

## ISMS – Integrated Store Management Solutions

| Solutions | Service | Satisfaction |

## Introduction

ElectroMech is the largest manufacturer of industrial overhead cranes and allied material handling equipment in India. Since its inception in 1979, ElectroMech has commissioned over 7000 cranes in more than 60 countries across the world, with an unmatched record of repeat orders.

We are recognised for providing unique solutions for the most challenging material handling requirements across a wide spectrum of industries.

ElectroMech is known globally for its 'Cranes & Beyond' offerings in the material handling sector. After four decades of global presence, we are acclaimed for our multi-spectrum solutions comprising of industrial cranes, explosion-protected cranes, forklifts & lift trucks, rollers, pushers & push-pull manoeuvres, in addition to custom-built solutions for various industrial applications.

ElectroMech's Integrated Store Management Solutions (ISMS) address the problem of storage & retrieval of palletised loads. It uses a custom-built stacker crane for storage and retrieval of materials, heavy-duty racking systems and forklifts for onward movement of materials from store to workstations for further processing. This indigenous development has been introduced after extensive trials in the organised and dynamic stores of different companies.





In today's market scenario, companies are under constant pressure to remain profitable and competitive. Optimum utilisation of space by value and floor area is critical, especially for a store annexed to the manufacturing facility. This is pertinent in metros, with the skyrocketing cost of land and construction, or for an existing facility with limited available space.

Appropriate storage, retrieval and inventory management play key roles in ensuring uninterrupted production at plants and maintaining an efficient supply chain so that the end customer receives the material within the deadlines. At the same time, one must keep inventory and logistical costs to a minimum by deploying appropriate storage systems, material handling equipment and adopting modern inventory management tools and techniques.

An efficient, safe and high-density store can be developed by optimally using the available space. Our Integrated Store Management Solutions consisting of a stacker crane, a suitable racking and storage system along with forklifts and lift trucks does exactly this.



# ISMS – Integrated Store Management Solutions

| Solutions |

## What is ISMS?

The ISMS is a perfect combination of a highly customised stacker crane which is ingeniously designed by ElectroMech along with a heavy-duty storage racking system and a fleet of equipment from Hyster-Yale®.

**ElectroMech Integrated Store Management Solutions consists of:**

- 1 Customised stacker crane
- 2 Self-supported racking system
- 3 An eclectic mix of forklifts and lift trucks





## Customised Stacker Crane

The primary product of the ISMS is a customised stacker crane which enables easy retrieval & storage of the pallets into the vertical racking system. The system can be customised to practically suit any specifications of capacity, height, width & length and thus offers utmost flexibility to storage & retrieval systems.

### Key highlights

- 4 axis movement of forks
- Customisable forks
- Vertical floating mast with 270° rotation
- No capacity derations with increase in height
- Camera vision on the forks to view material stored in the shelf
- Ease of operation without having a licensed operator

### Stacker crane is available in 3 versions:

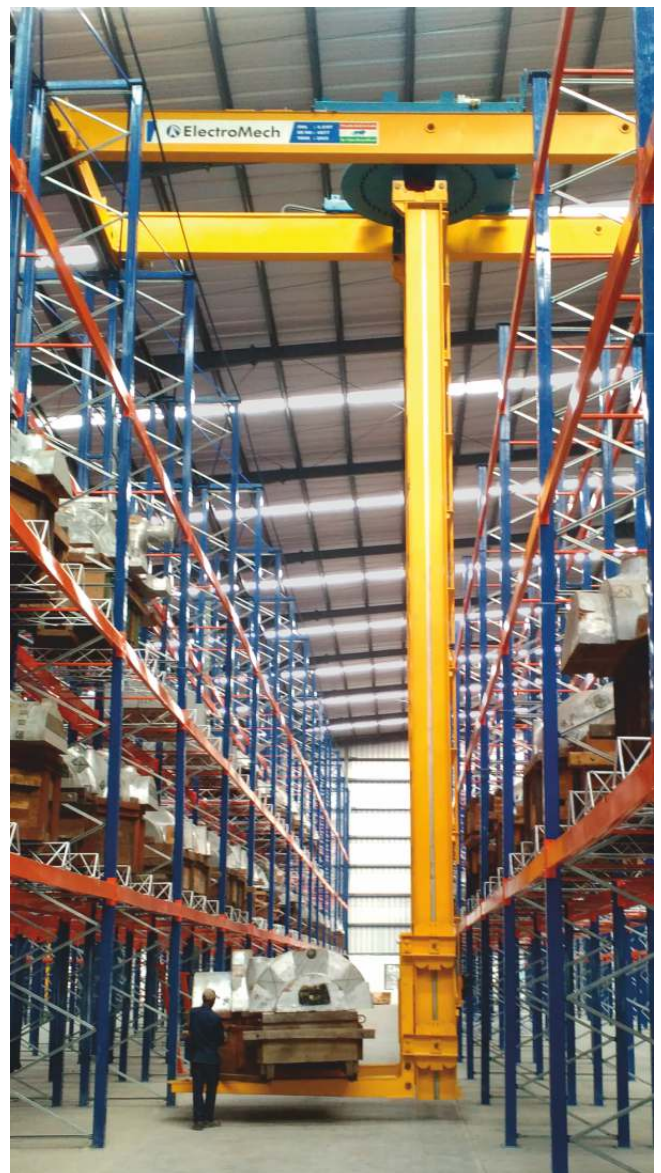
- **Handheld, remote-controlled system**



- **Semi-automated system with auto-leveller and one-click rotation**



- **Fully automatic system with PLC and command centre**



### Fork attachments





## Racking and Storage System

A well-designed and sturdy racking system is essential for ensuring higher storage density in the ISMS. ElectroMech, through its vast experience and expertise, can assist you to select an appropriate and customised solution to suit specific requirements. Increased storage density allows more material to be stored. Customised layout and design optimise floor space, weight, size and throughput. The racking system is safe, durable and scalable, which offers higher lifetime value.

The storage & racking system can be offered as a package with metal fabricated pallets as well.





# Lift Trucks and Forklifts

ElectroMech, in association with Hyster-Yale®, offers a wide range of Yale® lift trucks and forklifts for a variety of applications and to suit different load capacities. The Yale® range of lift trucks is well-known to the industry for its ergonomics, productivity, dependability, serviceability and low cost of ownership.

## Pallet trucks (Hand/Battery-operated)

They are ideal machines for medium and light-duty applications. Pallet trucks are extraordinary in their ability to combine operator comfort and reliable performance with energy efficiency and low-maintenance operation. They offer a wide choice of fork lengths, fork spreads and load capacities.

## Forklifts

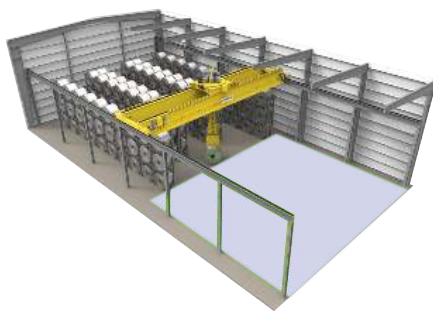
Three and four-wheel (Electric & ICE type) – Yale® lift trucks are the most manoeuvrable trucks in the market today. These products provide outstanding features, assure low energy consumption and enhance productivity. They are easy to own, operate and maintain.



## Advantages and Benefits

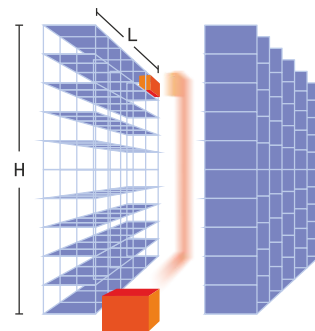
### Floor space saving

The ISMS uses the height of the racks to increase storage density and free up valuable floor space. Use of very narrow aisles allows closer rack formation, reducing the floor space requirement.



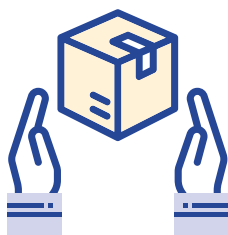
### Automation & higher speeds

The ISMS crane can move at variable speeds inside and across the aisles. The speeds are determined based on throughput. When multiple commands are given simultaneously, auto-sequencing is decided by the inbuilt programme, ensuring that the material is retrieved within minimum time span.



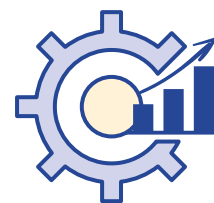
### Material safety

For careful handling of palletised material, customisable forks are provided. ElectroMech ISMS is designed for jerk-free movement, avoiding spilling over or accidental falling of material from a greater height, ensuring that there is no danger of tilting and toppling of material.



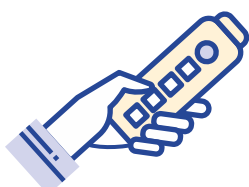
### Improved productivity

The ISMS offers enhanced storage & retrieval frequency. The required material is available just-in-time, avoiding production downtime or machine hold-ups. This helps in enhancing store efficiency and shop-floor productivity.



### Operator-friendly

Remote controlled, semi-automatic and fully automatic variants of the stacker crane are easy to operate with the use of a handheld remote control or through a command centre.



### Ergonomics

The ElectroMech stacker crane is ergonomically designed considering the comfort of the operators for repetitive actions. It avoids the need for stretching, bending, climbing ladders and additionally, there are no obstructions for clear viewing of products. This also eliminates the possibility of accidents and injuries.

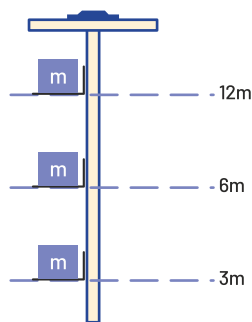






## No deration in capacity with height

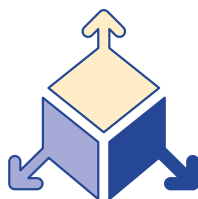
The lifting capacity of the stacker crane remains uniform across every operational point in the entire cubicle space of the store, with no deration with the increase in height. Also, there is no danger of toppling / overturning .



## Flexibility

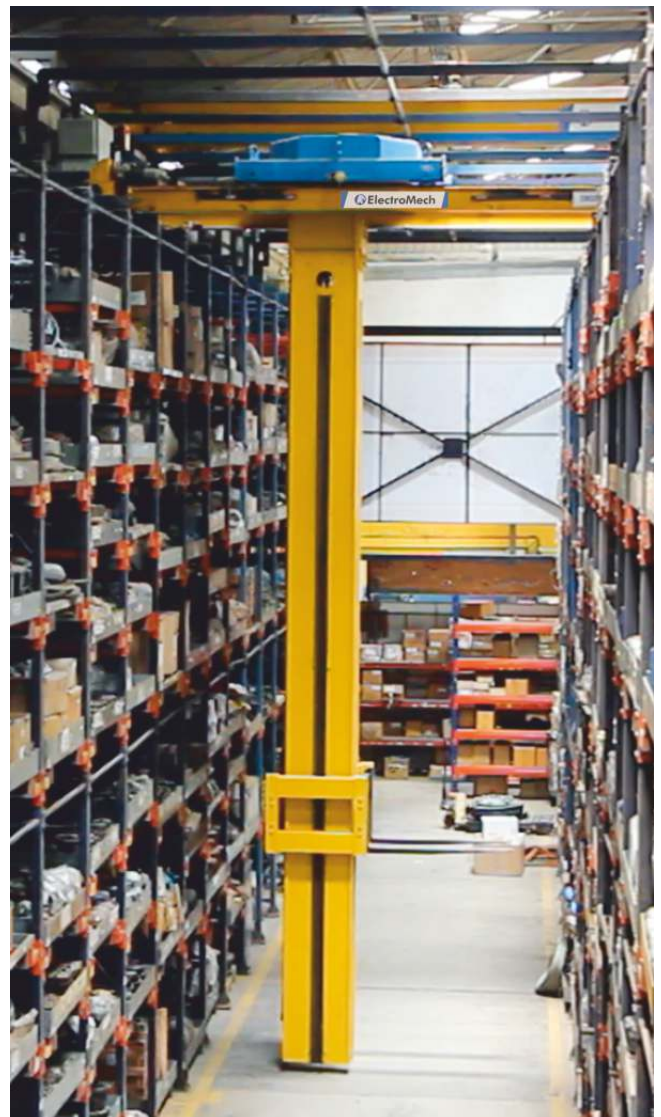
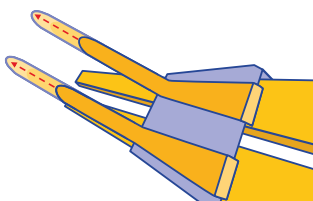
The ISMS is a highly flexible solution that can be built to suit shops or warehouses of different shapes and sizes.

The shelf height can be adjusted to suit the dimensions of the products to be stored. The forks can also be customised to suit all pallet dimensions.



## Customised

The ISMS is completely customised to suit specific requirements in a production shop or factory store. The system can be customised to have remote control operation, semi-automated or fully automated system. The right selection of MHE makes the system highly customised to suit any capacity.



## Applications

Palletised boxes



Pumps & motors



Coil storage



Automotive tooling



Flow control valves



Barrels



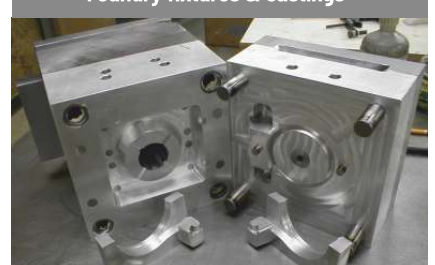
Foundry patterns & core boxes



Pipes & tubes



Foundry fixtures & castings



### Industries served

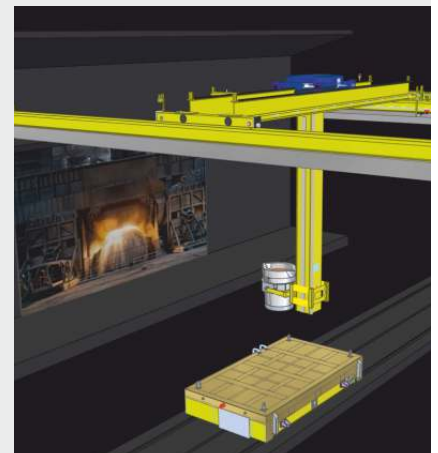
- Automobile
- Chemical
- Construction Equipment
- Food & Beverages
- Manufacturing
- Heavy Engineering
- Oil & Gas
- Paper
- Power
- Pharmaceutical
- Steel / Metal
- Warehousing

### Ladle handling in foundries



In foundries, ladles consisting of molten metal are required to be handled and tilted carefully while pouring. A customised stacker crane is an ideal choice for such an application as it reduces manual intervention and assures higher safety for the operator. Precise positioning avoids material spillover while pouring or accidental falling of the ladle.

Significant productivity improvement can be experienced with the use of the stacker crane.





# Upkeep - Upgrade - Upraise

## Ensure high uptime - anytime, anywhere

ElectroMech is renowned for its benchmark service support extended through its subsidiary company - Cranedge.

Cranedge focuses on preventive maintenance to ensure greater workplace safety and to avert production losses due to sudden equipment failure. With this approach, we are successful in ensuring nearly zero downtime of equipment maintained by Cranedge. Besides our existing customers, Cranedge services can be availed by customers using cranes and forklifts of other makes as well.

Availing our services means ensuring complete peace of mind while keeping your production unaffected due to non-availability of equipment at critical times. Moreover, the most important aspect assured by these services is safety.

We are sure that you will be delighted to know more about and avail our various service offerings to be worry-free in the future.

## Our commitment -

Resolution within 48 hours during warranty.



# CRANES & BEYOND

Material handling solutions for the world since 1979



**ElectroMech**

| Solutions | Service | Satisfaction |

*Corporate Office & Plant*

**ElectroMech Material Handling  
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