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Budget 2022-23

Blueprint for Infra Sector Growth

Rent-A-Machine

An Attractive Option

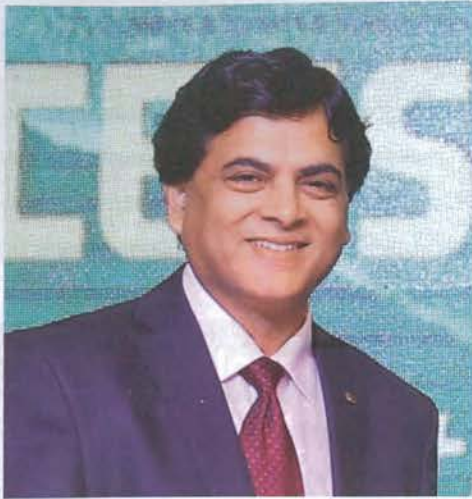
Operator Skillset & Training

When Even More is Less

- Digitalized Indian Bridge Management System
- Foundation Treatment of Largest Concrete Dam
- Engineer Certification Practices: India vis-a-vis USA
- Stability of Tall Buildings
- Fiber Reinforced Concrete

Total Crushing, Screening, Washing Solutions





“ L&T-CMB has been a leader in the last five years and has trained over 13,000 operators and mechanics. IESC, as an industry body, has trained close to 50,000 operators and mechanics in the year 2019-20.

KA Sravan Kumar
Head-Product Support, L&T

Despite all the efforts from OEMs and IESC, there is both a skill gap and supply-demand gap for operators and mechanic and a lot more is required to be done where customers will also have to join hands.

The last decade has seen a quantum increase in the use of mechatronics and ICT tools in the Construction and Mining Equipment. New models are upgraded and loaded with features that not only make them more efficient but environment-friendly as well.

Compared to a 20-year-old excavator with working modes, the latest Komatsu PC210-10M0 has six different working modes to choose from, each one tailor-made for different jobsites and production requirements. An operator therefore needs regular upgrade to be conversant with these features so that the benefit is translated into higher production or higher fuel saving.

Since the basic working methods have remained unchanged, the operator feels that he is doing a good job, while the data captured through sensors narrates a different story and exposes a lot of areas to be improved. Today, we are in a 50-50 situation, where the operator is aware of the capabilities of the machines and another half who just operate without using all the features that the machines offer.

In the training that we provide to operators, we teach them to operate machines as per the required application, and fully utilize the advanced technologies to enhance productivity.

In all our operator training sessions, a lot of emphasis is given to safety and proper use of PPE from the very beginning. This aims at making the operators and mechanics environment a safer and a disciplined arena. Training stresses on basic activities like walk-around inspections, proper seat, rear-view mirror adjustments, AC

temperature settings, etc. - areas that will reduce fatigue for operators and not allow the production to dip during long hours of operation.

On the machine front, inputs are provided on features and how to use them for different types of job requirement, for example, the mode selection for a blue metal quarry will differ from an irrigation project. Reducing unproductive power consumption is the key to energy saving operations and a master operator will demonstrate the techniques to the trainee team.





Training for new recruits at L&T Training Centre

For an excavator, proper bench preparation, swing angle, and the bucket attack angle are some of the factors that enhance productivity. Understanding monitor panel, the eco-guidance and caution that they exercise, are areas which an operator should be conversant with.

Komatsu's excavators are equipped with telematics monitoring systems (KOMTRAX) that provide operational reports for machines and fleet wherever applicable. These reports are discussed with operators to make them aware of how their performance is getting tracked and evaluated, so much so that KOMTRAX has become an effective tool to evaluate and recognize operators.

We have joined hands with the government of Odisha to conduct training programs at ITI – Barbil, and with the National Academy of Construction in Hyderabad.

The IESC under ICEMA is dedicated towards skilling and certification of operators and mechanics and creating a healthy skilling eco-system. Almost all the OEMs and major distributors are members of ICEMA and connected to IESC.

GOI's focus on skill development through NSDC (National Skill Development Corporation) has schemes under the PMKVY (Pradhan Mantri Kaushal Vikash Yojana) that have a well-defined training and certification framework not only

for beginners but also for experienced operators and mechanics through the RPL-4 and other schemes.

L&T-CMB trains unemployed youth who desire to take up CE operation as a career and offers them to our customers for employment. The operator pool thus created adds value not only to the individual, but it also inducts trained personnel in the industry which enhances the quality of the industry.

Training for freshers should largely be free of charge and sponsored either by OEMs under their CSR, or through a government scheme.

A training centre for construction equipment requires high capital investment in terms of infrastructure and training aids since the practical portion in the training agenda is around 3-4 times the theory portion. The

operating cost of the machines required for practical training is high, while the monetary returns are negligible.

Trainees largely come from modest backgrounds with low academic qualifications (only class 8 pass is okay to start as a junior excavator operator as these trades require more skills of the hand). As a result, we don't find many operator and mechanic training schools.

Smaller contractors operating a small fleet find it hard to spare operators and mechanics for skill development programmes due to the tight project completion commitment. Owners prefer to host training sessions on Sundays or on holidays, but the trainees prefer to spend the off days with their families.

Another challenge is that not many youngsters today find this profession attractive as they tend to miss the fast-paced city life and have to work at construction sites. Generally, boys from rural areas opt to become operators and mechanics.

OEMs with a culture of continuous learning and skill development play an active role and they also share the burden of expenses.

L&T-CMB, during their 75 years of journey in this industry, have developed a Central Training Centre in Kanchipuram and five regional training centres across the country. We have well-equipped classrooms, machines, simulators, actual machine components for demonstration and experienced faculty to handle training. We even have portable simulators at regional centres so that they can be taken to jobsites where training can take place and trainees can save on travel time.



Training for operators on Komatsu machines in the field