



**Crane solutions for every handling challenge**

**ABUS**  
crane systems, Germany

Solutions for hazardous area



| Solutions | Service | Satisfaction |



# Equipped to Excel

ElectroMech is one of the largest manufacturers of industrial cranes and related material handling equipment. We are recognised for unique solutions for the most challenging material handling requirements across a wide spectrum of industries. We are highly relied upon for our design capability, high manufacturing standards and service excellence. Since inception in 1979, ElectroMech has commissioned over 6500 cranes in around 50 countries across the world, with an unmatched track record of repeat orders.





## Solutions for every handling challenge

### Overhead Cranes

(Safe area & Explosion-protected)

- Jib Cranes
- Light Weight Cranes (HB-System)
- Wall Travelling Cranes
- Underslung Overhead Cranes
- Single Girder Overhead Cranes
- Double Girder Overhead Cranes
- Gantry/Goliath Cranes

### Customised Solutions

- Shaft/Tunnel Mucking Systems
- Stacker Cranes
- System Solutions

### Hoists

(Safe area & Explosion-protected)

- Electric Chain Hoists
- Electric Wire Rope Hoists
- Pneumatic Hoists
- Hydraulic Hoists

### Easy Mover

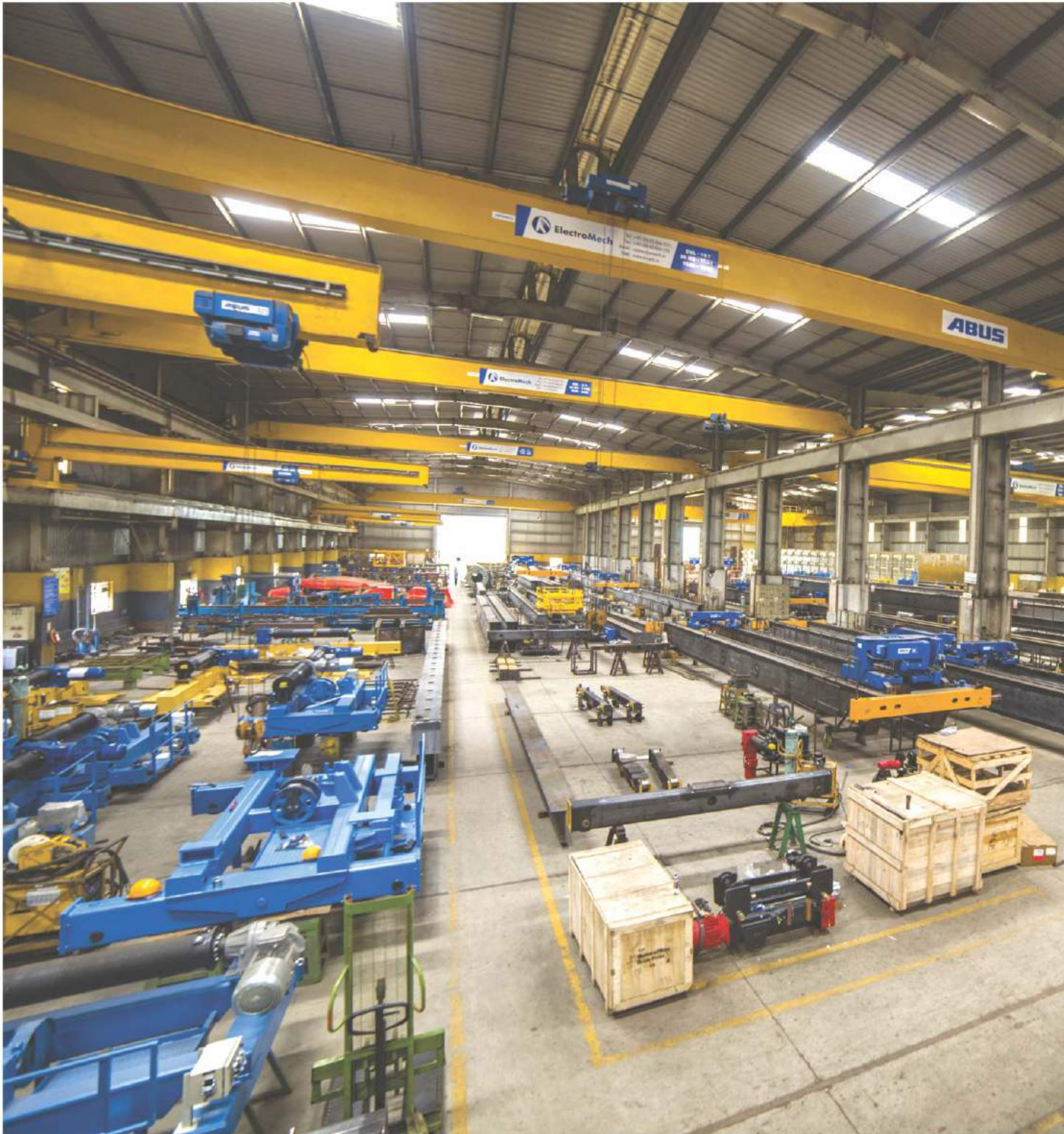
- Rollers
- Pushers
- Push-Pull & Manoeuvre

### Taim Weser

- Coker Cranes
- Process Cranes



# Equipped to Excel







## **Harnessing technology to ensure higher reliability**

It is our endeavour to maximise value for our customers in terms of cost of ownership, high reliability, high safety, and ultimately, higher productivity. ElectroMech is proud to be at the forefront of technology with an evolving product range that provides our customers with the best possible solutions; be it advanced safety features or fully customised equipment.

Further, to ensure that we meet the challenges of various industries, we have collaborated with several global leaders.

We have an exclusive tie-up with **Abus Crane Systems, Germany**, offering overhead travelling cranes up to 125t, right down to compact chain hoists to lift 80kg, and a wide range of crane accessories and hi-tech crane components.

We have also tied-up with **Stahl CraneSystems, Germany**, a world leader in Explosion-protected (Ex) cranes and components. Through this tie-up, we offer the safest lifting solutions for use in hazardous, explosion-prone areas. Additionally, we bring to you pneumatic and hydraulic hoists in association with **J D Neuhaus, Germany**; the world's leading manufacturer of crane solutions for extreme situations.

In association with **Easy Mover Rejmyre Maskin AB, Sweden**, we have recently introduced the Easy Mover range of rollers, pushers and push-pull manoeuvre. Easy Mover is a simple machine ideal for moving heavy loads up to 100t single-handedly.

ElectroMech has recently tied up with **Taim Weser S. A., Spain** for application-specific cranes for steel and metal industries, nuclear plants, waste-to-energy plants, ports, container handling and coker cranes for oil refineries.

## **Far-reaching solutions**

As a result of our pursuance of world-class technology, our equipment can be seen operating flawlessly at diverse locations. ElectroMech supplies a variety of cranes and hoists in capacities ranging from 80kg to more than 300t across different industry verticals such as automobile, steel, power, shipbuilding, heavy engineering, oil & gas and manufacturing.

Our presence is evident in the infrastructure segment. We are proud that a lot of major infrastructure projects like roads, bridges, dams and power plants have been made operational by using equipment supplied by ElectroMech.

Versatility, safety, convenience and peace of mind are the standard features of every ElectroMech equipment. This is attested by several repeat orders received from major industrial groups in India, the Middle East, South East Asia and Africa.

# Equipped to Excel

## The infrastructure

ElectroMech has its manufacturing facilities spread across 85000 sq. m., making it one of the largest crane manufacturing plants in Asia.

Our manufacturing techniques are industry leading, from CNC plasma cutting machines for crane girders to shot blasting and a dedicated paint booth for finished crane components. Our quality management systems have been certified by Bureau Veritas for the latest ISO 9001:2015 requirements.

## The team

The team at the helm of ElectroMech consists of qualified technocrats with collective experience of more than one hundred years in the industry. More than 500 motivated experts are engaged in the manufacturing of more than 1500 cranes, hoists and other similar lifting equipment every year.

## Global presence

The span of ElectroMech capabilities has ever been widening. After achieving a position of market leadership in India, ElectroMech is also spreading its wings to soar high in the global markets. A substantial chunk of ElectroMech's revenues comes from exports.

We are serving our large customer base across the world through ElectroMech FZE - Dubai, Electro Mech Equipment Trading LLC - Abu Dhabi and PT. ElectroMech Material Handling, Indonesia as well as representatives and solutions partners across the world.

In Indonesia, we have our own manufacturing plant at Cikarang, Bekasi, West Java, and National Sales Office at Jakarta.

In addition to our strong presence in the Indian Subcontinent, the Middle East, Africa and Southeast Asia, we also have installations in Americas, Europe, Australia and Central Asia. The list of countries keeps on growing with every passing year.







# Hoists

ElectroMech supplies standalone Electric Chain Hoists and Electric Wire Rope Hoists for various handling requirements across industries. With a reputation for quality, reliability and affordability, ElectroMech hoists feature advanced engineering

concepts with special emphasis on safety and versatility. This proven range encompasses several standard models of Abus hoists with options of load capacity, lift, hooking arrangements and headroom requirements.

## Electric Chain Hoists

The new generation of Abus compact chain hoists feature a fresh new design and convincing technical solutions. The 3phase, 400 volt hoists are available in four different sizes to reliably handle loads from 80kg to 4t. The motor and the gear units are of modular design, allowing to produce a wide variety of versions for lifting speeds up to 20m/min. & FEM groups up to 4m.



## Electric Wire Rope Hoists

Abus Wire Rope Hoists are compact with low headroom dimensions and incorporate the latest technical innovations. These hoists are produced using the most advanced technology available and continue to bear witness to the reliability, safety and durability year after year, from motor to rope, gearbox, brake and electronic systems. These units cover an extremely wide SWL range from 1000kg to 125t in both Monorail and Double Girder configuration.



# Jib Cranes

Jib cranes can effortlessly assist and multiply human efforts, handling loads precisely up to 6300kg.

Jib Cranes are useful especially for loading or unloading of workpieces on machine tools. These are also useful for loading or unloading of trucks. They can become an inseparable part of a standalone workstation.

Column mounted Jib Cranes are necessary when no appropriate support is available near a workstation. Wall mounted Jib Cranes are ideal solutions for workstations located near walls or vertical structures. ElectroMech designs and manufactures such Jib Cranes using Abus hoists to suit specific customer requirements.





# Light Weight Cranes (HB-Systems)

HB-System is one of the most successful developments in lifting and material handling technology, combining the effectiveness of a stationary hoist with the mobility of an overhead crane, efficiently and cost-effectively.

HB-System is an outcome of our experience of several decades with hoists and overhead cranes, high-quality production facilities and determination to develop systems enabling industries to make their workplaces more and more user-friendly.

HB-System offers several useful features at a very low cost. It is indispensable to enhance work efficiency at workplaces like warehouses, workshops, assembly lines, tool rooms or factories. Today's HB-System is a great combination of advanced technology, economy, flexibility, quality and ergonomics which make it a favourite choice of several industries.

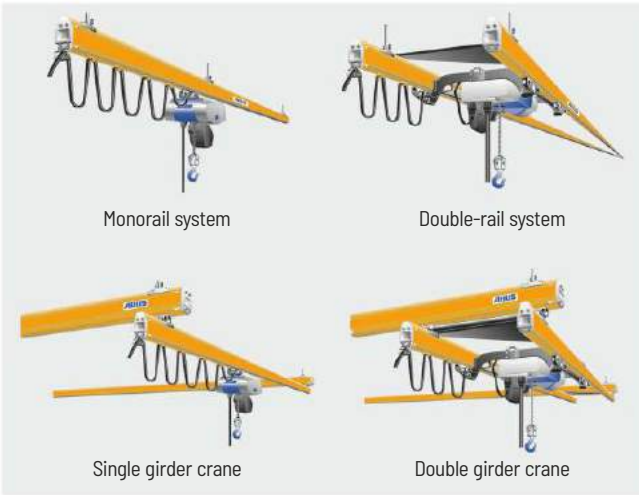
HB-Systems are readily available and can be quickly installed by suspending to almost any type of roofing/support structure.

HB-System offers tailor-made modular solutions. The components of the system are both modular and cost-effective and can be combined to build just the system which the application demands. All HB-Systems feature an extremely low-build design, ensuring that maximum hook height can be reached in the available space. Options of three types of profiles cover a load capacity range up to 2000kg. All electrical connections are made using an easy plug-in connector system. The system can be adapted and individually fitted to almost any type of roof structure from wood to steel.

HB-System is available in different versions such as Monorail, Double rail, Single Girder and Double Girder type to suit a variety of handling requirements. Even a combination of two or more types can integrate a particular work area and simplifies handling.







# Wall Travelling Cranes

The Abus Single Girder Wall Travelling Crane is designed to operate on a lower level beneath a large travelling crane system. These cranes provide additional handling possibilities and ensure smooth and trouble-free material handling between different working areas.

A wall travelling crane installed at right angles across the hall can serve several workstations. Abus Single Girder Wall Travelling Cranes are available for a maximum load capacity up to 5000kg and for a maximum outreach of 10m depending upon the load capacity.





# Underslung Overhead Cranes

ElectroMech manufactures Single Girder as well as Double Girder Cranes in the Underslung version as well. Such cranes find applications where the headrooms available are limited or the process requirements cannot allow any other means of supporting the crane other than from the roof.

Majority of the Underslung Overhead Cranes are in the capacity range from 250kg to 10t. However, higher capacity Underslung Cranes can also be manufactured as per the customer requirements.

Hoisting is done using the standard Abus Electric Chain Hoist /Wire Rope Hoist.

Precise control of the up/down motion and/or travel motion can be achieved by fitting Variable Frequency Drives in the panels (optional).

Control can be either through a Pendant Push Button station or a Radio Remote Control (optional).





# Single Girder Overhead Cranes



ElectroMech manufactures Single Girder Overhead Cranes in SWLs ranging from 250kg to 20t in different configurations.

- Beam/Box type main girders (dependent on spans)
- These cranes can be offered either with an Electrically Operated Trolley (EOT) or a Hand Operated Trolley (HOT) depending on the customer requirement.

A standard range of Abus Electric Wire Rope Hoists is used on these cranes. Alternatively, we can also supply these cranes with Abus Electric Chain Hoists.





Precise control of the up/down motion and/or travel motion can be achieved by fitting Variable Frequency Drives in the panels (optional).

Control can be either through a Pendant Push Button station or a Radio Remote Control (optional).

Additionally, we can also supply Single Girder Cranes in a 'torsion box' type arrangement, featuring a cantilever-mounted Abus hoist.





# Double Girder Overhead Cranes



ElectroMech manufactures Double Girder Overhead Cranes in SWLs ranging from 1000kg to more than 300t.

These cranes can incorporate either standard Abus crabs (upto a SWL of 125t) or fully customised open winch type crabs.

ElectroMech can supply fully customised Double Girder Cranes as per client requirements for different duty cycles and for diverse range of applications.

Double Girder Cranes can be provided for very large range of spans, large range of heights of lift as well as a large range of speeds.

Double Girder Cranes can have only a main hoist or a combination of a main hoist as well as auxiliary hoists (useful especially for load tilting).





Double Girder Cranes can also be provided with multiple hoisting trolleys running on the same bridge. Two such cranes can be synchronised for tandem movement for handling heavy and long objects.

Precise control of the up/down motion and/or travel motion can be achieved by fitting Variable Frequency Drives in the panels (optional).

Control can be either through a Pendant Push Button station or a Radio Remote Control (optional) or through a Control Cabin (optional).

We can also offer Double Girder Overhead Cranes for the steel industry which are capable of withstanding extreme requirements of operating speeds and operating conditions.



# Gantry / Goliath Cranes

Gantry/Goliath Cranes are very versatile cranes and are used mainly for activities in steel stock yards, precast segment yards and other outdoor applications. These are self-propelled cranes running on rails installed at the ground level and do not require any supporting structures.

These cranes can be supplied in Single Girder or Double Girder options depending on requirements of SWL, speeds, heights of lift and other characteristics.

Hoisting for these cranes is through the Abus standard electric wire rope hoist for a Single Girder configuration. For Double Girder Gantry Cranes, the hoisting can either incorporate standard Abus crabs (up to a SWL of 125t) or fully customised open winch type crabs for higher SWL.

Power supply to these cranes is traditionally provided through a Cable Reeling Drum. These cranes can also be fitted with on-board generators depending on the site conditions.

Precise control of the up/down motion and/or travel motion can be achieved by fitting Variable Frequency Drives in the panels (optional).

Control can be either through a Pendant Push Button station or a Radio Remote Control (optional) or through a Control Cabin (optional).





We can also provide different versions of these cranes to suit your requirement. For example:

- In workshops where part utilisation of the shop bay is required, a Semi-Gantry Crane can be provided.
- Cranes with overhangs on one/both sides.
- An auxiliary hoisting mechanism can also be fitted on the main hoisting trolley.
- Multiple hoisting trolleys running on the same bridge.
- Synchronised cranes working in tandem to handle heavy and long objects.





# Customised Solutions



Congruent with our business philosophy of providing hoisting solutions for most challenging requirements of the industry, a great emphasis is laid on customisation.

ElectroMech offers solutions designed around its proven crane systems such as double girder cranes, gantry cranes and transfer trolley system. The system solutions are developed using these cranes with other flexible options such as auxiliary hoists, dual hoists, multiple cranes on same girders, cranes in multi-tier formation, cranes with rotating crab, special hooking arrangements, sophisticated controls and radio remote control. Along with overhead cranes, transfer trolleys with remote control provide more flexibility to the overall handling system.

Customised solutions from ElectroMech prove to be versatile, economical and most appropriate for the requirement.







ElectroMech customised material handling crane solutions are helping several manufacturing plants across the world to reduce human efforts, ensure safe handling and enhance plant productivity.

These solutions have an extensive range from mere lifting and lowering loads at specific workstations to achieving complete plant integration.

Various manufacturing industries which have benefitted with the use of our solutions include

- Automotive sector
- General engineering
- Heavy engineering
- Infrastructure projects
- Manufacturing
- Oil & Gas sector
- Power plants
- Process industry
- Shipbuilding
- Steel sector





# Shaft / Tunnel Mucking Systems

ElectroMech has developed a unique and cost-effective bulk material handling system for extraction and disposal of overburden generated during construction of shafts and tunnels. These systems can very efficiently remove overburden generated during construction of deep shafts which offer access to tunnels, as well as the overburden generated during the tunnelling operation itself.

The typical heights of lift for such systems are in the range of 50m to 300m. The typical hoisting speeds are in the range of 30m/min to 40m/min.

Several such systems designed and manufactured by ElectroMech are being used by major construction companies and are operational at various construction sites across the world.



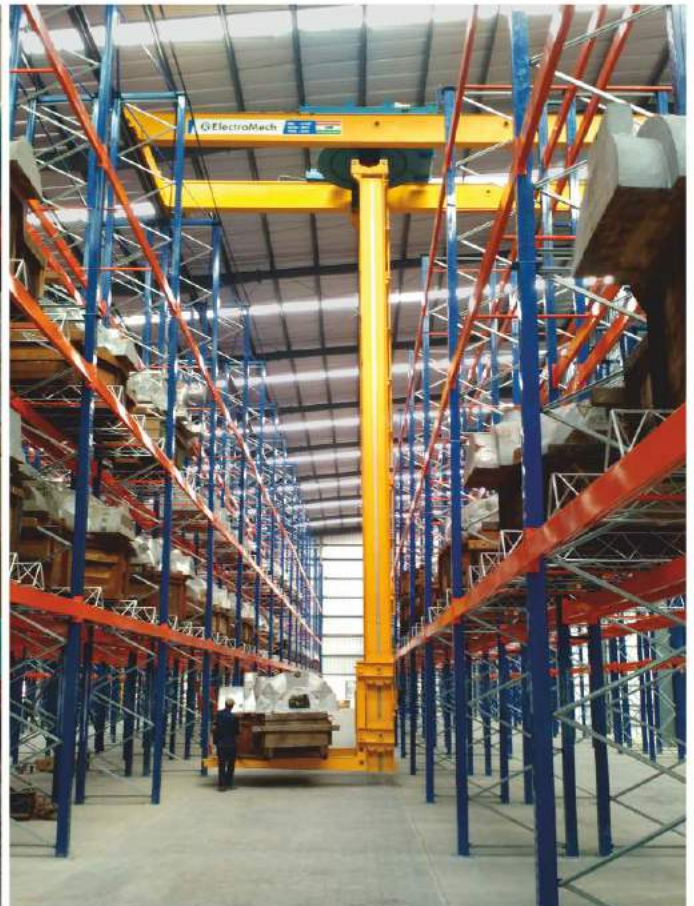




## Stacker Cranes

Indigenously designed and manufactured by ElectroMech

- First conceptualised & introduced by ElectroMech in 1993
- Second iteration of the original design with slew bearing for smooth operation
- Combination of an EOT crane and forklift
- Optimises warehouse space by providing a highly effective, quick and safe solution for storing and retrieving material from vertical racking systems
- Allows for narrower aisles as compared to the space required by a forklift to manoeuvre
- Racks support the crane. No additional structure required.
- Electrically operated, no diesel fumes or batteries to be recharged
- No danger of tipping over
- Supplied to several customers across the world





# Explosion Protection Technology

Explosive atmospheres may occur in industries such as chemical or petrochemical industries. Electrical apparatus used in potentially explosive atmospheres must be constructed in such a way that it does not become a source of ignition.

In order to avoid serious injuries and damage to material and environment, safety regulations, laws and standards have been established in most states. This way, a high degree of safety has been developed in explosion protection across the world. As the physical laws regarding the occurrence of explosions and the measures taken to prevent them are based on similar principles everywhere, currently the aim is to harmonise approval conditions and regulations regarding conformity at an international level. This brochure merely outlines the European explosion protection directives which, however, correspond largely to the international IECEx regulations. It cannot take the place of an intensive analysis of national legal principles and standards.

Stahl CraneSystems is pioneering, dynamic and uncompromising when the safety of persons and machines in areas subject to explosion hazards is at stake. Stahl CraneSystems occupies an exceptional position in this field with several decades of experience and expertise, fundamental research and development, approvals from the Federal Physico-Technical Institute (PTB) and other national and international test institutes and worldwide certification. All hoists and components without exception come from in-house production, from motor & brake to controls & control pendant. Stahl CraneSystems is the world specialist for explosion protection and as a world market leader offers the most comprehensive, complete programme of explosion-protected lifting, drive and control technology.





## ATEX


With the ATEX product directive 94/9/EC (ATEX 95) and the ATEX user directive 1999/92/EC (ATEX 137) the European Community has established the basis for uniform European explosion protection.

This safety concept is applicable both for manufacturing electrical and non-electrical apparatus and for operating this apparatus in the respective industrial plants. The legislators of the individual member countries implement these directives in equivalent statutory regulations.

In Germany, for example, these are the Explosion Protection Ordinance ExVO (implementation of directive 94/9/EC), the Industrial Safety Ordinance (implementation of directive 1999/92/EC) and the Technical Regulations for Industrial Safety (TRBS), the regulations issued by the Employers' Liability Insurance Associations (e.g. BGR 104, BGR 109 and BGR 132),

the Employers' Liability Insurance Association information sheets (e.g. BGI 740) and the regulations issued by the VDI (Association of German Engineers) (e.g. 2263 and 3673). ATEX directive 94/9/EC defines the properties required by apparatus for safe use in explosive areas. This includes classification into equipment groups and categories, the respective conformity assessment procedures to be followed, manufacturers' responsibility including CE conformity marking, basic safety requirements for the development and manufacture of explosion-protected equipment and recognised quality management measures to be implemented during production. ATEX directive 99/92/EC defines the obligations of users and employers for employees' protection in explosive areas. Inter alia, the user must assess risk and classify the potentially explosive areas into corresponding zones, so that the apparatus required by directive 94/9/EC can be used in safety.

### Assessment of conformity in compliance with ATEX 95

<b>Category 1 and M1</b>	EC prototype test (III)	Production quality assurance (IV)		
		Product verification (V)		
	Individual verification (XI)			
<b>Category 2 and M2</b>	Electrical equipment or Internal combustion engine	EC prototype test (III)	Quality assurance of products (VII)	
			Conformity with prototype (VI)	
	Other apparatus	In-house production testing (VIII) and documentation at notified body		
	Individual verification (XI)			
<b>Category 3</b>	In-house production testing (VIII)			
	Individual verification (XI)			

The figures in brackets refer to the modules of directive 94/9/EC which define the procedures to be followed for meeting conformity.

### Examples for the classification of gases and vapours into groups and temperature classes

	T1	T2	T3	T4	T5	T6
<b>I</b>	Methane					
<b>IIA</b>	Acetone Ethane Ethyl Ethanoate Ammonia Benzol (pure) Ethanoic acid Carbon oxide Methane Methanol Propane Toluene	Ethanol i-Amyl acetate n-Butane n-Butyl alcohol	Benzene Diesel fuel Aircraft fuel Heating Oils n-Hexane	Acetaldehyde Ethyl ether		
<b>IIB</b>	Coal gas (lighting gas)	Ethylene				
<b>IIC</b>	Hydrogen	Ethylene				Carbon disulphide



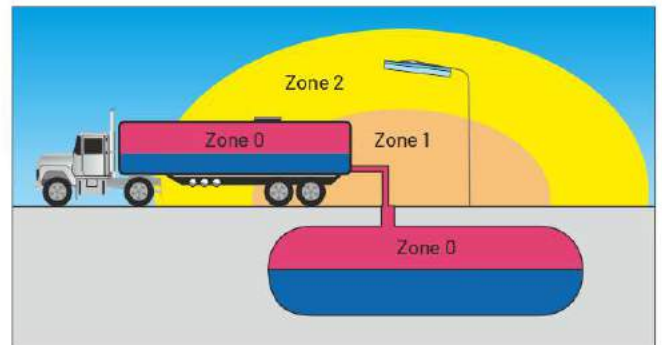
# Explosion Protection Technology

## Physical and technical principles

An explosion is a precipitate chemical reaction of combustible matter with oxygen, setting free high energy. In this connection, combustible matter may be gases, mists, vapours or dusts. An explosion can only take place if three factors come together: combustible matter (in suitable dispersion and concentration), oxygen (in the air) and a source of ignition (e.g. an electric spark). It is thus necessary to prevent ignition or reduce the effect of an explosion to an innocuous level.

To ensure this, apparatus which is used in potentially explosive atmospheres must be designed, manufactured and of course marked in compliance with the relevant regulations (ATEX product directive 94/9/EC, IECEx regulations, etc.). Classification of devices into groups and categories according to ATEX product directives or in EPL according to IECEx standards results from their area of use or the safety level of protective measures and the frequency of occurrence of an explosive atmosphere. The highest possible risk potential must be taken into account when carrying out this classification. Only explosion protected apparatus may be used in areas in which explosive atmospheres may occur in spite of all preventive measures. This apparatus is produced with

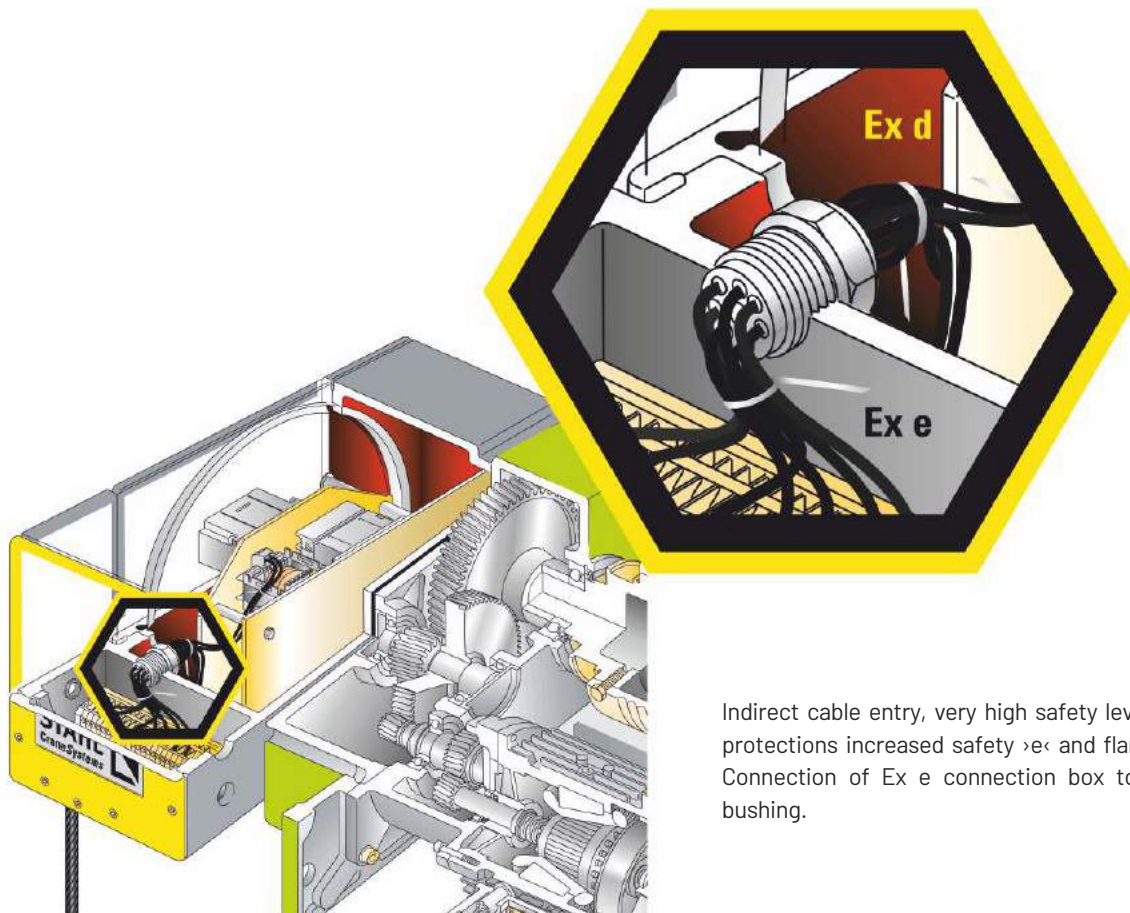
various types of protection in accordance with the corresponding construction regulations (series of standards IEC/EN 60079, IEC/EN 61241 and EN 13463). The type of protection applied by the manufacturer depends on the type and function of the apparatus. All standardised types of protection within a category are equivalent. In the EG declaration of conformity included in the technical documentation the manufacturer confirms that the product meets the ATEX directives.



## IEC/EN 60079 for equipment in areas subject to gas/dust explosion hazards

<b>Ex d</b> flameproof enclosure IEC 60079-1 EN 60079-1	<b>Ex p</b> pressurised apparatus IEC 60079-2 EN 60079-2	<b>Ex e</b> increased safety IEC 60079-7 EN 60079-7	<b>Ex n</b> Zone 2 equipment IEC60079-15 EN 60079-15	<b>Ex o</b> oil immersion IEC60079-6 EN 60079-6
<b>Ex m</b> encapsulation IEC 60079-18 EN 60079-18	<b>Ex op</b> optical radiation IEC 60079-28 EN 60079-28	<b>Ex i</b> intrinsic safety IEC 60079-11 EN 60079-11	<b>Ex q</b> powder filling IEC 60079-5 EN 60079-5	<b>Ex t</b> protection by housing IEC60079-31 EN 60079-31





Indirect cable entry, very high safety level, provided by type of protections increased safety »e« and flameproof enclosure »d«. Connection of Ex e connection box to Ex d with post-type bushing.

### Typical crane features

- Protection against overloading
- Asbestos-free brake linings
- Overhoist & overlower limit switches
- Anti-derailment device on crane and crab unit, non-sparking type
- Control panel mounted on crane bridge platform
- Travel and traverse limit switches with actuators for mounting on crane runway
- Bronze coated load hooks
- Aggressive environment paint systems
- Low and high ambient temperatures
- Increased enclosure protection
- Anti-condensation panel heaters
- Radio control
- Off-standard supply voltages



# Special Design for Cranes

In lifting, drive and control technology both electrical and non-electrical components and parts can trigger an explosion. Stahl CraneSystems therefore offers apparatus specially designed for use in areas subject to gas or dust explosion hazard. All hoists and crane components without exception are from in-house production, from motor and brake to controls and switchgear, and meet the latest European (ATEX) and international (IECEx) construction and safety regulations for potentially explosive atmospheres.



### Cable entry

Indirect cable entry, very high safety level from type of protection increased safety >e< and flameproof enclosure >d<. Connection of the Ex e connection box to Ex d by post-type bushing.



### Limit switch

The type of protection of the limit switch combines flameproof enclosure >d<, increased safety >e< and protection by housing >tD<.



### Wheels

The type of protection of all wheels is constructional safety >c<. If travel speeds are high, this also includes brass wheels.



### Overload device

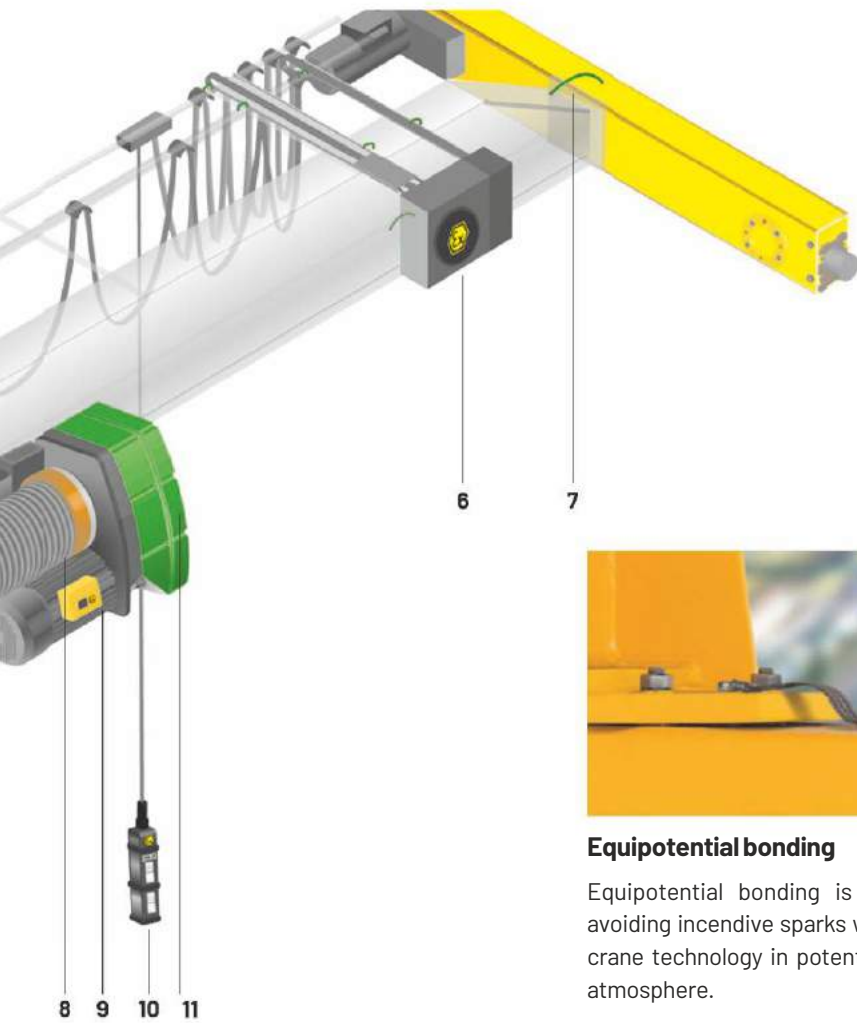
The overload devices for Zone 1 and 21 comprise mechanical sensors (LMS), analog sensors (LET) for Zone 2 and 22.



### Bottom hook block

The type of protection employed is constructional safety >c<, no aluminium is used. If travel speeds are high, individual parts, such as the load hook, are bronze-coated.





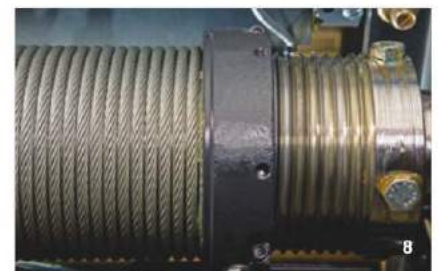
**Panel box**

The type of protection for panel boxes for Zone 1, 2 and 21 on cranes and hoists combines types of protection flameproof enclosure >d<, increased safety >e< and protection by housing >tD<.



**Equipotential bonding**

Equipotential bonding is essential for avoiding incendive sparks when installing crane technology in potentially explosive atmosphere.



**Rope guide/chain guide**

The wear-resistant rope guide in nodular graphite casting GJS (previously designated GGG) is extremely durable and not subject to temperature limitations. The same applies to the chain guide, type of protection used: constructional safety >c<.



**Motors**

Motors for Zone 1 and 21 are made of grey cast iron, the type of protection combines flameproof enclosure >d<, increased safety >e< and protection by housing >tD<. For Zone 2 the motors are made of aluminium and in type of protection non-sparking equipment >nA<. For Zone 22 the motors are manufactured in IP 66 and protection by housing >tD<.



**Control pendant**

The type of protection of the housing is IP 66, installed elements protected by flameproof enclosure >d<, increased safety >e< and protection by housing >tD<.



**Gear**

The types of protection of the gear are constructional safety >c< and liquid immersion >k<. The protective liquid (oil) prevents sparks.

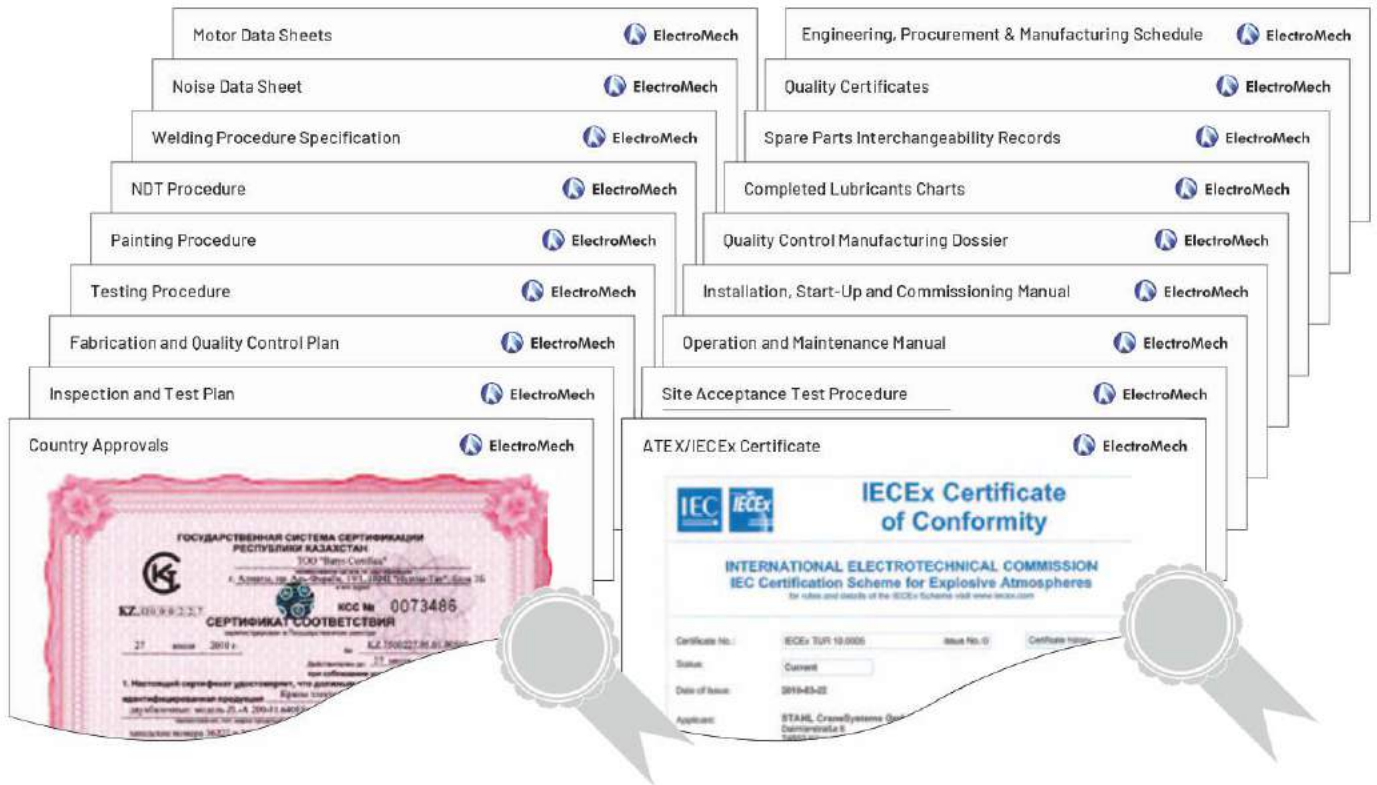


# Certification and Documentation

## Documentation

Documentation from ElectroMech meets and exceeds by far all the requirements of international project business. Even in the quotation stage, we assist you with all necessary documents and literature. In addition, you receive in-process documentation and extensive individual end customer documentation.

During all phases of your project, we offer you comprehensive services relating to documentation, certification and approvals complying with international, country-specific regulations and specifications.



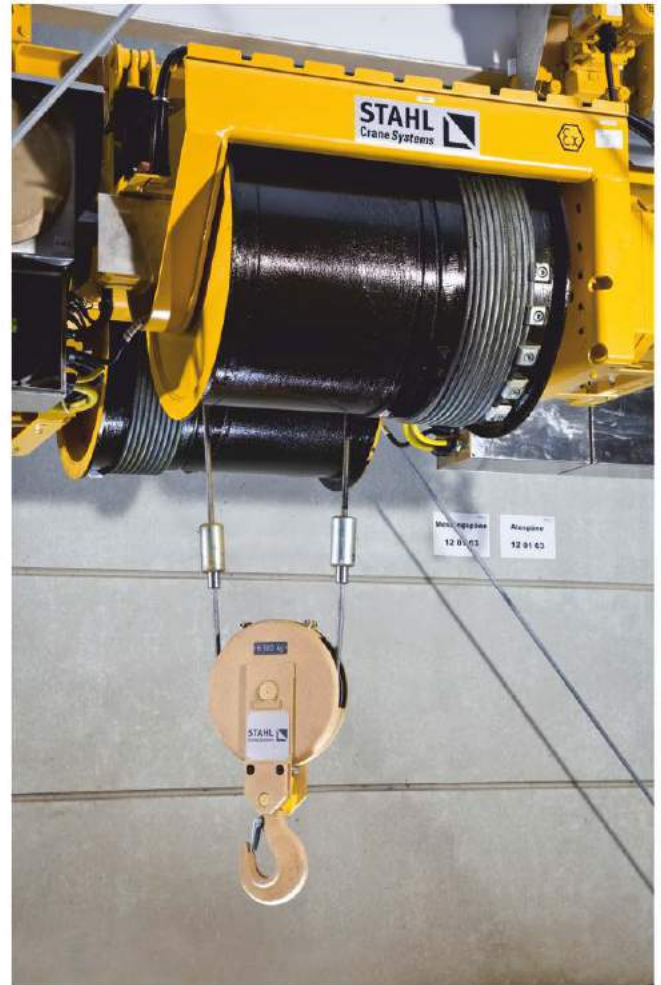




## Solutions for LNG

When maintenance is performed on LNG tanks, a 100 percent reliable technology is required. LNG is neither inflammable nor poisonous in its liquefied state and is thus relatively innocuous. However, if it evaporates, it is highly explosive. For this reason, the most stringent explosion protection regulations apply in the whole LNG terminal - including the crane technology. The LNG wire rope hoists and jib cranes from ElectroMech meet these requirements.

The LNG hoists from Stahl Crane Systems have been designed especially for maintenance work in natural gas liquefaction plants (LNG). Thanks to their high-quality components and robust design, they are ideal for use near the coast in challenging climate conditions. The pumps which pump the liquid natural gas into a pipeline system at a temperature of  $-161^{\circ}\text{C}$  must be lifted out of the tanks and transported outside for maintenance. The extreme conditions prevailing in the tank necessitate special ropes which are permanently connected to the liquid gas pump. When maintenance is required, these ropes are attached to the wire rope hoist by means of a rope clamp, so that no hook is necessary. All safety-relevant components are doubled. This means that the hoisting procedure proceeds without disruption even if a rope should break. One of the two wire rope hoists lifts the pump, the second hoist runs alongside with a dead rope as backup. If the load rope should break during the hoisting procedure, the second wire rope hoist carries on hoisting. The shock-absorbing rocking suspension of the hoist cushions the impact of the abrupt load change. Thanks to their redundant design and rocking suspension, ElectroMech LNG wire rope hoists are regarded as the safest hoists available on the market.





# Installations



## Explosion-protected crane solutions for Oil & Gas

- Refineries
- Petrochemical complexes
- LNG tanks
- Regasification terminals
- Offshore & onshore rigs
- Jetties
- Paints & chemicals
- Pharmaceuticals





# Pneumatic and Hydraulic Hoists

ElectroMech brings to you pneumatic and hydraulic hoists in association with J D Neuhaus, Germany; the world's leading manufacturer of crane solutions for extreme situations. J D Neuhaus holds a track record of innovation of over 270 years.

The light weight, low headroom pneumatic hoists are designed for frequent switching and extended duty cycles. They are also insensitive to dust, humidity and wide range of temperatures. Ease of operation, maintenance friendliness and infrequent lubrication requirements are some of the key benefits which make pneumatic hoists suitable for an array of applications ranging from handling food containers to aggressive environments like galvanising where cranes come in contact with hot, acidic vapors or hydrogen/explosive gas rich processes in petroleum refineries and off-shore platforms.

Hydraulic hoists, which operate on fluid oil are smooth, jerk-free in operation, precise in control and suitable for use in hazardous areas. They find application in industries like shipbuilding, aerospace technologies, mining, steel works and oil & gas.



# Rollers, Pushers and Push-Pull & Manoeuvre



## One person can move up to 100 Ton!

Moving heavy and bulky loads on the shop-floor is always challenging. ElectroMech, in association with Easy Mover, offers an innovative range of Rollers, Pushers and Push-Pull & Manoeuvre to easily overcome these challenges.

All Easy Mover machines are manufactured in Sweden and universally patented in 1982 by Rejmyre Maskin AB.

Easy Mover products are ideal for moving heavy loads up to 100t single-handedly. It is a simple machine that handles heavy loads by using the weight of the object being moved. The Easy Mover range includes pneumatically operated and battery-driven models which are suitable for a range of handling requirements. It increases productivity on the shop-floor, reduces manual labour and assures higher safety. All Easy Mover machines can be customised to suit your requirements.



**Push-Pull & Manoeuvre**



**Pusher**



**Roller**



## Features

- Designed for easily moving objects weighing up to 100 ton
- Pneumatically or battery driven
- Economical to operate
- Non polluting
- Compact, lightweight and noise-free
- Rugged, heavy-duty construction
- Operates at speeds up to 80 ft per minute (0.40 meter per second)
- Delivers applied force up to 4400 lbs (2000 kg) on any dry rolling surface
- Increases productivity
- Increases employee safety
- Offers an alternative to automated conveying
- Models for special applications are available



# Coker Cranes, Process Cranes



Understanding the material handling needs of various industrial sectors and pairing them with appropriate solutions is the cornerstone of ElectroMech's business approach. In an exclusive partnership with Taim Weser, we are now offering heavy and specialised lifting solutions used in metal production, refineries, ports and all other sorts of processes.

With history of more than 100 years, Taim Weser is one of the leading technological crane manufacturers in the world and has supplied turnkey plants in almost 60 countries across the world. Innovation and technology form the backbone of Taim Weser, and their solutions are known for the highest reliability and safety.

With our association with Taim Weser, we are now in a position to serve various sectors such as power, steel, non-ferrous, ports, container terminals and waste-to-energy with a wide range of solutions.





Our association with Taim Weser now allows ElectroMech to cater to the entire spectrum of cranes – right from the lightest duty workstation crane to the most sophisticated cranes like coker cranes and nuclear plant cranes.

- Scrap Handling Cranes
- Galvanising Plant Cranes
- Liquid Metal Handling Cranes
- Slab/Plate/Coil Handling Cranes
- Dispatch Bay/Stockyards Cranes
- Bloom/Billet/Bar Handling Cranes
- Rotating Trolley/  
Rotating Beam Cranes
- Coker Cranes
- Process Cranes
- Converter Cranes
- Tank House Cranes
- Nuclear Plant Cranes
- Lance Handling Cranes
- Waste-to-energy Cranes



# Expert Services

Experience competence  
in industrial overhead crane services



Services By ElectroMech

## Ensure high crane uptime, high productivity and higher profitability.

ElectroMech is well known for the most efficient industrial overhead crane services for all makes of industrial overhead cranes. These services, available under the Cranedge brand have become a benchmark in several parts of the world. Cranedge services focus on preventive maintenance to ensure high level of workplace safety and to avoid production losses due to a sudden crane failure. With this approach, ElectroMech is successful in ensuring nearly zero downtime of cranes.

Besides existing customers of ElectroMech, our services are availed by customers using cranes of other makes as well. Our expertise, efficient service and ability to deliver required spares in the shortest possible time have earned us the loyalty of our customers.

Our experienced and trained teams are strategically located across the world and supported by strong logistics and inventory management system with quick access to spares.

Cranedge services cover almost all types of overhead cranes used in the safe zone as well as hazardous areas (oil & gas, chemicals, etc.). Availing our services means ensuring complete peace of mind while keeping your production unaffected due to non-availability of cranes at critical times. Moreover, the most important aspect assured by Cranedge services is SAFETY.

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



### Service offerings

- Spares Sales
- Repairs, Services and Overhauling
- Annual Maintenance Contracts
- Crane Health Checks
- Modifications and Retrofits
- Relocation of Cranes
- Crane Safety Certification







# A World of Satisfaction

ElectroMech has earned a noteworthy reputation of being a most reliable name in the field of material handling systems through its products and prompt, efficient service. Our customers have been experiencing a world of delight and satisfaction all across the globe.

The sturdy ElectroMech cranes are operating year-after-year in extreme climatic conditions, irrespective of whether it is the sweltering heat of the deserts in the Middle East, or the biting chill of the mighty Himalayas.

Our experience with cranes, which ranges right from small workshops to gigantic shipyards, expands our expertise. We are inspired to sharpen it further to help us design advanced cranes for more critical applications.

Our happy customers all over are a source of immense satisfaction for team ElectroMech.



*This is a pictorial representation and does not purport to be the political map.*



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**ElectroMech**

| Solutions | Service | Satisfaction |

Indonesia Office & Factory

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Our presence across the world

