

he demand for construction equipment has taken a beating, just like any other industry. But here there's hope. The government hopes to kickstart the economy through infrastructure projects. Considering that most machinery were lying idle for months, they will need maintenance or new purchases.

Construction equipment manufacturers, on their part, faced their own unique challenges. While attending to their

customers' demand for maintenance, they had to look at opening their own plants while maintaining the rules set as precautionary measures. The pandemic had far reaching consequences and the biggest one of them was abrupt lockdown of the manufacturing plants. Sorab Agarwal, executive director, Action Construction Equipment, says, "The most important thing post lockdown was to ensure complete safety of our people and restarting with minimum number of people, which were subsequently increased in a BUILDING & INFRA CONSTRUCTION EQUIPMENT

phased manner, and simultaneously putting in place all possible safety measures and health checks. Every area of the manufacturing facilities was sanitised to make it easy for people to resume work. The biggest challenge was to keep the supply chain system seamless as the country unlocked in phases."

Restarting the factory after the lockdown was a new experience to all companies. **Anshum Jain, COO, Wirtgen India,** says, "It took some time to come to terms with the local guidelines on what is allowed and what is not. We restarted the plant in a reverse sequence to serve customers while following all the precautionary protocols. First thing to spring back in action was the spares parts depot followed by finished machines dispatch. Our strong monitoring on a daily basis has allowed us to remain a Covid-free plant so far."

Many companies were stringent about adopting measures that would guarantee safety. **Dr Deepak Kumar Hota, CMD, BEML,** says, "We have adopted the following measure since re-opening our office and factory prem-

HE BIGGEST

ises: Entrance health checks; provision of hand sanitisers and wearing of masks by all; staff education for COVID-19 health and prevention; quarantine measures for supply and storage of goods; physical distancing measures; and working in shifts. All these are as per the protocol issued by the state government."

Case Construction has also prepared by stocking its plants with PPE kits, sanitisers and safety masks for every employee and the new protocols mandate the use of these supplies as well. "We are also equipped with a thermal scanning gun, automated sanitiser sprays and CCTV cameras



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▲ BEML180 ton Electric Hydraulic Excavator BE 1800E is the largest excavator available.

at the gates to ensure that each individual is thoroughly checked and safe to enter," says **Puneet Vidyarthi, brand leader. Case Construction.**

TIL has two state-of-the-art factories – Kamarhatty and Kharagpur in West Bengal. **Pinaki Niyogy, VP & CTO, TIL,** says, "Besides following all safety and hygiene precautions, we did maintenance checks of all our machineries, gas pipelines, etc. Our plant head and his team is closely monitoring the situation and taking all precautionary measures as mandated."

FOLLOWING SET NORMS

With the new way of working, (wearing mask, maintaining physical distance, frequently washing and sainting hands), it is even more important to start with reduced workforce (33%). **Dimitrov Krishnan, MD, Volvo CE India,** says, "We prioritised our approach on 4Cs, (Colleagues, Customer, Cash and Cost). We completed all unfinished machines and shipped them to the warehouse. Our next priority was to initiate production activity for models that either had less or no stock. We then balanced the line with available resource to drive output. In a matter of four weeks, we could run the plant with almost 80% work force with due compliance to health and safety guidelines."



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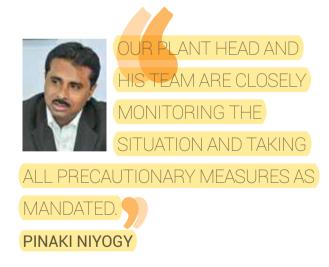
DR DEEPAK KUMAR HOTA

The norms were easy to follow once you know what they are. Vidyarthi says, "In accordance with social distancing norms, we increased the number of shifts from two to three which has ensured a decrease in the number of people working at a time. Our team does rigorous planning and scheduling to keep a track of the work being done every day. This detailed roster helps is making sure that no critical processes are disturbed, the number of employees working at a time is safe and work is being prioritised accordingly."

BUILDING & INFRA CONSTRUCTION EQUIPMENT



▲ TIL took plenty of precautions before restarting its Kharagpur factory.



To ensure completion of work with minimal people involves increasing the number of shifts or rearranging work places to maintain social distancing without reducing the number of people. Agarwal says, "We used both variably across production lines and departments to ensure that our production does not get affected. We have been meeting all

our customers' demands as we simultaneously address the health and safety issues of our employees. Each of our employees has shown resilience and grit."

Most began production once the lockdown was lifted in phases. Niyogy says, "However, in the first two weeks, the manpower strength was lesser but we could manage since most of the machines were in the final stages of production when the lockdown started. Our Kharagpur facility is very large having a floor area 21,600m2 and we have only 60 persons working per shift. Hence such social distancing can be easily maintained by default. However, there are some operations where a group of people work together, such as assembly bay, and in such work areas we have redefined the SOPs while the assembly work takes place."

Most companies are still not operating to full capacities, possibly because of the virus and also the demand stagnation in the market. Jain says, "Covid-19 has taught us to be more productive, flexible, and innovative. People too have become more accommodating and flexible. They are more than willing to cover areas outside their responsibility so that supervisors of different areas, can be in the plant on alternative weeks. That way the customer gets served and we maintain minimum number of people on the premises."

RISE OF AUTOMATION

The pandemic has also compelled the need for automation and given rise to a stress on R&D. Hota says, "Automation may mean lesser number of manpower but it will require a new set of skilled people. We are gradually moving towards automation with minimal capex. Our R&D thrust is on technological upgradation of CE that have less emission, higher productivity, lower fuel consumption and higher comfort. We will produce future equipment that comply with BSIV or BSVI emission norms, high operator comfort and reduced noise/vibration free."

R&D activities in CE are mainly directed at meeting BS CEV 4 emission norms. Krishnan says, "We have maintained good pace of projects and not slowed down any investments. However, lockdown has impacted testing and validation of development projects. Since the Ministry of Road has supported the industry by proposing to delay implementation of emission norms, we will be back on schedule with all product development activities."

For ACE, investment in automation is an on-going process to improve productivity and consistency. Agarwal says, "Our organisation has always followed the path of automation, and upgradation thereof. R&D has been the key element in our success story and our in-house R&D Centre is approved by the government of India. Over the years, speedy commercialisation of world-class designs and technologies have been instrumental in making us the largest crane company in India. We are spending greatly on R&D and also



OUR TEAM DOES
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KEEP A TRACK OF THE WORK
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PUNEET VIDYARTHI



▲ CASE Construction has some advanced machines for infrastructure projects.

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▲ Many companies went the extra mile to safeguard workers and the neighbouring areas.



OR NO STOCK.

DIMITROV KRISHNAN

includes digital empowerment of our internal and external operations."

The CE industry is gradually becoming more technology intensive. The new emission norms (BS-IV CEV) are coming up and due to this changeover, a significant amount of

engineering resources is engaged. Niyogy says, "Some of our customers are investing in Artificial Intelligence in their areas of operations to make their operations efficient and they want our equipment to be compatible with their futuristic plans. This will result in investing in R&D for our heavy material handling equipment."

Case Construction has always been at the forefront of innovation and technology. Vidyarthi says, "We believe in using technology that enables. Our plant at Pithampur is a testimony to this. This is where we produce our world-class CE range. Our products are exported to Africa, South East Asia, Russia, Sri Lanka, Bhutan and Middle East countries. The plant has recently been certified Bronze Level in World Class Manufacturing (WCM) programme."

As far as market demand is concerned, the scenario is currently bleak due to unprecedented disruptions caused by COVID. However, most see, infrastructure activity starting to come back to some sort of normalcy. Most of the infrastructure companies are working at 40-60% levels and expect demand to improve in the second half of this year, post monsoon.