machines will further expand the global compaction machines market size during the next ten years.

According to 6Wresearch, India Compactor Market is anticipated to register growth during 2020-2026. The government of India has come up with 'Vision 2030' initiative aiming to be a \$5 trillion economy by 2025 and \$10 trillion economy by 2030, the foremost dimension of achieving this vision is to build physical infrastructures such as next-generation roads, railway, seaport, airports, urban transport, and inland waterways. The government of India and Invest India have come up with "India Investment Grid" (IIG) aiming to provide different investment options to global investors in 5000 projects from across the 36 states and union territories. Such initiatives would create ample demand for compactor equipment in the Indian market.

## TECHNOLOGY

Chances are that today's operator is unaware

that the heavy, vibrating roller machines for compaction were, in fact, decades in the making. Today's tough workhorse machines have evolved for nearly a century, at first influenced by an expanding car manufacturing market, growing industrial transportation that demanded new and better roads, plus faster modes of application, and later, by innovations in software technology.

**INDUSTRY GIVES THUMBS UP...**

**Alok Jha, Director, Sales & Marketing, India & SAARC, CASE Construction Equipment,**



**ALOK JHA**  
Sales & Marketing,  
India & SAARC, CASE  
Construction Equipment

says, "As a market leader in vibratory soil compactors, CASE offers a range of world-class compactors for the domestic and global markets. The new line of FX Series BS-IV (CEV) Compliant Compactors from CASE is one of the top pieces of equipment with excellent technology. CASE currently provides three options in the FX series: the 1107FX, 1107FX-D and 1107FX-PD. These are equipped with an Electronic BSIV-compliant FPT engine, which is designed for carefully controlled fuel injection, improved power and torque distribution, easy manoeuvrability, and higher fuel efficiency. These machines come with an option of 32 mm and 25 mm drum size. The CASE 952EX vibratory tandem compactor comes with up to 5% improved fuel efficiency along with a new diesel oxidation catalyst system for exhaust after treatment. The compactors are comfortable and safe for operators with excellent brakes and new audio-visual system. Recently, at the EXCON, we have launched the 1107EX (PD) Soil Compactor that features a standard drive and smooth drum for multi-purpose activities and standard compaction jobs. The 1107EX (PD) with pad foot drum and double drive is designed for compressing more cohesive materials. It also offers a 25 mm drum and turbocharger with pre-cleaner as a part of its clean and quality design."

**Ramesh Palagiri, Managing Director & CEO, Wirtgen India,** said, "Indian Compactor Market is expected to witness significant growth over the coming years on account of several upcoming projects such as the expansion of public infrastructure, the establishment of new industries as well as a growing number of small and medium enterprises (SME's) in the country. Growth in infrastructure and construction activities



**RAMESH PALAGIRI**  
Managing Director &  
CEO, Wirtgen India

are the key factors driving the growth of the compactors market. The introduction of stringent regulatory policies is also fueling the demand of this market. Whether it is asphalt compactors or soil compactors, the thrust from manufacturers has been on machines that will achieve optimum compaction with the minimum number of passes."

**Vishwesh Rai, General Manager, Dynapac India,** said, "Dynapac is always committed



**VISHWESH RAI**  
General Manager  
Dynapac India

for continuous improvement and innovation. Changing for better is in Dynapac's DNA. Since last eight decades, Dynapac has always been at the forefront of sensing the environmental, technological and developmental changes. And we are also the first to fully operationalize these changes in our widest range of products and other offerings. CEV stage IV was not new to us. Dynapac's thinktank and the advanced R&D department were on it since quite long. Again, we are the first to introduce our series of CEV IV compliant soil compactors, tandem rollers & pavers. These machines are all set to raise the bar.

In compactors, we have optimized eccentricity for better fuel efficiency & economy. Dynapac is the first manufacturer to offer the first optimized design of eccentric system for rollers. This design is optimized for maximum performance, low fuel consumption and minimum environmental impact. Almost 11 kW less power is required to initiate the vibratory action, reducing energy consumption at start-up by 50% and thus using less fuel. Dynapac equipment are equipped with high degree of intelligent compaction system. Parallely, we provide compaction meter which reduces the inspection period of checking density, eliminates the chances of double bouncing and over compaction. Compaction Meter can also be used as initial proof if the compacted area is homogeneous and there is no organic material in the lower layers. ■



## As a market leader in vibratory soil compactors, CASE offers a range of world-class compactors for the domestic and global markets.

### **ALOK JHA**

Director - Sales & Marketing, India & SAARC, CASE Construction Equipment

#### **How optimistic are you in the compaction equipment sector in terms of project execution and growth and How do you look at the future of compactors in India?**

We anticipate surge in the current demand for compaction equipment as more and more infrastructure development especially roads and highways construction projects are announced. With the announcement to expand National Highways, the Gati Shakti Master plan to accelerate road and highway projects as well as rural development projects such as Pradhan Mantri Gram Sadak Yojana for road construction, there will be a boost in demand of construction and earthmoving equipment. Moreover, associated projects

such as Sagarmala, will further the need of such equipment as they are versatile and can be used for multiple applications.

These are exciting times for the construction equipment and manufacturing industry, and we at CASE, are ready to cater to the industry needs with our smart range of machines. Moreover, we anticipate a decent growth in the coming months owing to the impending General Elections that would bring the focus on investment on pending or long tailed civic infrastructure projects.

#### **What are the latest offerings in your product range?**

As a market leader in vibratory soil compactors, CASE offers a range of world-class compactors for the domestic and global markets. The new line of FX Series BS-IV (CEV) Compliant Compactors from CASE is one of the top pieces of equipment with excellent technology. CASE currently provides three options in the FX series: the 1107FX, 1107FX-D and 1107FX-PD. These are equipped with an Electronic BSIV-compliant FPT engine, which is designed for carefully controlled fuel injection, improved power and torque distribution, easy manoeuvrability, and higher fuel efficiency. These machines come with an option of 32 mm and 25 mm drum size.

The CASE 952EX vibratory tandem compactor comes with up to 5% improved fuel efficiency along with a new diesel oxidation catalyst system for exhaust after treatment. The compactors are comfortable and safe for operators with excellent brakes and new audio-visual system. Recently, at the EXCON, we have launched the 1107EX (PD) Soil Compactor that features a standard drive and smooth drum for multi-purpose





activities and standard compaction jobs. The 1107EX (PD) with pad foot drum and double drive is designed for compressing more cohesive materials. It also offers a 25 mm drum and turbocharger with pre-cleaner as a part of its clean and quality design.

**Share insights on technological upgradation that has happened recently or might happen in near future in compaction equipment.**

There has been an upward trend in the soil compaction segment owing to the gradual recovery post the pandemic. According to the recent studies, the global soil compaction market is expected to grow at over 4% and hit USD 4 billion by 2028. Driven by the renewed focus on infrastructural development in the Indian market, there is a positive outlook of the construction industry towards compaction equipment. Additionally, the demand has been influenced by the adoption of modern soil compaction equipment including rollers with an integrated intelligent compaction measurement system by construction companies.

In India, the Construction Equipment

industry has recently upgraded the machines above 75HP by accepting newer emission norms. Moreover, while adopting the CEV Stage IV (or BS-IV), Diesel Oxidation Catalyst (DOC), Exhaust Gas Recirculation (EGR) or Selective Catalytic Reduction (SCR) Systems were introduced to bring down the harmful emissions in the exhaust. By April 2024, the next stage of emission norms are scheduled for implementation, referred to as Stage-V and the OEMs are working towards it. The BSV emission norms mandates the operator safety structures like Roll-Over Protective Structure (ROPS) and Falling-Object Protective Structure (FOPS). Additionally, in last couple of years, customers have preferred the vibratory compactors with telematics for the ease of operations. Intelligent compaction meter is another optional fitment, which is expected to gather customer base in near future.

Also, Tandem Compactors have been moving from in-frame roller design to suspended roller design, though both designs have their unique advantages and disadvantages. Single drum roller options with heavier (13 to -21 tonnes) and powerful machines are preferred as it enhances the productivity. ■

---

The CASE 952EX vibratory tandem compactor comes with up to 5% improved fuel efficiency along with a new diesel oxidation catalyst system for exhaust after treatment.

---

Keep up-to-date with the latest industry-specific news!

Visit the **Equipment Times** website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)





## Wirtgen Group has always served its customers with technology intensive machineries including the Hamm soil compactors and tandem rollers.

**RAMESH PALAGIRI**

Managing Director & CEO, Wirtgen India

### What are the latest offerings in your product range?

HAMM has supplied new compactor models from the HC series HC 119i to the Indian market. The machine, weighing 11 t, are available with or without a drum drive as well as a Padfoot shell. All machines fulfil the requirements of the CEV Stage IV. At 90 kW (121 HP), they bring enhanced power to the construction site. Furthermore, the new compactors feature a modern, convenient operating platform, excellent driving and handling properties, as well as a highly efficient ECO mode that can reduce fuel consumption considerably. The new Hamm tandem rollers HD 99i launched in the Indian market are CEV-Stage IV compliant and are fuel efficient. Furthermore, they offer a modern operator's platform, excellent driving comfort and handling properties. These models are manufactured at the Wirtgen Group plant in Pune, Maharashtra.



### Share insights on technological upgradation that has happened recently or might happen in near future in compaction equipment.

The Wirtgen Group has always served its customers with technology intensive machineries including the Hamm soil compactors and tandem rollers. Hamm offers IoT based technologies and features in the compactors. WITOS fleet view is a software offered by Wirtgen group which records all the machine related data in real time. With its intelligent telematics system WITOS Fleet View supports fleet management for onsite machines. With WITOS HCQ, HAMM has taken another leap forward, towards the digital construction site. Here, all process data that has been collected is transferred to the WITOS portal via the mobile network. It also allows users to view process data such as the number of passes, asphalt temperature and stiffness value – for every individual point and for every individual machine. Working on a range of construction sites in the earthworks and asphalt sectors requires rollers to have optimum driving and steering characteristics. To meet this need, HAMM has installed three-point articulation – a more sophisticated upgrade from conventional articulated joints – in all soil compactors and tandem rollers. The three-point articulation ensures optimum steering characteristics, driving comfort and safety while driving on difficult terrain.

### How do you look at the future of compactors in India?

Indian Compactor Market is expected to witness significant growth over the coming years on account of several

upcoming projects such as the expansion of public infrastructure, the establishment of new industries as well as a growing number of small and medium enterprises (SME's) in the country. Growth in infrastructure and construction activities are the key factors driving the growth of the compactors market. The introduction of stringent regulatory policies is also fueling the demand of this market. Whether it is asphalt compactors or soil compactors, the thrust from manufacturers has been on machines that will achieve optimum compaction with the minimum number of passes.

Manufacturers are also focusing on coming out with machines that are fuel-efficient and require minimal maintenance, all adding to the good news for contractors. With competition, intensifying suppliers are concentrating on coming out with machines that would ideally suit Indian working conditions, where typically these machines would be put through more number of work cycles, as compared to the developed world. With articulated and pivot-steered tandem rollers of between 1.5 and 14 t, manufacturers are offering a large range of machines for practically any application in asphalt construction for all markets. This includes double vibration rollers, rollers with vibration and oscillation drums, combination rollers, vibration rollers with split drums and rollers with split vibration and oscillation drums.

Indian Compactor Market is anticipated to register growth during 2020-2026. The government of India has come up with "Vision 2030" initiative aiming to be a \$5 trillion economy by 2025 and \$10 trillion economy by 2030, the foremost dimension of achieving this vision is to build physical infrastructures such as next-generation

roads, railway, seaport, airports, urban transport, and inland waterways. The government of India and Invest India have come up with "India Investment Grid" (IIG) aiming to provide different investment options to global investors in 5000 projects from across the 36 states and union territories. Such initiatives would create ample demand for compactor equipment in the Indian market.



The government of India has come up with an initiative to encourage public-private partnerships (PPP's) and foreign investors to participate in several infrastructure projects such as coastal road project, char Dham highway, char Dham railway, eastern and Western dedicated freight corridors, kalpasar project, and Delhi-Mumbai Expressway, Amritsar-Jamnagar industrial corridor project, Delhi-Katra Expressway, Ganga Expressway thus creating demand for compactor equipment in the upcoming years. ■

## EQUIPMENT TIMES

DON'T FORGET TO FOLLOW US  
ON SOCIAL MEDIA FOR THE  
LATEST UPDATES ON  
EQUIPMENT INDUSTRY



Visit the Equipment Times  
website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)



## Dynapac is the first manufacturer to offer the first optimized design of eccentric system for rollers.

**VISHWESH RAI**  
General Manager, Dynapac India

### How optimistic are you in the compaction equipment sector in terms of project execution and growth?

Considering General election of 2024, I expect next two year will be very demanding for equipment sales due to new upcoming projects like 6-8 lane expressways, greenfield projects, airport expansions etc. As compactors are the most basic equipment required for road building, this segment is expected to grow with higher productivity machines.

### What are the latest offerings in your product range?

In India, we manufacture 3 ton roller to 15 ton rollers for higher productivity and greenfield projects. At Dynapac, we believe in right machine for the right job. By this, we mean that we have compactors for all spectrum of customers with our essential, standard & performance range. Currently, we are having the biggest range of CEV-IV soil compactors in India. This encompasses our patented advanced technology with energy efficient eccentrics, variety of



options like compaction meter, dyn@link, padshell etc to optimize the passes that ensure quality results with fuel efficiency. We focus on customer value designed for higher productivity & low operation cost driven by our vision of "Design to Perform build to last".

### Share insights on technological upgradation that has happened recently or might happen in near future in compaction equipment.

Dynapac is always committed for continuous improvement and innovation. Changing for better is in Dynapac's DNA. Since last eight decades, Dynapac has always been at the forefront of sensing the environmental, technological and developmental changes. And we are also the first to fully operationalize these changes in our widest range of products and other offerings. CEV stage IV was not new to us. Dynapac's thinktank and the advanced R&D department were on it since quite long. Again, we are the first to introduce our series of CEV IV compliant soil compactors, tandem rollers & pavers. These machines are all set to raise the bar.

In compactors, we have optimized eccentricity for better fuel efficiency & economy. Dynapac is the first manufacturer to offer the first optimized design of eccentric system for rollers. This design is optimized for maximum performance, low fuel consumption and minimum environmental impact. Almost 11 kW less power is required to initiate the vibratory action, reducing energy consumption at start-up by 50% and thus using less fuel. Dynapac equipment are equipped with high degree of intelligent compaction system.

Parallely, we provide compaction meter

Expansion in building and development activities like greenfield projects, expansion of highways, airport projects etc in India will drive the compactors market.





which reduces the inspection period of checking density, eliminates the chances of double bouncing and over compaction. Compaction Meter can also be used as initial proof if the compacted area is homogeneous and there is no organic material in the lower layers.

Dynapac CompBase software bases the selection of machine and method on the material to be compacted. The software provides information on the expected depth effect and degree of compaction after any given number of passes. Accordingly compactor is designed with a higher static linear load and optimized engine power which reduces fuel consumption and desired density is achieved in fewer passes.

Dynapac Seismic technology automatically detects the frequency of the soil characteristics, works together with it, and applies the correct amount of energy exactly when required. Dynapac Seismic will reduce fuel consumption, eliminate any unnecessary wear and tear and even reduce the number of passes required to reach the optimum compaction.

Dynapac equipment also comes with best-in-class static linear load. Higher static linear load plays a significant role in achieving desired density and stiffness earlier with low number of passes. Hence



providing an advantage of saving time and fuel.

### How do you look at the future of compactors in India?

Expansion in building and development activities like greenfield projects, expansion of highways, airport projects etc in India will drive the compactors market. Rising funding and investments in developing infrastructure are fueling the growth of the Road Compactor Market.

### What is your long term vision for the company?

Dynapac is having a clear and defined long term goals that is focused towards implementing new ideas and coming up with advanced technological upgrades to meet the emerging demand of customers keeping government norms in mind. ■

Keep up-to-date with the latest industry-specific news!

Visit the Equipment **Times** website now

[www.equipmenttimes.in](http://www.equipmenttimes.in)



# From Survey to successful execution **EIRICH's** upgradation of **Texmo** **Industries Sand Plant**

**T**exmo is a global company whose presence in India dates to 1956. Texmo manufactures high quality, robust, and reliable pumps. In its portfolio, Texmo Industries has submersible pumps, monoblock pumps, and motors for the Domestic, Industrial, and Agricultural markets. Their pumps are renowned for their quality, and for supplying power and efficiency.

In the existing plant at Coimbatore, Texmo has 3 Sand plants. Sand plant 1 & 2 uses DISA Horizontal moulding line with Eirich sand plant with RV-19 Mixer installed in 2007 and Sand plant 3 uses DISA Vertical moulding line with DCE sand plant with Eirich RV-15 Mixer installed in 2009.

## REQUIREMENT

Texmo decided to increase the capacity of their plant with new moulding line. This in turn called for higher capacity of green sand. Texmo evaluated the options to increase sand supply. The option was to

replace RV15 with RV19 in Sand plant 2 or in Sand plant 3. When the company first decided on the upgrade in January 2020 they wanted to upgrade Sand plant 2 with RV-19 Mixer.

## SURVEY

Eirich studied the layout and analyzed that the sand plant capacity was not sufficient, and it won't be a good option to install RV-19 in Sand plant 2. Also looking at overall feasibility with regards to minimum changes in layout, down time, Eirich proposed that a change of Mixer in Sand plant 3 would be a better option.

After internal review, Texmo came up with the proposal to upgrade Sand plant 3 in April 2021 on turnkey basis with minimum down time, and structural changes. Also, they had to align the work with other stake holders.

Along with Sales team, Eirich's Engineering and Service team visited the site for overall assessment and analysis for upgradation as well as to understand the timelines required for the successful execution of the project.

After the first round of visits, Eirich gave Texmo an offer along with details on modifications needed and time estimates. The Texmo team reviewed the document and asked for a detailed techno-commercial offer with commitment on timelines, shutdown time needed amongst other things.

Before submission of offer, Eirich did a joint assessment with the "probable local vendor" who would most likely do the modification job including erection. The table for "work and time study" was prepared and concurrence was received from customer also. Considering the importance, Eirich also has back-to-back arrangement with this vendor.

Eirich prepared two to three proposal layouts, discussed with Texmo team during site meetings and through conference calls explained their proposal in detail. They





also gave key technical points- such as advantages and the equipment that needs to be changed or modified.

In May 2021 Eirich sent the commercial proposal, followed up continuously and submitted the civil structural drawings to the customer for approval. Eirich had given schedule for shut down initially for 50 days, but customer agreed only for 41 days. The layout plant suggested by Texmo's structural consultant went through many revisions, sending the Eirich team back to the drawing board 8 times.

They wanted to complete the commissioning of RV19 plant in 7-8 Months from date of PO.

Texmo realized the value of Eirich's strong technical competency and offer which really helped to win the confidence of Texmo Management and Project Team as well.

Eirich started negotiation and finally received LOI in September-2021.

### **SUCCESSFUL EXECUTION**

After internal kick off meeting, Eirich started ordering of long lead items like brought outs and Import items in September, 2021

Eirich started preparing and scheduling the activity chart for Texmo & started offline activity like modification of existing equipment. Agreement was signed to supply equipment in February 2022 and supply by end of March.

Eirich started structural erection in December 2021 and completed by February 2022. There was some delay in civil work & ducting from customer side.

Eirich started dismantling of Mixer on 22nd February 2022 onwards. The sand cooler's erection began on 28th February 2022.



Eirich RV19 Mixer erection commenced after March 7th and was completed on 11th March

All other modification works were completed at the same time.

Eirich completed erection and commissioning on 6th April, 2022.

Final commissioning certificate was received on 23rd April-2022.

The feasibility study commenced in July 2021 and in April 2022 the project was completed. After the feasibility study the site was formally handed over to Eirich on 21st February 21st 2022 and Eirich completed the project in record time by 6th April 2022. ■

## ONGC PLANS 1 GW SOLAR POWER PLANT IN RAJASTHAN

Oil and Natural Gas Corp (ONGC) is planning to set up a 1 GW solar power plant in Rajasthan in a key move aimed at securing a foothold in the green energy space, according to an executive familiar with the company's plans.

The company has approached the state government, seeking 5,000 acres of land to house its proposed 1 GW plant, the executive said.

"We are engaged with the government," the person said. "The moment the land is allotted, we will go full throttle on executing the project."

The project may require an investment of Rs. 5,000 crore and take about three years to finish after the allotment of land.

The proposed plant will help meet in-house electricity demand as well as allow the company to sell power on the market.

With just 153 MW of wind and 31 MW of solar generation capacity, ONGC barely has a presence today in the renewable energy space. But it has now begun to act on its green goals by pushing hard on some projects and by tying up with some power companies.

## ASHAR GROUP REDEFINES MMR REDEVELOPMENT PROJECTS WITH SPEED, QUALITY AND TRANSPARENCY

Slum Redevelopment and Society Redevelopment is a pipe dream for thousands of people living in dilapidated housing structures in the MMR.

In a city where land is scarce and land price is skyrocketing, brownfield projects are the only options available for the city to accommodate an average daily migration of 200 people in Mumbai.

The case for redevelopment is more urgent because more than 50 per cent of Mumbai's land is still underutilised, out of which slums occupy 24% percent of the land. The rest of the land for redevelopment lies with the housing societies and various government authorities like Bombay Port Trust, Indian Railways, Airport Authority etc.

Besides, more than 50,000 buildings in MMR are dilapidated, and astonishingly half of such structures are situated in the heart of the financial capital and its near suburbs. Redevelopment is yet to yield the intended outcomes despite various legislative initiatives by the Maharashtra government and financial support from the banking sector. Today, finding a solid and reliable developer is one of the critical challenges faced by all stakeholders, especially the housing society. The most vital factor in successfully implementing and executing redevelopment is the selection of a good developer.

## UP DEFENCE CORRIDOR SET TO REALISE RS. 50,000 CR INVESTMENT POTENTIAL

The Uttar Pradesh Defence Corridor is on track to realise its estimated investment potential of Rs. 50,000 crore, former Air Chief Marshal R K S Bhadauria has said.

Bhadauria, who is now the Chief Nodal Officer of the UP Defence Industrial Corridor, said the state government has taken a slew of policy measures to actualise the potential of the mega project of national importance.

He said memoranda of understanding (MoU) for investment worth nearly Rs. 12,000 crore had already been signed with private companies and institutional entities.

"Apart from the MoUs already signed, fruitful discussions are underway with other companies looking to invest in the Corridor," he told Business Standard.

Bhadauria said efforts were being made to rope in anchor players and innovative startups to foster defence manufacturing ecosystem and a robust supply chain for maximising the benefits of the Corridor project.

## MAHARASHTRA BAGS AROUND RS. 500-CRORE ELECTRONICS CLUSTER PROJECT

The central government has approved a Rs. 500 crore project to make Ranjangaon in Pune, an electronics manufacturing cluster, in a move that is being seen as an apparent bid to make up for Maharashtra losing back-to-back big-ticket projects to Gujarat.

Announcing the project, Minister of State for Electronics and IT Rajeev Chandrasekhar recently said the cluster will attract major investments from manufacturers, generate thousands of jobs and put the state in the league of locations that have emerged as vibrant electronics production hubs in the country.

The announcement came amid a political slugfest over mining giant Vedanta switching to Gujarat for its Rs. 1.53 lakh crore chip factory and Maharashtra also losing out on the Rs. 22,000-crore Tata-Airbus transport aircraft project. While former Maharashtra minister Aaditya Thackeray has criticised the Eknath Shinde-led government for letting go of these projects, the Maharashtra chief minister has stated that Prime Minister Narendra Modi and Home Minister Amit Shah have assured of big projects for the state.

"To make Maharashtra into an electronics hub, we have approved an Electronics Manufacturing Cluster project in Ranjangaon, Pune. The total investment of the government on this EMC will be about Rs. 500 crore," Chandrasekhar said at a briefing.

## MRTS CONNECTIVITY FROM VELACHERY TO ST THOMAS MOUNT TO BE READY BY MARCH

Finally, the long wait for passenger travel in the 5-km stretch of the Mass Rapid Transit System (MRTS) between Velachery and St Thomas Mount is likely to end soon. The work in the final leg of this crucial connectivity is expected to be completed in the last quarter of the current financial year, said BG Mallya, General Manager, Southern Railways. This will integrate MRTS with the South BG section and Chennai Metro.

The Velachery to St.Thomas Mount project was approved by the Railway Board with the revised sanctioned estimate of Rs. 734.01 crore. Railways and the Tamil Nadu government shares the cost in the ratio of 1:2.

This last-leg connectivity project under the MRTS Phase II extension traverses along the Inner Ring road for 4.35 km and passes through a densely-populated residential area for 500 m to connect with the existing St Thomas Mount Station in the suburban network of Beach to Tambaram.

## ENGINEERS INDIA UPDATE ON MONGOL REFINERY (MR) PROJECT

Engineers India announced that Mongol Refinery (MR) Project achieved a critical milestone of executing EPC contract agreement for EPC-2 (Open Art units, Utilities & Offsites, Plant Buildings) and EPC-3 (Captive Power Plants) at Ulaanbaatar, the capital city of Mongolia. The LOA has been awarded to Megha Engineering (MEIL) on 28 October 2022.

Mongol Refinery having 1.5 MTPA crude throughput is being set up in Mongolia with the Line of Credit fund by the Government of India. This project is also part of the Development Partnership Administration initiative of the Ministry of External Affairs (MEA), Govt. of India.

Engineers India (EIL) is the Project Management Consultant (PMC) for this prestigious G2G collaboration project.

EIL is committed to successfully execute this project of national importance that intends to catering the energy security for Mongolia. It is worth noting that Mongolia is presently importing its total fossil fuel consumption requirement such as Diesel, Gasoline, Jet fuel, LPG etc. from its neighboring countries. Construction of this refinery shall also open numerous job opportunities and cater to the development of industries in the vicinity aiding the Mongolia's economic growth in the years to come.

## BALDOTA GROUP TO INVEST RS. 18,000 CR TO BUILD 3.5 MTPA STEEL PLANT IN KOPPAL

Aaress Iron and Steel, a subsidiary of the Vijayanagar-based Baldota Group, has proposed to set up and operate an integrated steel plant of 3.5 million tonnes per annum (MTPA) capacity with an investment of Rs 18,000 crore.

The plant will come up at Halavarthi village in Koppal district. Baldota Group company MSPL joint MD Rahul Baldota will sign an MoU for this project at the global investors meet (GIM) in Bengaluru on Wednesday.

Aaress has already acquired 1036 acres of land and is in the process of acquiring another 933 acres, the company said in a statement, and added that it has already received environment clearance and water drawl sanctions. The project will add about 10,000 direct and indirect jobs, it said.

## RANE GROUP COMPANIES BAG RS. 620-CR NEW BUSINESS ORDERS IN H1

Leading auto component house Rane Group has bagged Rs. 620-crore worth of new business orders during H1 of this fiscal and targets to achieve higher than industry growth. During H1, ZF Rane Automotive India bagged Rs. 240-crore worth of orders for occupant safety products and Rs. 155-crore new orders for steering gear products. Rane (Madras) bagged Rs. 105-crore orders for steering products from various international and domestic companies. Rane NSK won Rs. 75-crore orders for manual steering columns from various companies. Rane Brake Lining and Rane Engine Valves secured orders worth Rs.35 crore and Rs. 10 crore respectively. During the period under review, the group recorded a 33 per cent increase in total revenue at Rs. 3,306 crore compared to Rs. 2,485 crore in the year-ago period.

## YOTTA INFRA TO INVEST RS. 39,000 CR IN UP IN 5-7 YR IN DATA CENTRE BUSINESS

Data centre company Yotta Infrastructure will invest Rs. 39,000 crore in Uttar Pradesh over the next 5-7 years, a top official of the company said on Monday. The Hiranandani Group firm has committed investment under a memorandum of agreement signed with the UP government.

The investments will go towards constructing the data center campus, procuring IT equipment and other hardware by Yotta and its customers, Yotta Infrastructure, Co-founder and Chairman, Darshan Hiranandani told reporters at the launch event of Yotta D1 data centre.

# FOCUSED ON THE FUTURE - 770 NXe LOADER BACKHOE



The highly versatile, newly launched Loader Backhoe from CASE - 770 NXe, provides a right balance between power and efficiency. This multipurpose equipment features a cutting-edge Electro-Hydraulic variable displacement pump, coupled with the proven FPT S8000 49.5 hp engine that promises to deliver exceptional productivity across applications, without any compromise.

The engine, by CASE's sister brand FPT Industrial, is designed to offer higher efficiency and is renowned for its class leading torque delivery. It provides unparalleled performance in tough loader applications with faster response time and optimum fuel efficiency. The engine's new generation hydraulics with its variable displacement pump optimizes hydraulic oil flow according to the load, improves fuel consumption, resulting in significant savings. It also offers faster cycle time compared to a gear pump, thereby improving productivity on site.

The 770 NXe offers three working modes – ECO, STANDARD and POWER. The ECO mode delivers better fuel efficiency up to 22% as compared to EX series. The STANDARD mode gives a perfect balance of fuel efficiency and productivity while the POWER mode offers 10% higher productivity against competition models. With the acclaimed CARRARO axle and transmission, the new 770 NXe is capable of handling loads up to 10 tons, ensuring better operations in any condition and reliability even in the toughest applications. 770 NXe also offers lowest maintenance cost compared to its counterparts.

The machine is designed with the CASE's DNA S-shaped boom that offers better reach on ground as well as on high body trucks, better transport height, and uninterrupted visibility. With a sloping and lockable engine hood and widest rear side window, the 770NXe provides excellent worksite visibility. The loader backhoe's spacious cabin with ergonomically located controls provide a comfortable environment for the operator. The modern information cluster layout bristles with features such as the 12V power socket, electrical side shift lock, and audio-visual alert system, keeping operator safety, comfort and convenience at the core.

CASE India has prioritized customer comfort, optimizing the machine layout for ease of operations and ensuring easy access to all the main components with its signature tiltable engine hood.

## MAIN REASONS TO CHOOSE CASE 770NXe

Case DNA "Styled Backhoe"

High Productivity Bucket

Reliability with ease of use

Better Structure

Comfortable Operator Station

Enhanced Safety

High Visibility

Reliable FPT S8000 Engine

Loader Productivity

Straight Loader ARM

Improved Fuel Efficiency





COMPONENTS ACCESSORIES & SPARES

# AIR COMPRESSORS



The growing demand for the energy-efficient air compressors to minimize the operational costs is driving the market growth. The rising initiatives by the prominent market players to develop low cost and eco-friendly air compressors are expected to positively impact the market growth.

**TRIMBLE OFFERS NEW PERSPECTIVE ON SMART CONSTRUCTION**

Trimble, a leader in construction technology, hosted its annual Tekla User Days (TUD) virtual event on October 12 and 13, 2022, to advance the skillset as well as the expertise in Tekla software of several Tekla experts, Tekla users, and construction industry professionals across the Middle East and India.

The event kicked off with Paul Wallett, Regional Director of Trimble Solutions, Middle East and India giving an insight on the construction landscape in the region and how various construction technologies have played a prominent role in successfully delivering projects on time.

The event offered a glimpse into the

immersive world of digital construction, offering industry professionals, contractors, and engineers the chance to interact with Tekla specialists and polish their Tekla skills and knowledge, as well as explore the newest Tekla 2022 features and offerings. In addition, the participants were presented with several case studies from the Middle East and India highlighting various industry concepts of Building Information Model (BIM), Sustainability, Artificial Intelligence (AI), and Robotics, along with several workshops, trainings, live Q&A sessions, project presentations, and numerous competitions organised by the Trimble.

**PERKINS CELEBRATES PRODUCTION OF 10,000TH 4000 SERIES ENGINE**

Perkins' Aurangabad facility has achieved a major milestone after its 10,000th 4000 Series engine rolled off the production line. Initially built to meet customer demand across Asia for the complete range of 750 to 2500 kVA 4000 Series engines, the state-of-the-art production facility now serves Perkins' customers around the world.

Located at the Shendra Industrial Estate in Aurangabad, India, equipment powered by Perkins Aurangabad built engines currently generate reliable power solutions for hospitals, airports, universities, real estate, data centres and large manufacturing industries. The 10,000th engine to come off the line was a 4012; one of 530 different variants that can be produced on the manufacturing line, which first started

production in October 2015.

"This is a great achievement for the Aurangabad facility and team, but it also represents a significant milestone for our customers," said Abhinav Gupta, Perkins general sales manager for South Asia.

"Ten thousand 4000 Series engines built in Aurangabad are now providing vital standby and prime power to customers around the world—helping to provide warmth and light to places such as hospitals, small villages and other manufacturing companies."

Employees at the Aurangabad facility celebrated the auspicious moment as the 10,000th engine came off the production line with coconut breaking, followed by the cutting of a cake.

**BROKK INTRODUCES BROKK SURFACE GRINDER 530**

Brokk, the world's leading manufacturer of remote-controlled demolition robots, announces the addition of the Brokk Surface Grinder 530 (BSG 530) attachment for material removal, such as paint and asbestos, surface preparation and polishing on walls, floors and ceilings in renovation and restoration applications. Compatible with the Brokk 170, Brokk 200 and Brokk 300, the BSG 530 allows contractors to tackle a range of previously labor-intensive projects up to 10 times faster. Pairing the surface grinder attachment with Brokk's remote-controlled operation also offers greater worker safety over manual methods.



"The Brokk Surface Grinder addresses a gap in the surface grinding market where there is a long history of using handheld tools for ceilings and walls," said Martin Krupicka, CEO of Brokk Group. "The Brokk Surface Grinder offers a faster, safer option than manual methods, especially when dealing with hazardous material. We see huge potential for concrete renovation in buildings from the 1970s when asbestos was often used for insulation and fire resistance."

**ALGECO EXPANDS OFFERING WITH 'GREEN' GENSETS**

Modular building rental company Algeco has partnered with generator specialist ABird/Apex Power Solutions, in order to give customers more environmentally friendly generator options.

The deal will see Algeco offer a range



of ABird/Apex's generators, including hybrid unit options and models that can be powered by hydrotreated vegetable oil (HVO), as well as traditional diesel powered generators. Suitable for use on small to large-sized sites, with outputs

ranging from 10kva to 1,260kva, the ABird/Apex generators incorporate advanced telemetry that provides real time reporting on fuel management and GPS location data. "The new generators utilise telemetry to help customers understand how it is positively impacting their fuel consumption and overall value for money," said Algeco.



# “ CONCRETE ”

results you'll see all year

Other shows may talk a big game, but only World of Concrete speaks concrete and masonry. We know that a solid foundation isn't just part of the structures you build — it's also the key to a more profitable business. That's why you'll find everything you need to strengthen your operation here, from new products, innovative solutions, and new technologies to help you capitalize on emerging opportunities.

**We Speak Your Language:** [www.worldofconcrete.com](http://www.worldofconcrete.com)

 **WORLD OF  
CONCRETE**

 informa markets

**EXHIBITS: JANUARY 17-19 2023**  
**EDUCATION: JANUARY 16-19**  
**LAS VEGAS CONVENTION CENTER**



### PROEMION GETS €33.5M INVESTMENT FROM BATTERY VENTURES

Proemion, a German-based multinational technology company specializing in hardware-enabled software solutions to connect mobile machines with humans, the cloud, and each other, has announced a



€33.5 million growth investment from Battery Ventures, a global technology-focused investment firm. In July, Battery announced new, global funds capitalized at a combined \$3.8 billion.

Family-owned since its founding in 1987, Proemion creates CAN devices and connectivity solutions and has global offices in Fulda, Germany, Dayton, Ohio, and Seoul, South Korea. Its connectivity solutions include proprietary telematics control units and accompanying cloud-based software. Its customers include original equipment manufacturers (OEMs) and mixed-fleet companies who use Proemion's telematics solutions to operate machinery more efficiently through the use of remote diagnostics and analytics. Specifically, the technology allows customers in industries such as construction, agriculture and logistics — to better manage equipment, plan maintenance, save fuel costs, monitor CO2 emissions, etc.

With this growth investment from Battery Ventures —and anticipated future capital infusions from Battery and Proemion's founders — Proemion said it will expand international operations, execute other organic-growth initiatives and pursue acquisitions. As part of this transition, Robert Thomas Michaelides, current Proemion COO, will assume the role of chief executive officer.

### CASTROL INDIA INTRODUCES 100% RECYCLED BOTTLE FOR ITS PREMIUM ENGINE OIL BRAND

Castrol, a leading lubricant player in India, is introducing new, more sustainable packaging for its premium engine oil brand, Castrol POWER1 ULTIMATE. The brand is now being packed in a 100% Post-Consumer Recycled (PCR) bottle, made from reprocessed plastic waste instead of virgin plastic. The use of PCR plastic decreases plastic waste, reduces carbon emissions, and supports a more circular economy.

Castrol's new packaging is a part of its global PATH360 aim to reduce its plastic footprint by half by 2030. Castrol's PATH360 focuses on three areas of saving waste, reducing carbon,



and improving people's lives, with an overall aim of helping Castrol become net zero by 2050 or sooner.

The new packs are being used for the Castrol POWER1 ULTIMATE product range and will start to appear on the shelf soon. Consumers will not incur any incremental cost arising from the transition to the new, more sustainable packaging.

### NEW CAM LOBE HYDRAULIC MOTORS FROM DANFOSS

Danfoss Power Solutions, a global supplier of mobile and industrial hydraulics and electric powertrain systems, has launched the first of a new family of cam lobe hydraulic motors for construction machinery applications. The new Thorex CLM 8 S motor, the first of the range, targets construction machinery with chain drives, such as skid-steer loaders, and offers better performance, higher efficiency and longer lifetime than other cam lobe motors, the company said.

The new motor is available in a displacement range of 470 to 820 cc/rev, with operating speeds to 465



rpm. Maximum torque ranges as high as 5841 Nm (4042.5 lb. ft.) at operating pressures to 450 bar (6526 psi).

The Thorex motor incorporates newly developed two-speed technology that Danfoss said offers 70% shock reduction when shifting speeds compared to other cam lobe motors. The technology is engineered to deliver smoother speed changeover with a consistent, quick response time, even at low temperatures. This results in superior machine handling and better operator comfort, with less noise when shifting, the company said.

### AGCO'S NEW ENGINE PLATFORM SUPPORTS FUTURE FUELS

The "baseline" for development of AGCO Power Inc.'s new engine platform was to better serve the needs of the future. This meant developing a platform capable of supporting fuels beyond those already served by the company's current engine models. Engines produced by AGCO are compatible with hydrotreated vegetable oil (HVO). However, the new engine platform was developed to take this a step further. "Alternative fuels

and electrification [were] all taken into account when we started the design," said Tapani Katila, AGCO account manager. Product development included simulation and iteration of the design not only by the research and development team but by the company's suppliers to ensure maximum performance from the engine. "This is why we have really met the highest level of efficiency and low fuel consumption," said Katila.

# SUBSCRIPTION *offer*



**SUBSCRIBE & GET**  
**Upto DISCOUNT**  
**Subscription Rates** **35%**

## SUBSCRIPTION RATES FOR CONSTRUCTION TIMES

YEARS	ISSUES	DISCOUNT%	COVER PRICE	YOU PAY	YOU SAVE
1	12	15%	Rs.1200/-	Rs. 1020/-	Rs. 180/-
2	24	25%	Rs. 2400/-	Rs. 1800/-	Rs. 600/-
3	36	35%	Rs. 3600/-	Rs. 2520/-	Rs. 1080/-

## SUBSCRIPTION RATES FOR EQUIPMENT TIMES

YEARS	ISSUES	DISCOUNT%	COVER PRICE	YOU PAY	YOU SAVE
1	12	15%	Rs.1200/-	Rs. 1020/-	Rs. 180/-
2	24	25%	Rs. 2400/-	Rs. 1800/-	Rs. 600/-
3	36	35%	Rs. 3600/-	Rs. 2520/-	Rs. 1080/-

## SUBSCRIPTION FORM FILLING OPTION

Please tick relevant copy for Subscription  CONSTRUCTION TIMES  EQUIPMENT TIMES

Name ..... Designation .....

Organization .....

Address .....

City ..... Pincode ..... State .....

Mobile ..... Telephone ..... Email .....

I am enclosing my DD/Cheque No.: ..... Date ..... / ..... / .....

For Rs ..... (In Words) .....

Drawn on Bank ..... Branch .....

Drawn in Favour of "ARK Events & Media Pvt. Ltd." (Please add Rs.50 extra for out of Mumbai cheque).

Send or print and email this form along with cheque/draft on below address.

For More details please contact us by Email: [subscription.arkeventsandmedia@gmail.com](mailto:subscription.arkeventsandmedia@gmail.com)

### BANK DETAILS

Bank Name: ICICI BANK

A/c Name: ARK Events and Media Private Limited

A/c No.: 120805000166

IFSC Code: ICIC0001208



A-603, Bhumiraj Costarica, Sector-18, Sanpada, Navi Mumbai - 400705.  
Contact: +91 8422010875.

# POWER ON THE GO

Portable air compressors are multifunctional, with an auto cutoff mechanism that recognizes when the pressure is sufficient and turns off the compressor. These qualities are likely to boost the portable air compressors market.



**T**he portable air compressor market has witnessed steady growth in recent years with rapid utilization in construction sites, road works, and packaging machines through myriad industries. Technological advances in air compression techniques are laying a profound influence on the equipment's compression capabilities and are consequently expected to drive growth in the portable air compressor market during the forecast period. In addition, the increase in the adoption of robust and energy efficient equipment is also expected to fuel the industry's demand for air compressors.

Since the oil and gas industry is one of the major market contributors, the countries with a strong infrastructure will prove to be the most lucrative air compressor markets.

The building and construction industry is currently the biggest investor in portable air compressors, with portable air compressors

available in various sizes and weights. Air compressors are predominantly being used by building and construction companies for a variety of pneumatic tools and equipment.

Depending on the construction task at hand, portable air compressors are being used in nail guns, jackhammers, and compactors. Oil & gas follows close behind as the second most utilized segment for portable air compressors.

## KEY DRIVERS AND OPPORTUNITIES OF THE MARKET

A portable air compressor is strong, robust, and reliable. They are frequently utilized in dusty areas because they have high-quality air filters. Portable air compressors function in a variety of circumstances, including extreme cold and high altitude, making them ideal for a variety of sectors. All of these factors are driving the demand for portable air compressors,

and the demand is anticipated to rise significantly over the next several years.

Portable air compressors are multifunctional, with an auto cutoff mechanism that recognizes when the pressure is sufficient and turns off the compressor. These qualities are likely to boost the portable air compressors market.

Industries all over the world have embraced the introduction of energy-efficient air compressor models, which are also available in portable forms. The new technology offers a considerable decrease in maintenance expenses, which is why it is being adopted by a large number of customers from various industries. The most prevalent issue with portable air compressors is engine failure. Engine failures can be caused by unclean air inlets, clogged oil filters, a defective speed controller, incorrect speed controller timing settings, or a blocked exhaust system. Furthermore, the portable air compressor is less efficient due to frequent fuel and compression issues.

#### **THE AIR COMPRESSOR OF TOMORROW IS FLEXIBLE**

There are several complaints involving today's compressed air technology, notably how such systems run rather inefficiently and use a lot of power. But a key trend that's driving the future of this technology is air compressors with variable speeds. Today, most air compressors run at fixed speeds. That is, regardless of the application they distribute the same amount of air. But a variable speed air compressor would allow users to adjust the flow of air relative to the application that they're working with. This could result in a significant energy savings while also making compressors more efficient and productive. Today, a compressed air system can represent up to 10 percent of a facility's total energy usage, which can represent a significant overhead cost. By moving toward a compressed air unit with variable speed control, the energy savings potential can be significant. This can ideally help a company improve its bottom line by reducing overhead.

#### **PORTABILITY**

Increased portability of air compressors is expected to continue well into the future, with Global Market Insights predicting that this segment will account for about 20 percent of the entire market by 2027. The

concept of "power on the go" is crucial for location-based work, and advances in these types of portable compressors look to significantly advance the productivity and convenience of professionals who need to take compressed air systems with them from location to location based on their scope of work for a particular day and week.

#### **QUIETER OPERATION**

One thing that's synonymous with most air compressors today is their sound — and not in a good way. Air compressors are loud and they can represent a significant amount of noise pollution. In fact, the average noise level for air compressors today is 85 decibels, a noise level that typically requires hearing protection and operation within designated hearing protection zones. Studies show that prolonged exposure to noisy environments can have more dire health consequences than just hearing loss as well. In fact, exposure to noisy environments is also linked to stress, lack of sleep, productivity lapses and even cognitive issues. This is all to say that one of the big stressors for new air compressor technology is more silent operation. This is partially being helped by various government entities regulating the noise that is emitted from industrial air compressors. Manufacturers are working to stay compliant to these changing standards as well as permit work to be performed in a more favorable environment by reducing operating noise.

#### **OIL-LESS SYSTEMS EXPECTED TO CONTINUE SURGE**

Oil-free systems are preferred by many due to being maintenance-friendly and requiring less of an operational investment compared to compressed air units that rely on this natural resource. This is especially becoming a more significant trend as oil prices continue to ebb and flow on a global scale. Oil-free air compressors have several notable advantages over their oil-using counterparts. For instance, they do not release contaminants into the environment, are generally less expensive and can represent a cost savings over time. They're expected to continue to trend in environments where it's difficult to acquire oil or in facilities that place a strong emphasis on environmental accountability. ■

---

Portable air compressors function in a variety of circumstances, including extreme cold and high altitude, making them ideal for a variety of sectors.

---



## Significant localization and proactive ordering on overseas vendors; helped to ease the pressure on our production.

### **DASIKA RAMARAO**

General Manager, Sales & Marketing, Doosan Portable Power

#### **In the current difficult market conditions, how are you taking on the challenges in terms of production, sales and aftermarket operations?**

Volatile geo political scenario throwing a unexpected supply chain challenge and effected portable compressor industry to a large extent. Thanks to our robust inventory management systems and able sourcing team who are putting best of their abilities to in managing the lead times with vendors across globe. Various initiatives are significant localization & proactive ordering on overseas vendors; helped to ease the pressure on our production. The balanced approach of domestic and export business is the key to manage the difficult times.

#### **What are the key applications of portable air compressors in construction, mining and drilling operations? What is the current demand trend?**

Indian portable compressor industry is pre-dominantly driven by water well application, large portion of the top line comes from this segment. Consecutive monsoon resulted in low demand in this segment followed by the soaring diesel price. However robust domestic demand for aggregates, Coal, Iron and granite supported the drilling applications followed by infra and construction projects.



#### **What are the new products and solutions offered? What are the features to meet extreme working environments?**

Doosan is leading the industry with the introduction high fuel efficient compressors by optimising the energy consumption of air ends & filtration system, thanks to electronic engines who does the efficient job. Our compressors are designed work +55 0 C to -100 C in all dusty conditions.

#### **What are the key productivity parameters of portable air compressors?**

Unlike other construction equipment products, challenge in portable air compressor is we have only one critical parameter ie, how fast a compressor can perform job by consuming less fuel.

#### **What are the environment-friendly features in your product range? And, what are your future plans in the changing market and operational conditions?**

Fuel efficiency, low noise are the environment-friendly features in our product range. We are working on to comply with upcoming BS5 & BS6 emission norms. The future is green energy, we are closely working on the engine technologies to support alternate fuel application with less carbon emissions and hybrid technologies. ■



THE FUTURE OF NATION BUILDING



# WE ARE BACK

after a 4-year hiatus!

COME AND JOIN THE LEAGUE OF LEADING BRANDS



## SHOW HIGHLIGHTS

<p>1,35,000+ sqm exhibition space</p>	<p>600+ Brands Exhibiting</p>	<p>50,000+ Trade Visitors</p>	<p>Strong Govt Alliances</p>
---------------------------------------	-------------------------------	-------------------------------	------------------------------

<p>SCAN TO EXHIBIT</p>	<p>SYNOPSIS ASSOCIATION</p>	<p>SCAN TO VISIT</p>
	<p>SUPPORTED BY</p>	

Join Us @

International Trade Fair for Construction Machinery, Building Material Machines, Mining Machines and Construction Vehicles.

**bauma CONEXPO INDIA**

**31 Jan. - 03 Feb. 2023**

India Expo Centre, Greater Noida / Delhi NCR

CONTACT: Ms. Violet Rodrigues | Tel : 022 26787 9804 | Email : info@bcindia.co.in



**We not only look at safety, but we are also concerned with operator performance, fatigue and comfort.**

**PIERO GUIZZETTI**  
CEO, MB Crusher India

**Can you tell us about the market trends for attachments in this construction equipment industry?**

Demand for attachments is growing as the construction industry increasingly becomes interested in mobile, capex light solutions. Attachments offer a versatile solution for a variety of applications in the construction industry. Strong advancements in technology is making attachments more efficient and easier to use. They are no longer considered a complement to other solutions, but a solution on their own.

**What are the latest offerings and key application areas in your product range?**

We offer the widest and deepest portfolio in the industry both in terms of categories and models, essentially catering to every application that requires stone cutting, breaking, trenching, crushing, screening and moving. Furthermore, our products are compatible with all base

machine brands and models. This gives us an edge as customers can have all of their needs satisfied under a single umbrella. The latest additions to MB's product range are the MB-HDS212 and MB-HDS207 shaft screening models, which offer increased productivity and versatility in a compact package. Both models are suitable for a wide range of applications, including recycling, pipelines, agriculture, landscaping and mining sectors. Our HDS line is very productive for screening damp material, but may also be used for some crushing application. The HDS line comes with a variety of options in terms of shaft kits, making them highly versatile machines that can be customised to suit the specific needs of any customer.

**How do you look at the market in India for your products?**

The market in India for MB Crusher's products is very promising. As a matter of fact, it is earmarked as one of our top 3 markets for the next 10 years to come. The company has been able to gain a strong foothold in the country thanks to its capillary direct presence, and its products are well received by customers. In India we are being very careful in segmenting the market in terms of contractors' profile and specific application requirements. India is large and has a high degree of diversity of materials' characteristics across regions and states. Using these two key defining variables, we ensure that we have the right solution for each respective work site.

**Tell us about the safety features of your products.**

Our products are designed with safety in mind. From the start, we use top-quality materials and components to ensure





durability and longevity. We also employ a rigorous testing and quality control process to ensure that our products meet or exceed customer's expectations.

As a matter of fact, we not only look at safety, but we are also concerned with operator performance, fatigue and comfort. Our attachments are hard-working machines, we go beyond the call of duty in ensuring minimum vibration while performing the heaviest of duties.

**Give us details about your dealer base in India?**

MB Crusher has a strong dealer network across the country. Apart from a couple of locations where we maintain a direct presence, we cover the entire market in a capillary and efficient manner. Fortunately most of our network is composed of partners with whom we have already built long terms relationships and hence are very capable of independently handling any customer requirement.

**What are the various challenges faced in the sector you are in?**

The crushing sector is a very competitive market, with numerous manufacturers offering a wide range of products and services. From local fabricators to large



MNCs. We have to constantly innovate and evolve our offerings to stay ahead of the competition. This means constantly striving for improvement and investing in research and development to ensure that we are offering the best possible solutions to our customers. Despite the challenges, we are committed to providing outstanding products and services to our customers, and we are confident that we will continue to be the market leader in our segments. ■

**EQUIPMENT TIMES**

DON'T FORGET TO FOLLOW US ON SOCIAL MEDIA FOR THE LATEST UPDATES ON EQUIPMENT INDUSTRY

www.equipmenttimes.in



INTERNATIONAL SOURCING EXPOSITION  
FOR ELEVATORS AND ESCALATORS

WHERE THE ELEVATOR  
INDUSTRY MEETS

SEE U @ I SEE

DECEMBER

1 2 3, 2022

BOMBAY EXHIBITION CENTRE  
HALL 1, MUMBAI, INDIA



Prabodh +91 98336 33955 | Priyanka +91 9920413001

[www.tak-expo.net](http://www.tak-expo.net) in   

### EARTH MOVING EQUIPMENT



Backhoe Loader



Wheel Loader



Hydraulic Excavator

### HIGHWAY EQUIPMENT



Wheeled Crusher



Tracked Crusher



Static Crusher



Screeners



Compactor



Motor Grader



Hot Mix Plant



Wheeled Paver

### MATERIAL HANDLING EQUIPMENT

Tower Crane



Aerial Lift Platform



Telehandler



Skid Steer Loader



Hydraulic Mobile Crane

### MINING EQUIPMENT



Crawler Dozer



Dump Truck



Boring Equipment



Compressor

### REAL ESTATE EQUIPMENT



Batching Plant



Transit Mixer



Self Loading Mixer



Concrete Pump

### ABOUT IESC

The Infrastructure Equipment Skill Council (IESC) is a 'Not for Profit' sustainable organization promoted by the Indian Construction Equipment Manufacturers Association (ICEMA) and supported by the Confederation of Indian Industry (CII) and funded by National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship, Govt of India to spearhead the skilling of workforce in the Infrastructure Equipment Sector with primary focus on training and certification of Operators and Mechanics.

The council is governed by 19-member Governing Body from various segments of the Industry along with the representative from Department of Heavy Industries, Academia and National Skill Development Corporation.



### MISSION

To train over million Operators & Mechanics in ten years to have 5000+ Certified Trainers in over next decade To accredit 400 Training Organizations meeting Global Standards Pan India

### CONTACT

Infrastructure Equipment Skill Council No. 6, Avik Royale – First Floor, 50 Feet Road, (Next to Vijaya Bank) Avalahalli Extension. Phone : 080 26754480  
Girinagar, Bengaluru 560026  
Twitter: IESCBlore, www.iescindia.com

75  
Azadi Ka  
Amrit Mahotsav

बी ई एम एल  
**beml**  
NEW FRONTIERS. NEW DREAMS



# Setting Standards in Exploration



**BE1800D**  
Hydraulic Excavator  
(Operating Weight 180 Ton)



**BE1800E Electric Excavator**  
(Operating Weight 180 Ton)



**BH205E Electric Dump Truck**  
(Pay Load 190 – 205 Ton)



**BD475-2 Bulldozer**  
(FHP 642 kW)



**BG605I Motor Grader**  
(FHP : 108kW)



**BL30-1 Front End Loader**  
(Bucket 3.1 cum)

**BEML's State-of-the-art Mining & Construction Equipment**

## **BEML LIMITED**

Schedule 'A' Company under Ministry of Defence

**Defence & Aerospace | Mining & Construction | Rail & Metro**

Marketing Division (Mining & Construction), 3<sup>rd</sup> & 5<sup>th</sup> Floor, Unity Buildings, J.C. Road, Bangalore - 560 002  
Tel : 080-22963540, 080-22963501 e-mail : [m@beml.co.in](mailto:m@beml.co.in) Website: [www.bemlindia.in](http://www.bemlindia.in)