



# SMART MOVES

The rise in infrastructure projects will only see an increase in demand for material handling equipment

BY MOLLY R

A couple of decades ago, human labour were the prime mover of materials. Gradually, realising the heavy loads that people were being made to carry, it became necessary to deploy material handling equipment.

Today, material handling equipment are a common sight at airports, Metros, warehouses, offices – any place that needs transportation of goods frequently will have material handling equipment present. They have become a ubiquitous part of life.

Of course, material handling equipment would vary in terms of sizes and types. But consider this: Material handling equipment (MHE) market size was worth over \$140

billion globally in 2018 and is estimated to grow at around 6% CAGR between 2019 and 2025.

The rising penetration of advanced technologies such as RFID, IoT in 3PL, food & retail, and e-commerce industries is driving growth of MHE. The incorporation of these technologies will help in saving time and costs in manufacturing processes, leading to increased accuracy and enhanced customer satisfaction. Players operating in the market are gradually adopting these technologies to maintain their position and to gain a competitive edge.

Importantly, equipment has been made safer too. **Anil Lingayat, executive VP & business head, Godrej Material Handling**, says, "We have always put people first. So safety



ket share of the country's construction equipment industry. This growth is primarily being driven by increasing investment in infrastructure development, growing penetration of advanced technologies, rising demand for increased automation, and safe working practices in the manufacturing space.

The reason innovation is important and matters. RFID forklift systems to improve material handling coupled with acoustic sensor, broad beam antenna, and controller logic to identify the pallet tag are only some of the innovations.

Bhatia says, "We tied up with Hyster in 2008 for their reach stackers and that's the highest material handling equipment used at ports. Across ICDS and other places, one will need a reach stacker for container handling, even for secondary handling at ports. TIL makes them for India, Asia and Africa. Our forklifts too are of 8-tonne and upwards."

For instance, in April, Godrej Material Handling forayed into the 3-wheel electric forklift truck segment. The country's largest manufacturer of lift trucks, GMH launched the latest three-wheel electric variant of its Bravo Forklift Truck for the 1.6 to 2 tonne category. The Bravo has been entirely produced in India to meet the needs of the Indian market with an R&D effort of over two years. It is compact in size and offers the fastest travel speed of (15 km/hr) in the category. It offers the best-in-class turning radius (25% shorter than four-wheeled trucks) to deliver efficient operations. Most importantly, as standard feature, all 3-Wheel Bravo Forklifts come with the latest wet disc brakes which provide higher braking efficiency and reduce operator fatigue. Wet disc brakes ensure a long servicing interval of 6000 hrs making the truck more reliable and productive."

ranks very high on our charts. Over the years, we have explored (and continue doing so) ways to make our equipment safer and stronger."

Anil Bhatia, VP, sales & marketing, TIL, said, "Our pick-n-carry cranes are highly different than the ones sold in the market. Most cranes available in the market are articulated cranes and they are mostly unsafe. What we have is a 360 degree continuous slew crane with plenty of safety features. For instance, in case of overload, it will shut down. Yes, it has an Australian design and works well."

**WHAT'S NEW**

The Indian market for MHE accounts for about 13% mar-



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▲ The advancements in machinery has come a long way in the last five years.

Growing automation capabilities in the manufacturing space will provide a fillip to the material handling equipment market size. Lingayat says, "Automation aids in reducing costs and delivering high-quality products. It eliminates the need for manpower to check-in, sort goods, or to move bins and totes containing materials. These automated systems scale up the operational needs and drive the business results by reducing errors, increasing pick rates, surging throughput and decreasing labour costs. For instance, automated guided vehicles (AGVs) are an automation solution for moving parts to and from the manufacturing facilities or conveying pallets for put-away in distribution centres. The logistics robotics market benefits from optimised work-flow procedures, high productivity levels and reduction of labour and operating costs."

Given the Make In India initiative and the government's focus on ease of doing business, this industry presents several opportunities. The increasing demand for customised solutions brings in the opportunity to develop after-sales services like onsite training and assistance. There is also an

increased emphasis on environmentally friendly and green machines, ergonomics and aesthetic designs.

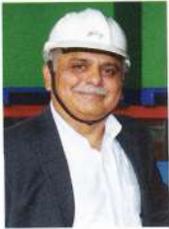
**WAREHOUSING EFFECT**

The warehousing segment in India has emerged as a strong contender and a promising opportunity post the pandemic. **Prakrut Mehta, director leasing, ESR India**, says, "Increase of au-



▲ Rough Terrain Crane 880

tomation is definitely one of the trends which will be widespread in mid to long term. Automation increases efficiency and creates a safer environment in the post COVID world. ESR parks are integrated with ESR Smart App, powered by IoT and AI for space management, AI-based cameras that enhances security and detects anomalous or suspicious behaviour. The app also integrates contactless visitor management, digital service request for tenants to raise a ticket if any of the common services are not working, wayfinding to guide truck drivers to designated docks, amenity book-



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▲ Bravo Series 3-Wheel Forklift

ings to ensure social distancing is maintained at common amenities. The app also is a rich source of information for Covid-19 and the latest official circulars.”

Over the last few years, e-commerce customer acquisitions have been on the rise, with a corresponding increase in grocery formats, which will lead to an increase in in-city warehousing spaces.

Generally, warehousing experts feel that Grade A spaces will be in demand and there will be an increase in collaborations and outright sale of assets by local developers to institutional developers, leading to increase in joint ventures owing to liquidity crunch and debt.

“The sector has also witnessed increase in demand for plug-and-play models, large-format modern industrial and logistics infrastructure spread across fewer strategically lo-



▲ Articulated Truck working in narrow working aisles



▲ The large warehouses made today require sophisticated material handling equipment.



AUTOMATION  
INCREASES EFFICIENCY  
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POST COVID WORLD.

**PRAKRUT MEHTA**

cated parks well connected to urban hubs, railways, airports and ports, focused on creating world-class, plug-n-play infrastructure supported by an enabling ecosystem and skill development support," says Mehta.

The pandemic has led to increase in demand for Grade A spaces, and there is a need for safer environment through contactless management of parks, implementation of au-

tomation and consolidation of spaces. Investment is a tad higher in Grade A spaces, but offers long term profitability. These spaces are high on sustainability, which is better for the environment as well as long term savings. They come with enhanced security, are enabled with AI based cameras and can be digitally managed to combat the spread of anything ill. Moreover, Grade A spaces have FM-2 compliant flooring, 5 tonne UDL floor design, 10-12m ceiling height thus creating more space for racking and storage. They can accommodate daylight integration and multiple air changes to create safer and productive environment for the workforce.

The need for MHE is directly related to the amount of cargo and freight traffic. With a wide production capacity base, India is perhaps the only developing country which is totally self-reliant in such highly sophisticated equipment. Manufacturing will continue to remain one of the biggest demand drivers of the warehousing sector with an annual requirement of 61 million sq. feet of incremental space between 2014 and 2019. With the government's renewed focus on incentivising the manufacturing sector, the logistics market will reap the benefits in the coming years. **CW**