

Yale[®] Electric Stacker with wide straddle design, low self-weight and an optimised shut height was the perfect solution for the new packaging plant of a leading spices manufacturer.

About the Spices Industry

Readymade spices is a large market in India with a number of players vying for market share. A few renowned brands dealing in a variety of powdered, blended and speciality spices have sizeable manufacturing plants. At such large manufacturing plants, complete processes are in-house. They include sorting, cleaning, grinding, blending, weighing and packaging. Massive

handling of raw materials, sacks of spices, packaged boxes and other palletised material is routinely required in such plants. Also, handling of large hoppers filled with powdered material is required at the filling stations. This calls for reliable and flexible material handling equipment to ensure productivity and safe handling.

A leading spices manufacturer required stackers having wide access for easy handling of hoppers, and which could also enter through the low-height doors of the factory.

When a new packaging line was set up at a spices manufacturing plant in Gujarat, the handling of large hoppers (IBC) became challenging. These hoppers, filled with nearly 750kg of powdered material, are to be lifted to about 2.2m height and are required to be precisely positioned atop the charging machines.



Challenges

The new packaging plant of the customer is a two-story building. The ground floor is being used for the storage of raw material and packaged items, which are ready for despatch. The packaging machines (8 nos.), which are installed on the first floor, produce small packets/pouches of different weights. The customer was looking for a suitable material handling solution for two requirements.

 IBC (Intermediate bulk container) handling: The bags of 750kg containing powdered spices, which arrive at the ground floor, are brought to the first floor with the help of a goods lift. These bags are required to be emptied in the IBC, which is then lifted up to 2.2m and fitted atop the packaging machine. The straddles of the stacker could not be inserted beneath the machine as there were components such as air motors, piping, etc. fitted below. This poses a hindrance for the straddles to be inserted beneath the machine. To ensure smooth entry of forks in the pallet containing filled hoppers, the straddles of the stacker have to envelop the machine on which the IBC is kept. As it is to be operated on the first floor, a stacker with less weight is required to minimise the impact on the floor.

2. Storage and retrieval of sacks: For storing sacks of raw material and powdered material, the customer intended to use 10.5m high heavy-duty racking. Sacks of about 50kg each are bundled together and stored on pallets, which are to be safely lifted, stacked and retrieved when required. Furthermore, a similar arrangement is required for the finished goods area for dispatching of the packaged spices.

Both the requirements needed a unique, robust and wellengineered solution to manage the operations in a safe and efficient manner.

Solution

ElectroMech Yale has a unique range of lift trucks to meet a variety of challenges in different sectors. For this particular requirement, we recommended the use of 2 nos. of our Electric Walkie Stacker with a wide straddle model MSL15WUX for IBC handling, and 2 nos. of Reach Truck model MR16 with 10.5m lifting height for storage and retrieval of sacks containing raw material and powdered spices in the finished goods area. *Contd.*»



ElectroMech Yale - Case Study | Spices Industry

Features of Electric Walkie Stacker – MSL15WUX

- > Wide Straddle The straddles of a conventional stacker are aligned with the main body of the stacker and hence offer limited reach beneath the packaging machine, whereas Yale® MSL15WUX offers wider straddles to access areas that are difficult to reach using standard stackers. Furthermore, they can handle the closed pallets, which is not possible using standard stackers.
- > Low full-shut height The masts of most of the stacker models available in the market do not fold completely thus restricting their passage through low-height doors. The mast height of the Yale® MSL15WUX stacker, when completely lowered, is less than 1.8m, allowing easy entry and exit through low-height doors.
- > Less weight The Yale® MSL15WUX stacker has a unique design and is manufactured using special components making it lightweight and the ideal choice where the loadbearing capacity of the floor is limited.
- > Electrically-operated It works on 24V, 240Ah traction battery, making it fit for use in the food industry. Batteries can be easily replaced due to side extraction and can be charged quickly.
- > Packed with performance features The Yale® MSL15WUX stacker incorporates several features for safety, productivity and serviceability. These include emergency power disconnect switch, built-in pressure relief valve to protect from overloading, variable speed control, sideways battery removal with rollers, maintenance-free AC motors, multi-function display with BDI and hour meter, handle equipped with emergency reversing button, auto deceleration function, optimum structural design, low centre of gravity for enhanced stability, low voltage protection setting for extended battery life, CANbus technology, etc.



ElectroMech Yale offers a range of forklifts and lift truck solutions to effectively meet the challenging requirements of warehouses and various other industries. To know more, get in touch with us today!

Features of Reach Truck MR16

The MR series is the next level in reach truck productivity, delivered through innovation, technology and an ergonomic design. The features of the Yale® MR series include -

- > Innovative technology including laser positioning, dual CANbus technology, 'get home' function and touch screen display
- > Productivity with high speeds for 'travel, lift and lower' functions
- > Operator comfort with unique ergonomic controls and enhanced visibility
- > Great efficiency with easy serviceability and low cost of ownership

For after-sales service, all ElectroMech Yale equipment are supported by our expert team at Cranedge, a subsidiary of ElectroMech, and a service specialist for material handling equipment of various makes.



Benefits

The job was made extremely simple and easy with the high-end models of the stacker and reach truck from ElectroMech Yale. The benefits to the customer include:

- > Low weight of stackers meaning low point load on the floor
- > Easy access around the machine and ease of operations
- > High residual capacity and full heights
- > High productivity
- Pollution-free working
- > Ease of maintenance
- Low cost of ownership

Customer speak

The equipment suggested by the ElectroMech Yale team are just perfect for the job. They not only meets our productivity demands, but are also easy to operate and maintain.





For enquiries, contact:

ElectroMech Material Handling Systems (India) Pvt. Ltd.

Gat No. 316, At post Kasar Amboli, Tal. Mulshi, Dist. Pune 412 111 INDIA

Telefax : +91-20-6654 2222 | E-mail : yale@emech.in www.emechyale.in

© Copyright 2021 | All the names and logos used here are the registered trademarks of respective companies. Technical changes reserved.