



torq - launch of
a new power breed
of crane kits



Rotating crab -
a new solution

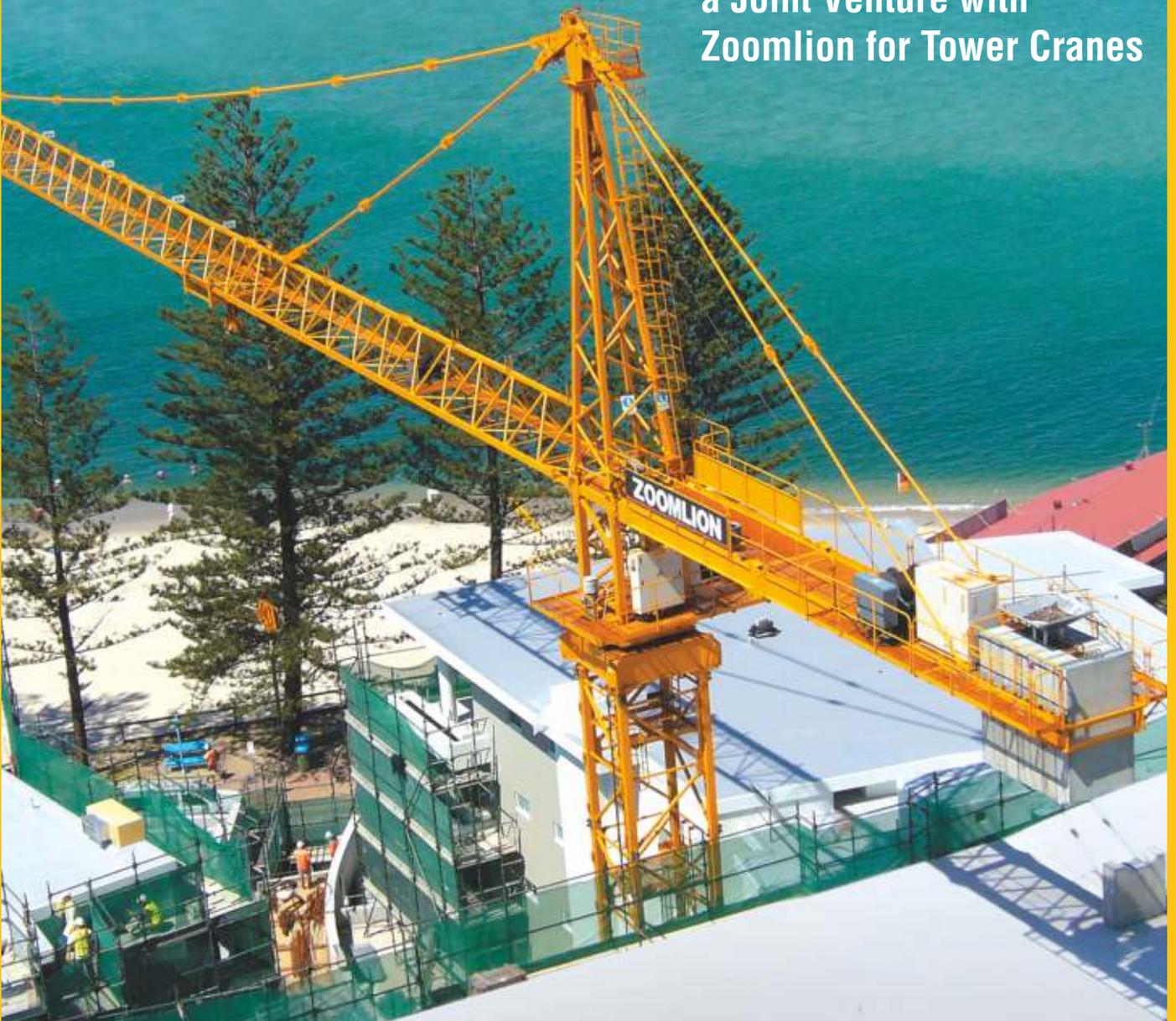


Proud to be a
part of the Chennai
Metro rail project

EMPOWER

Lifting & Handling

**ElectroMech enters into
a Joint Venture with
Zoomlion for Tower Cranes**



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ElectroMech FZE Handling challenges successfully in Iraq

Our global customers trust us for our solutions ability and approach to meet challenges in handling with our hoist or crane solutions. This is true not only in case of completely new projects, but ElectroMech is also their trusted partner when it comes to refurbishment, retrofitting or modernisation of existing cranes, where they know for sure that ElectroMech can handle the job swiftly and ably.

One such challenging requirement was successfully handled by us for **Diala State Company in Iraq**. Diala is engaged in the assembly and manufacturing of large capacity distribution and power transformers and is one of the largest transformer manufacturing companies in Iraq. The project involved supply and retrofitting

of completely new hoisting units and refurbishing the old cranes with new electrical systems. With our expertise in such projects, we refurbished four units of Double Girder trolleys of 100/30MT, 50/20MT, 15/10MT and 15/7MT capacities.

This was a very challenging project considering the unrest in Iraq and the critical time frame requirement of the customer. However, our engineer, Santosh Tambe took on the assignment, and with admirable courage and project execution ability, completed the task in the given time frame to the fullest satisfaction of the customer.

With the successful execution of this project, we now look forward to new challenges in Iraq and the Middle East region.

Refurbishing of double girder trolleys at Diala State Company in Iraq



Take my word!

Tushar Mehendale
Managing Director

Dear customers, colleagues, business associates and well-wishers of ElectroMech,

As always, it gives me immense pleasure to introduce you once again to the latest issue of EMPOWER, our regular publication which showcases the achievements of Team ElectroMech.

The theme of the current issue is definitely GLOBAL - tie-ups with multinationals, executing projects in Iraq, cover page story in an international industry magazine, winning orders against global competition, catering to unique requirements of foreign MNCs in India and launch of a product exclusively for the SMEs in developing countries across the globe.

The big story of this issue is undoubtedly our tie-up with the global construction equipment major, Zoomlion. Zoomlion which ranks amongst the top 5 construction equipment manufacturers in the world, also happens to be the world's largest manufacturer of tower cranes in terms of volumes. ElectroMech and Zoomlion have inked an Equity Joint Venture Agreement for setting up a complete sales, manufacturing and services JV in India.

Talking about being global, ElectroMech has also managed to hoist its flag in Iraq by successfully refurbishing several cranes at Diala State Company in Iraq. This is the first step for ElectroMech's entry into Iraq and we are looking forward to being involved in the ongoing rebuilding efforts in Iraq in our own small way.

The pioneering installations and solutions from ElectroMech also got a global recognition from HOIST magazine as we made their **cover story** in the April '12 issue.

World-class infrastructure is also being built in India and ElectroMech is proud to be associated with several such projects. We highlight one of the important projects currently underway - Chennai Metro, wherein ElectroMech's cranes go a long way in helping execute the project in fast and timely manner.

For a growing country like India, the requirement of basic building materials for its buildings, power plants, factories and overall infrastructure happens to be steel. India's steel manufacturing capacity is set to increase to more than 180 mtpa by 2020. ElectroMech marks its entry into the steel sector by being chosen as a key supplier to BMM Ispat's 1.25 mtpa steel plant coming up near Hospet. ElectroMech won this order by beating global competition from other Asian competitors.

The ElectroMech name has always been associated with supplying the best products to the Indian industry. Indian industry, however, is a unique marketplace with requirements for a good quality product at several different price points having different value propositions. In view of this, ElectroMech has launched its new range of products - **torqk** - exclusively aimed at the SME sector in India as well as in developing countries across the world.

Our services subsidiary, Cranedge also continues to achieve newer milestones. Being true to its ethos of being a services and solutions provider, Cranedge has helped one of our esteemed multinational clients, Gestamp in saving on its investment to the tune of 60% by clever reallocation of cranes.

Well, all I can say now is happy reading!

Tushar Mehendale



is the 7th largest construction equipment manufacturer in the world. Tower cranes are one of the most competitive products of Zoomlion among its diverse product lines. Their technical superiority and tremendous manufacturing strength make Zoomlion the leader in the Chinese tower crane market. In June 2011, Zoomlion acquired the world's most advanced topless tower crane technology from JOST, thereby entering into the global high-end tower crane market and leaping from a leading Chinese enterprise into an advanced international enterprise. Currently, Zoomlion manufactures three series; hammer-headed, luffing-jib and topless tower cranes and over 40 models of tower cranes ranging from 63tm to 5,200tm. On August 29, 2010, Zoomlion developed the world's largest horizontal jib top slewing self-raising tower crane -D5200.



Commenting on this association Mr. Tushar Mehendale, Managing Director, ElectroMech said, "It is a fine time for Chinese machinery producers to invest in India's heavy machinery industry, as India has planned to invest USD one trillion on infrastructure construction over the next five years. Last year, India's tower crane industry saw total revenue of USD 93 million. Industry insiders expect the sector to maintain

an annual growth rate of more than 20% in the next decade."

Mr. He Wenjin, Vice-President of Zoomlion Heavy Industry Science and Technology Development Co. Ltd. said, "The joint venture will be Zoomlion's first directly-invested overseas plant, with Zoomlion holding a 70% stake and ElectroMech owning the remainder."

He further added that the Hong Kong-listed Zoomlion has a long-term strategy in the Indian market and plans to invest USD 100 million to bolster its business development in India in the next few years. He said the two partners hoped the joint venture plant, which will specialise in tower crane production, will realise USD 50 million in annual sales in five years. Mr. He Wenjin also mentioned that Zoomlion will continue looking for overseas merger and acquisition opportunities in the future.

ElectroMech inks JV agreement with Zoomlion

ElectroMech has diversified into the tower cranes business by signing a Joint Venture agreement with Zoomlion. The joint venture plant will realise USD 50 million in annual sales over the next five years.

On the 21st of August, 2012, ElectroMech entered into a Joint Venture agreement with Zoomlion Heavy Industry Science and Technology Development Co. Ltd., to manufacture, sell and service Zoomlion's complete range of tower cranes in India.

This strategic alliance aims to combine the advanced technology and manufacturing expertise of Zoomlion with ElectroMech's strong base in India and its strengths in sales and service to provide top class Zoomlion tower cranes to Indian customers.

ElectroMech specialises in designing, selling, manufacturing, erecting and commissioning of a diverse range of products in the industrial cranes product spectrum and counts amongst its clientele all leading infrastructure construction companies in India. This Joint Venture aims to leverage ElectroMech's relationships within the infrastructure majors and expand our product offerings to them. Moreover, this will see

ElectroMech reach out to the booming real estate sector with Zoomlion's world-class leading tower cranes.

The real estate sector itself has seen a paradigm shift over the past decade with modern techniques of construction becoming more common across the sector. Not only metros, but tier II towns are witnessing previously unseen levels of development and the skylines of cities like Mumbai and Delhi are rapidly changing with skyscrapers becoming the norm. This isn't surprising, given escalating land prices and Cushman & Wakefield's estimate of the shortfall in residential units from seven major cities alone touching 1.3 million. With these changes comes the demand for quicker time to market for projects, which is pushing the demand for related equipment. Mumbai alone accounts for approximately 70% to 80% of the demand for new tower cranes and this is only expected to grow as project approvals are becoming a speedier process.

Zoomlion is China's leading construction machinery manufacturer with the world's most comprehensive product chain. The company has maintained an average CAGR of over 60% since establishment and now manufactures 13 categories, 66 series and over 640 varieties of leading products, to which it owns complete intellectual property. With annual sales of over 8 billion USD in 2010, Zoomlion





ElectroMech has proved to be a reliable partner to several EPC companies. Hardly any large scale infrastructure project is complete without ElectroMech. In keeping with this tradition, we have supplied several cranes for the Chennai Metro Rail project, handled by Gammon India and Soma Constructions, reasserting our successful track record.

Metro rails are the new lifelines of modern India. With the ever-growing population of Indian cities, rapid mass transportation systems are the need of the hour. A metro rail is best suited for this purpose with an added advantage of economy in commuting. After their successful implementation in Kolkata, Delhi & Bangalore, several other cities such as Chennai, Mumbai, Pune are following suit.

ElectroMech continues to play a pivotal role in several metro rail projects by installing cranes for precast segment yards and in flyover construction activity. A railway track is an essential

requirement for a metro rail and the congested nature of most Indian cities necessitates an elevated structure over existing roads.

Hence, most of the routes of the metro rail track consist of flyovers. These flyovers are necessarily built using modern construction techniques consisting of pillars and precast segments, which allow quick, precise and reliable construction.

For using this method of construction, precast segments are manufactured in a central precast segments yard which is usually located far away from the construction site. These precast segments are then carried to the project location. They are then lifted and precisely placed to form the track length.

ElectroMech's experience at metro rail projects

ElectroMech is looked upon as a reliable partner by several EPC companies for their metro rail projects. ElectroMech has supplied a 60 Ton launching girder hoist to Gammon India for the Delhi metro rail project. We have also been a part of Bangalore metro rail project by supplying two 120 Ton gantry cranes to Navayuga. ElectroMech cranes are conspicuously

present at several flyover projects, precast segments yards, highway construction and other infrastructure projects in India.

The current project

Recently, ElectroMech supplied several cranes for the Chennai Metro Rail project. This is being jointly executed by Gammon India Ltd. and Soma Constructions Ltd., both of whom are ElectroMech clients.



Cranes for casting yards

Gammon India and Soma both have large casting yards on the outskirts of Chennai where precast segments are manufactured and then transported to project sites. ElectroMech Gantry Cranes are used in these casting yards for

efficient and safe handling of precast segments. These gantry cranes practically cover the entire length and breadth of the yards, reaching every corner. They are used to handle precast segments through various stages of manufacturing and then for moving them to the stocking area. ElectroMech gantry cranes are also used for loading of precast segments onto trucks.

These cranes are reliably performing round-the-clock for continuous handling.

Cranes on flyovers

ElectroMech is synonymous with handling solutions. Obviously, for any challenging requirement, industries look at us with great expectations and trust. One such challenging requirement at the Chennai metro rail project was to construct a parapet wall using precast cemented blocks. ElectroMech was quick to respond to this unusual requirement. The solution came in the form of a 7MT gantry crane running on top of the flyover, with overhangs on both sides. With this arrangement, it was very easy to lift precast segments and position them precisely to form the parapet wall.



Photo courtesy : Infrawindow.com

ElectroMech marks its presence at the Chennai Metro Rail project

The same crane was used to build platforms on the elevated track of the metro rail.

By meeting the requirements of Gammon India and Soma successfully at the Chennai Metro Rail project, ElectroMech has reasserted its successful track record once again.

ElectroMech clients





Launching torqk A new power breed of workshop hoists and cranes for SMEs

In a recent strategic move, ElectroMech has expanded its portfolio to ensure product availability at every price point in the market by way of launching a new range of hoists and crane kits, specially developed for SMEs.

India's economic growth is driven by its strong SME sector. Several thousand SMEs spread across India are fueling the growth and proving to be the backbone of large scale industries in various sectors. Indian SMEs are typical in nature. Though they operate on a small scale, they are successful in ensuring great economy in overall operations. They offer good quality products at very competitive prices. This success attributes to their economic resources deployment. Every equipment, system and machine used by them is mainly selected based on its entry level cost, but without compromise on the performance. This way, the SMEs are able

to keep their product costs low without compromising on the quality.

The introduction of torqk is a culmination of our close understanding of the needs of Indian SMEs backed by over 30 years of being deeply entrenched within the sector. The torqk range encompasses a complete range of material handling products and systems which includes crane kits, single girder cranes, wire rope hoists, chain hoists and chain pulley blocks.

Considering the geographical spread of SMEs across the country, torqk reaches you exclusively through its vast network of Solutions Partners. For efficient distribution and prompt after-sales services of the torqk range, we have developed a unique distribution model in the industry. torqk Solutions Partners have been appointed in various industrial cities. They are



Crane Kits



Single Girder Cranes



Wire Rope Hoists



Chain Hoists



Chain Pulley Blocks

primarily EOT cranes manufacturers catering to the local market and hence are able to develop a right crane solution for you and also provide erection, commissioning and after-sales-service support. They will be procuring crane kits from torqk, assuring a standardised product of high quality. This way, you are assured of a reliable solution and expert services.

The torqk range encompasses all the essential features, offering a high level of safety, reliability and techno economic efficiency while ensuring good value for money. torqk is the perfect solution for your handling requirements when you want to achieve more in a small budget and yet elevate your business to a new height.

Launch of tower crane model Zoomlion TC5010-4

Available in India through ElectroMech

Zoomlion from China has now established a firm footing in India. Over the years, the company has developed a very good understanding of typical requirements of the Indian market. This fact is evident from the new developments at Zoomlion and its recent launch of tower crane model Zoomlion TC5010-4, specifically developed for India.

So far, the use of tower cranes has been restricted to the construction of high-rise towers and mega construction projects. This is primarily because of the low number of high rise buildings as well as the relatively high level of initial investments in tower cranes. But, looking at the boost in

mid-sized housing complexes even in tier 2 cities, Zoomlion has developed this special model, the Zoomlion TC5010-4, to suit these projects.

Zoomlion developed this model after extensive discussions with developers and contractors regarding their actual requirements in the Indian scenario. These insights, coupled with its experience in the market, led to the development of the TC5010-4, a Hammer Head type tower crane best suited for mid-sized housing construction projects. The seamless square tube mast structure makes it compact and light weight. Further, the crane is very convenient to transport and has a user-friendly design. This new model has 4T maximum capacity and 1T tip load capacity which is adequate for mid-sized housing construction. This saves unnecessary costs involved in providing excessive tip load capacity as in the case of other tower cranes.



Zoomlion TC5010-4 also features

- ▲ Lower running costs due to solar obstruction light
- ▲ Higher safety due to anti-drop device
- ▲ Higher stability
- ▲ Elegant design
- ▲ Easy transportability





Gestamp Automotive is an international group dedicated to the design, development and manufacture of metal components and structural systems for the automotive industry. Today, Gestamp Automotive is present in 22 countries and has 95 production centres (49 plants in West Europe, 15 plants in East Europe, 8 plants in North America, 9 plants in South America, 14 plants in Asia) and 13 R&D centres, and has over 25,000 employees. One such plant of Gestamp Automotive India is in Chakan, near Pune in India.

This plant presently has 5 ElectroMech EOT cranes on their press shop, which are performing extremely well and to the satisfaction of the customer for the last 5 years. However, there was a change in the handling requirement due to an increase in the production and die maintenance activity.

The cranes being used presently are -

- Bay 1 (Blanking line) 32/16MT DGEOT ABUS Cranes-2 Nos.
- Bay 2 (Line 1) 50/15MT DGEOT ABUS Crane-1 No.
- Bay 3 (Line 2) 50/15MT DGEOT ABUS Crane-1 No.
- Bay 4 (Line 3) 50/15MT DGEOT ABUS Crane-1 No.

die handling demanded no more than 30t capacity. Hence, the following suggestions were made to the client.

- One new 32t crab would be added to the existing 32/16MT blanking line crane
- Shifting of another 32/16MT crane in bay 3 (Line 2) as the total die capacity in line 3 was not more than 30MT
- Shifting of existing 50/15MT crane from Bay 3 (Line 2) to Bay 2 (Line 1) to meet their requirements

The most interesting part of the proposal was that the entire investment in the project was just 40% of the cost of a new crane. The client was definitely impressed with this ingenious solution and opted for it. After making all the initial preparations, the required cranes were re-engineered and reallocation of cranes was done based on the client's requirement. This was quite a herculean task, but with the help of a large team of engineers and contractors we completed this task in just 6 days.

We sincerely thank team Gestamp Automotive India for involving us in this challenging project and trusting our solutions providing capability.

Gestamp saved 60% through re-engineering and reallocation of existing cranes

Cranedge team conducted a thorough audit of all their cranes. Suggestions were made to the client, which proved greatly worthy.



With the change in the production requirement and die maintenance activities, Gestamp required 2 cranes of 50/15MT in Line 1 bay. Hence, they approached Cranedge for their following requirements.

- Dismantling of 32/16MT crane from blanking line (Bay 1)
- Upgrading one existing 32/16MT crane to 50/16MT capacity
- Re-erection of modified 50/16MT crane in Line 1 (Bay 2)
- Upgrading one existing blanking line crane to 32/32MT capacity

Based on the above enquiry, Cranedge evaluated the possibility of converting 32/16MT to 50/16MT crane and found that technically this modification was not feasible.

A completely new crane for Bay 2 was then considered, however this option proved to be beyond their allocated budget for this upgrade. The client approached Cranedge again for solving this problem. Looking at the challenge involved in the project, the Cranedge team decided to conduct a thorough audit of all the cranes on the shop-floor. A careful study of the optimum usage pattern revealed that the Blanking line 32/16t crane was not fully utilised and a 50/15t crane was not essential in Bay 3 (Line 2) as

Project highlights

Phenomenal saving of 60% of investment in a new crane.

Proper utilisation of cranes.

The problem related to production is solved successfully in minimum possible time.



upkeep • upgrade • upraise

ElectroMech crane features on cover page of HOIST magazine, UK

HOIST

is a prestigious international magazine from UK. ElectroMech is featured in it as a leading Asian player. Our Tunnel Boring Machine assembly crane appears prominently on its cover.



Hoist magazine, published from UK, is a prestigious magazine dedicated to the Hoist and Crane industry worldwide. In the April 2012 issue of this magazine ElectroMech is featured as a leading Asian player in this market. The photograph of our TBM assembly crane supplied to SOMA for Mumbai water tunnel project appears prominently on the cover of this magazine highlighting its uniqueness and our solutions capability.

Hoist Magazine is published by World Market Intelligence - a premium information and marketing solution company focused on the provision of high-quality information and software solutions to drive business success. This is the only international magazine with news and information focused on overhead cranes and industrial lifting equipments. The magazine reaches almost 19,000 users and distributors of lifting equipments from various countries across the globe.

The April 2012 issue of this magazine focuses on the emerging South Asia market in which it has extensively covered Indian crane industry from various perspectives.

The article mentions Mr. Tushar Mehendale's views on the importance of tie-ups.

While talking about the strategic partnership with Abus and Stahl, he has added how these partners are a significant part of ElectroMech growth strategy over the past few years.

Mr. Mehendale has also mentioned about the strategic alliance of ElectroMech with Zoomlion while venturing into a new line of business of tower cranes. Zoomlion is among the top ten construction equipment companies globally and manufactures over 9000 tower cranes annually.

Mr. Tushar Mehendale has highlighted the entry of ElectroMech in the new market viz. the nuclear sector with the order for cranes for critical handling applications at Kakrapara Atomic

Power Project set up by the Nuclear Power Corporation of India.

The cover of the April 2012 issue shows the ElectroMech crane supplied to SOMA for Mumbai water tunnel project. This unique project has also been described in detail in a separate article in the same issue. It highlights the uniqueness of crane solutions supplied to these projects and the challenges fulfilled by them.

This news signifies our growing footprints in the global market. With the encouragement and best wishes from our clients, we look forward to several such news in the near future.

"We have always been a firm believer in tie-ups with market leaders which allow both the partners to effectively leverage each other's strengths and derive synergies".

Mr. Tushar Mehendale, Managing Director, ElectroMech



ElectroMech receives a single largest order from a steel plant - BMM Ispat Ltd.

BMM is a Rs.2000 crore company with a focus on market orientation and optimal usage of technology to achieve process efficiency and value addition. BMM has always believed in its core value - 'potential in tonnes' and hence continues to transfer the benefit derived from sustained growth to all its stakeholders. The unique value proposition that defines the very fabric of the BMM culture is the firm's belief in unleashing this 'potential in tonnes' in terms of its human capital, continuous growth and consistent transfer of benefits to its stakeholders.

The BMM Group has two manufacturing facilities -

- BMM Ispat Limited - Located at Danapur, Hospet, Karnataka
- BMM Cements Limited - Located at Gudipadu, Yadiki Mandalam, Anantapur District, Andhra Pradesh

Current capacities at BMM ISPAT Limited are

- Beneficiation plant - 2.60 million tonnes per annum
- Pellet plant - 2.40 million tonnes per annum
- Sponge iron plant - 0.73 million tonnes per annum
- Induction furnace - 0.10 million tonnes per annum
- Rolling mill - 0.09 million tonnes per annum
- Power plant - 165 MW

BMM Ispat Ltd. has embarked upon an expansion project to set up an Integrated Steel Plant of 2.00 million tonnes per annum in two phases and a Power Plant of 70 MW.

During the summer of 2012, senior executives from BMM visited the ElectroMech factory in Pune for capacity evaluation. They were very impressed with our plant facilities, systems, design facilities and our ability to achieve on time performance. After thorough evaluation, they have placed an order on ElectroMech for 15 cranes for their Steel Melting Shop and Rolling Mill which will be a part of the new 1.25 mtpa Steel Plant.

An interesting challenge in this order from BMM will be the supply of Cranes with Rotating Trolleys.

This is achieved in two ways :

- Via slewing wheels
- Via slew bearing for the 12.5t cranes

Rotating Trolley on slewing wheels

This trolley consists of two parts viz. the upper trolley frame and the lower trolley frame. The main hoisting machinery is mounted on the upper trolley frame which has slewing wheels that run on a circular rail track fitted on the lower trolley frame. This will be used to rotate a spreader beam with magnets attachment through 270 degrees with a slewing speed of 2 rpm. The magnets are capable of handling hot billet bundles at 600°C and are designed for 60% duty cycle (having class H insulation with temperature rise limited to class B). These magnets are equipped with a battery back up system for 15 minutes. This crane will normally be used for stacking of billets, loading/unloading of billets/bars.

Rotating Trolley on slewing bearing

This trolley consists of two parts viz. the upper trolley frame and the lower trolley frame. The slewing bearing is fitted in between these two frames. The main hoisting machinery is mounted on the upper trolley frame. This will facilitate the spreader beam (having magnets attachment) to rotate through 270 degrees with a slew speed of 2 rpm.

This is the single largest order for ElectroMech from a steel plant. The entire project is expected to be completed by the end of 2013. We sincerely thank the entire BMM team for their trust in our solutions capability and look forward to a successful completion of the project.

SIEMENS

appreciates our service efficiency

Mr. Raju Prasad of SIEMENS LTD.

Energy Sector, Power Transmission Division, Gas Insulated Switchgear(GIS), Aurangabad, while appreciating our service says,

"I want to thank you all for your timely and continuous support in resolving some of the issues related to crane erection, maintenance and repair, which we were facing in the last couple of days.

We extremely appreciate the efforts of both your teams, Cranedge and ElectroMech, in sorting out all the issues in the shortest span of time and with least follow up (especially rigorous phone calls).

Once again thank you and looking forward to expecting the same kind of Service & Support in the future as well."

The company

CMI Fpe is a global leader in designing, manufacturing, erection and commissioning of Cold Rolling Mill plants. In India, they have large plants at Talaja and Silvassa, where they manufacture various equipments required in Cold Rolling Mills. These two units are equipped with high precision, ultra-modern machinery, and all the assembly activities conform to high quality standards. In the entire plant, emphasis is laid on automation where handling of various components and parts during the assembly impacts the productivity of the plant.

The challenge

CMI Fpe's Talaja plant consists of several manufacturing bays. With the growing demand for their equipment and machinery, the company has also constructed another plant beside the existing one. With this new addition, the manufacturing activity is carried out in one plant and the assembly in the other plant. For handling requirements in a particular bay, the company uses EOT cranes. However, the inter-plant handling of high tonnage machinery from one bay to another and intra-plant movement of components and semi-assembled machines weighing up to 150Ton posed a great challenge.

The solution

The ElectroMech solution for intra-bay and intra-plant transfer and handling of loads came in the form of a transfer trolley. This is a specially designed trolley operating on ground rails. It consists of a platform of size 9m x 3.5m with 8 wheels, capable of handling 225Ton shock load. It traverses on a 112 m long set of rails which efficiently integrates various bays and also two plants in the premises. Handling is made extremely easy with a pendant control, and a load of 150Ton at a time can be transported at a speed of 40m/min. Power supply to this transfer trolley is through a spring operated cable reeling drum. To ensure safety, power cables run through a cable tray which is 6 inches below the ground.

The result

This highly efficient and safe system has made handling extremely efficient. Previously, for the same job the company was using a trailer, which has now become redundant. All the bays and two plants are conveniently connected to operate without requiring any special skill. The transfer trolley system from ElectroMech is a new development ideally suitable for intra-bay and intra-plant handling of heavy loads. This is a completely in-house development introduced in the market after successfully using it in our own plant for more than 3 years. The system is also proving its worth at Prime Group, Reniguntta plant and Enpro Industries, Pune.

Transfer trolley Adding flexibility to handling

CMI Fpe benefits from our new transfer trolley system for intra-bay and intra-plant handling of loads



When productivity takes a new turn

The rotating crab at Valmont makes tasks easier; enhances productivity.

**The company**

Valmont is a world-renowned company manufacturing street lighting poles, traffic signal poles, utility poles, communication poles and poles to light up large sports complexes and stadiums. In India, Valmont has a large manufacturing plant at Indapur (Maharashtra). The plant is designed in such a way that the entire production process follows a linear path right from the raw material arrival to the dispatch bay. The plant employs state-of-the-art manufacturing facilities.

The challenge

Valmont uses 11 ElectroMech cranes throughout their manufacturing plant. They are being used at various stages in manufacturing, right from the unloading of steel coils from trailers and placing them on the conveyor. The requirement from an EOT crane at the last stage of manufacturing was most challenging. Here, the poles, completely ready for despatch, are carried by the conveyor. At this point, they are to be lifted and placed on the trailers. But, the direction of the trailer is perpendicular to the conveyor. This necessitates lifting and then rotating of poles by 90°. Conventional cranes pose limitations in rotating the poles automatically and also placing them precisely on the trailers.

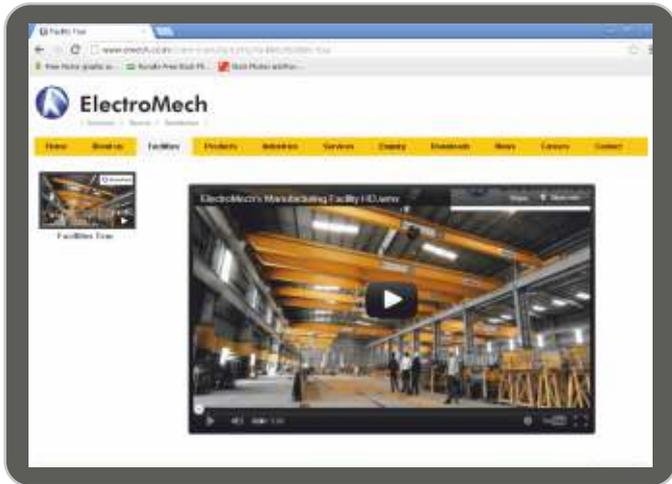
The solution

The engineering team at ElectroMech perfectly understood this problem. Using the conventional solution was ruled out because of its limitation of automatically turning the pole to change its orientation. It would have been very cumbersome, involving lot of labour to do the job if a conventional crane was used. Considering this aspect, our design engineers designed a special crane with a rotating crab. Such a design allows extreme flexibility. It can rotate the object by 360° clockwise or anti-clockwise. This special design consists of two hoists of 10Ton capacity each mounted on a rotating crab of a double girder crane. The span of the crane is 17.6m and the height of lift is 7.6m. It can lift a load up to 120Ton. When ready-to-despatch poles come out of the shed along the conveyor system, they are lifted using this crane, turned by 90° to bring them in line with the trailer and then carefully placed on the trailer.

The result

This ingeniously designed system resulted in a tremendous amount of saving in labour, time and enhanced productivity of the despatch area. Team ElectroMech thanks Valmont for involving us in this challenging project and proving the real solutions ability of ElectroMech.





Plant walk-through

The ElectroMech factory at Pirangut near Pune is the largest single location crane manufacturing facility for overhead cranes in India. It employs modern and technologically advanced manufacturing techniques and received ISO 9001:2008 certification from Bureau Veritas. The plant layout is such that all the processes are carried out in-line and raw material enters from one end of the factory and finished cranes come out from the other, as in an assembly line, a first for the industrial cranes industry in India. This facility is spread over 76,000sq.m of land and has more than 20,000sq.m of covered manufacturing area.

We welcome and encourage our clients to visit our plant where they can see first hand our state-of-the-art facility where their cranes are manufactured. Of course, not everyone can make the

trip. **So to give them a glimpse of our facility, we have recently developed a video walk-through of our plant and uploaded it on our website.**

 **Factory walk-through**
emech.co.in/crane-manufacturing-facilities/facilities-tour

New virtual tour of our factory on www.emech.in

Stacker crane video

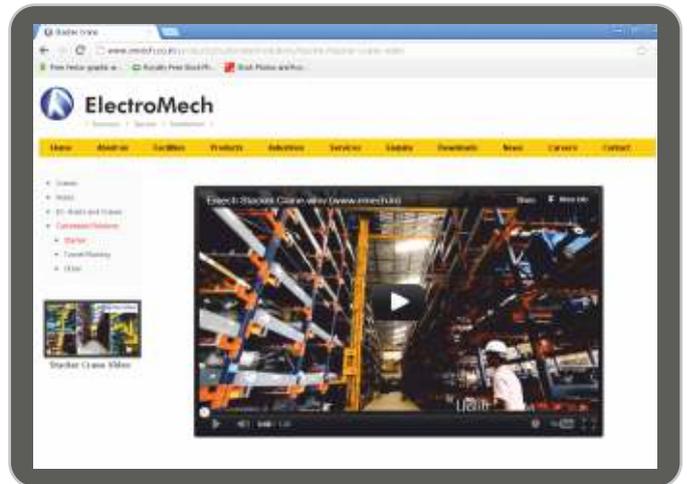
ElectroMech's stacker crane is a unique and effective solution for material storage in stores where shop-floor space is at a premium.

A stacker crane essentially combines an EOT crane with a forklift, resulting in a very efficient piece of equipment that allows a large number of palletised items to be stored and quickly retrieved as per requirements. The stacker crane is optimally designed to access and retrieve material from narrow aisles. At the same time, it allows utilisation of full height of the stores area. This saves valuable floor space and increases storage density.

A video demonstrating the complete functioning of the stacker crane has been uploaded recently on our website.

 **Stacker crane video**
emech.co.in/products/customized-solutions/stacker/stacker-crane-video

 **Also catch us on facebook for the latest updates**
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