ElectroMech

Solutions | Service | Satisfaction

Newsletter Issue 9 : 2015

Once again! SFP crane for NPCIL

Largest order for Tower Cranes in India

Siemens entrusts ElectroMech for global projects

EMPOWER

Lifting & Handling

Modular castellated girder cranes for landmark projects

Contents

Mr. Tushar Mehendale honoured for his business acumen

ElectroMech Group Managing Director, Mr. Tushar Mehendale was honoured with the **'Next Generation Leader of Indian Manufacturing - SME Segment'** award by Manufacturing Today at the 3rd Annual Manufacturing Today Awards 2014.

He is actively involved in the entire operations of the group companies at the top management level. In addition to this, he is also directly involved in the marketing and business development activities of ElectroMech. His inspirational leadership enables our R&D team to develop new solutions and systems to meet the challenging requirements of our customers. The team is also continuously engaged in developing products and services that enable to maximise the value of our offerings.

Mr. Tushar Mehendale's dynamic and foresighted leadership has been rightly recognised with this award.

Take my word!

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

After a faint glimmer of hope of recovery in the Indian industry, the reality on the ground is yet to change. While all indications do point to a surge of growth in the overall economy, the exuberance is still not translating into hard core business. However, as I have always maintained, exciting times are ahead for all of us and we are happy to be your partner in helping you 'handle' this growth.

Continuing our saga of supplying top-notch highly engineered cranes for the nuclear industry, we cover in this issue the latest single-failure-proof crane that we recently supplied to Nuclear Power Corporation. This crane has so many intricacies in its design, that after having successfully designed, manufactured and tested the crane, our pride knows no bounds.

Our quest to achieve excellence on a global level continues. We have recently executed a prestigious order for Siemens for one of their power plants being executed in Philippines. The reason that this makes us proud is that we won this order in a global tender and were pitted against crane suppliers from all over the world.

We have managed to make a niche for ourselves in the construction industry by providing unique solutions that cater to the ever changing requirements of customers in this industry. Hence, in our cover story we are proudly showcasing unique modular castellated cranes that we have supplied to Gammon India for two of their prestigious projects. The uniqueness lies in the fact that the customer can use the same crane in four different configurations, thus allowing him complete flexibility and helping him maximise the returns on his investment. Continuing on, Precast India is making great strides in the construction field by bringing in the precast methodology to the real estate industry and executing massive projects in record time. We are happy to note that ElectroMech plays a significant part in helping them execute their projects by providing vital handling support in their precast element factory.

The auto industry is extremely demanding in terms of equipment up time and safety. At ElectroMech, we have been supplying crane solutions to this industry for the past many decades. In this issue, we cover an application wherein our cranes were used by Bajaj Auto for one of their die shops. The challenges posed by safety requirements and the layout limitations were effectively overcome by ElectroMech. Furthermore, we are showcasing an operation that is unique to people in the pressing industry - die tilting - which can be done effectively and safely using our cranes fitted with auxiliary hoisting mechanisms.

Cranedge continues in its tradition of providing top-notch service support to the customers. Response time of any service organisation is a key to its success and customer satisfaction. We are proudly showcasing in this issue the work that Cranedge did for Inox Wind in the aftermath of an unfortunate fire breakout in their blades factory. The cranes that were completely destroyed in the fire were repaired and put back in working condition in an extremely short timeframe and the customer was able to resume effective production with least down time.

Such excellence demonstrated by Cranedge was recognised by an award from 'Manufacturing Today' for Excellence in Service. But the awards saga doesn't end here as ElectroMech managed to get a lot of other awards as well adding to the feathers in its proverbial cap.

Zoomlion ElectroMech continued on its path of gaining leadership in the Tower Cranes market of India and secured one of the single largest Tower Cranes order up for grabs in the Indian market. The cranes have already been supplied and have been deployed on the project sites of Reliance Industries and ITD Cementation.

As always, I wish you all a happy reading and want to thank you all for your continued patronage of ElectroMech.

Tushar Mehendale
Managing Director

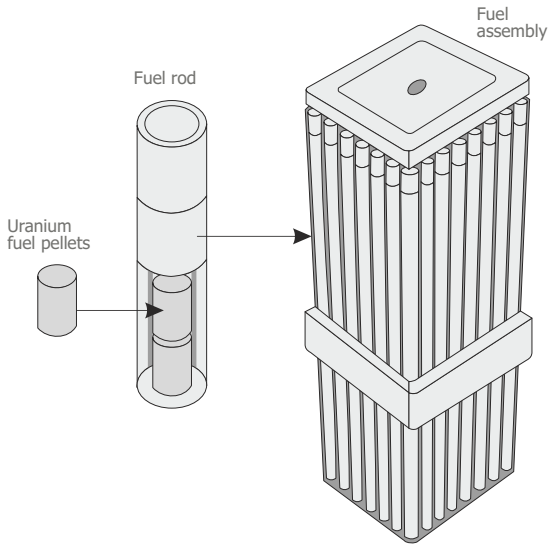
Once again!

A single-failure-proof crane for Spent Fuel Storage Bay (SFSB) at NPCIL's Kakrapar Atomic Power Plant

As you know, Nuclear Power Corporation of India (NPCIL) selected us as a partner for providing solutions for their handling requirements at Kakrapar Atomic Power Plant units 3 & 4 which are expected to be commissioned in 2015. As a part of this challenging project, we have completed the order for yet another Single-Failure-Proof crane (SFP) to be used at the Spent Fuel Storage Bay (SFSB).

Crane application

This crane will be used to handle spent fuel rods in the spent fuel storage bay, where they will be stored in spent fuel pools. Spent fuel rods from the nuclear reactors are stored for 10 to 20 years in storage pools that are typically 40+ feet deep. These pools contain water, which acts as a shield to prevent radiation from entering the atmosphere as well as cools the fuel assemblies that continue to produce heat (called decay heat) for some time after removal. The bottom is equipped with storage racks designed to hold fuel assemblies. Used nuclear waste, in the form of tiny pellets, is loaded onto metal rods that are then bundled into a 'fuel assembly'. The assemblies are stored inside casements that are then submerged in cooling pools. The application of the 75/30MT single-failure-proof crane supplied by ElectroMech will be to handle these casements. Needless to say, this is a very critical application, requiring the highest levels of safety, reliability and precision.

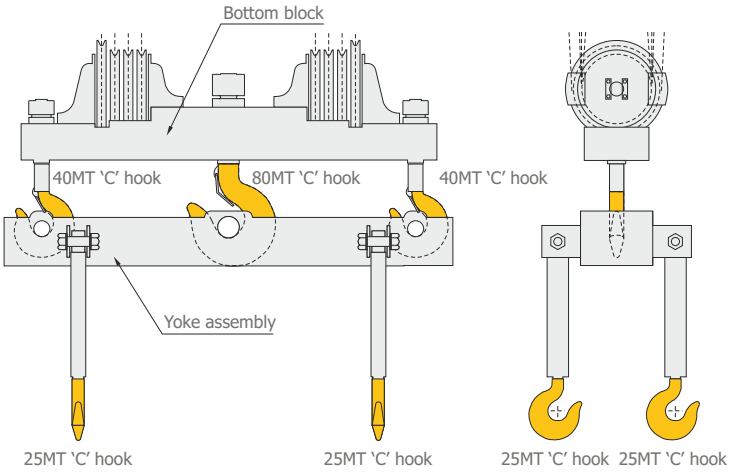


Crane construction

The lower block of the crane has been provided with three hooks - a 75MT main hook and two 40MT hooks on either side. They are positioned in such a way that the composite lifting assembly meets the requirement of single failure criteria. During regular operation, the load will be lifted by the 75MT hook and in case of failure of this hook, the load will be borne by the two 40MT hooks.

This lower block gets engaged with a 3-pin arrangement to a specially designed yoke, which is a lifting attachment with 4 x 25MT hooks. This yoke will handle the spent fuel casements kept underwater.

Stringent guidelines, right from the raw material to manufacturing and testing were specified by the customer considering the critical nature of the application. Some of the special requirements for the underwater application include treating the yoke hooks with manganese phosphate and galvanising the lower block.



A single-failure-proof crane

Design challenges

Designing a single-failure-proof crane is always a challenging task. There were a few more additional constraints while designing this crane, such as its span being only 6.8m. This demanded the trolley including redundancy machinery, safety equipment like caliper brakes and auxiliary machinery to be tightly accommodated in a crab area of 6.5m X 5.5m.

Testing

The crane underwent a rigorous three step testing process.

- Full load and overload testing of the crane (factory testing)

  The crane was tested at 100% & 125% of the full load capacity. This was based on two conditions. First, with load & overload on the 75MT centre hook and then again for the two 40MT hooks.

- Testing of engagement & disengagement of the crane with yoke (factory testing)

  The yoke is a critical component of this crane and its engagement & disengagement with the crane is of paramount importance. This was tested for repeatability and accuracy in the presence of the NPCIL technical team.

- Overload testing of the yoke separately at 150%

  As a critical link between the load and the crane, the yoke was required to be tested at 150% of the rated load. Certain constraints in the shop and the yoke being a stationary equipment with no hoisting mechanism in itself posed a major challenge for testing of the yoke. The testing was conducted by using a 200MT mobile crawler crane. The test load was lifted by suspending the yoke to its hook.

This crane was despatched after rigorous inspection and testing in our factory in the presence of NPCIL experts. They were extremely happy with the timely delivery, perfect design, quality manufacturing, high level of finishing and ultimately excellent performance during the various trials and tests. With this despatch, we are about to complete the entire order for Kakrapar Atomic Project.

We are thankful to the entire NPCIL team for their trust in our capability and providing an opportunity to prove it.

Cranes of global standards

Siemens Power Generation entrusts ElectroMech to supply cranes for their global projects

Siemens Power Generation is globally acknowledged for their competence in providing sustainable energy solutions, establishing power generation plants and providing related systems to the energy sector.

The project engineering team at Siemens was on the lookout for a competent solutions provider to meet their global requirements of process cranes and related auxiliaries up to 50MT capacity. Selection criteria for such a partner were obviously very stringent. After an initial assessment of several crane manufacturers, the Siemens team shortlisted ElectroMech.

Subsequently, a top level delegation from Siemens visited the ElectroMech plant at Pune and conducted an in-depth audit of our facility and had several interactions with our team to thoroughly evaluate our technical competence, manufacturing capability, quality processes & norms, concern towards the environment, health & safety norms and responsiveness to customer requirements. Extremely satisfied with our ability to meet their expectations, the team decided to select us as their partner for providing crane solutions. We are now an approved supplier to Siemens Energy Sector, Power Generation.

Siemens then immediately placed the first order for a double girder 20MT, 21m span gantry crane. This crane has been installed at the San Gabriel 450MW CCPP PROJECT - a power plant in Philippines.

Project highlights

- Special requirements: Design as per FEM standards, materials as per European standards and final testing as per FEM standards.
- Siemens had appointed Bureau Veritas as a third party assessor for the inspection of the crane from the raw material stage to the final stage.
- The final inspection and testing of the crane as per European norms was overseen by Mr. Christian Plume from Germany on behalf of Siemens Energy Sector and the crane was accepted with Zero Nonconformity in the first go.
- Special condition of Siemens was to offer the crane for load testing in its fully painted condition. The painting standard specified is of C5M Grade to ensure high corrosion resistance.
- Special packing with QR Code on each loose component sealed in VOC packing.

The Siemens team expressed its great satisfaction on the overall competency of the ElectroMech team in executing this project systematically to utmost perfection and in a time-bound manner. We now look forward to our contribution in the efforts of Siemens in meeting the global energy demand.

SIEMENS

Undisputed leadership in precast industry

Precast India reaffirms its trust in ElectroMech

PiiPL Precast India Infrastructures Pvt. Ltd. is a joint initiative between one of Pune's most reputed civil contractors, Bhate Raje Construction Company Pvt. Ltd. and leading real estate developers, Panchshil Developers. It was founded in 2010 with a mammoth production facility in Wade Bolhai, on the outskirts of Pune. Spread over 63 acres, this state-of-the-art precast factory is one of India's largest. Full scale production started here in 2012.

PIIPL undertakes high volume contracts for IT buildings, commercial complexes, industrial and residential buildings. They offer a one-stop 'design and build' solution and have successfully completed several projects with a cumulative built-up area close to 4 million sq.ft.

Challenges

For their new plant, PIIPL was looking for a suitable solution to meet various handling requirements in the plant. The applications included handling moulds and precast segments in the outdoor area and handling smaller moulds and precast columns inside the factory.

The most essential criteria for selection were the performance and reliability of cranes, time-bound completion of the project and capability to offer efficient service support. The PIIPL management is extremely happy with ElectroMech cranes on all these criteria as they have been already using them for several years in their other companies. Taking into consideration this experience, they selected ElectroMech cranes for the new venture.

Solutions

ElectroMech suggested three double girder gantry cranes to work in different bays in the outdoor casting yard where large and heavy castings are manufactured. These cranes are fitted with Abus hoists which demonstrate peak performance in extreme working conditions and require minimal maintenance. One 8MT single girder crane was recommended for the indoor application where smaller moulds and precast columns are to be handled.

Transporting and installing these cranes in a very short time of span was a big challenge. Team ElectroMech, with its large manufacturing plant and vast experience of working on various difficult sites across the world, was able to manufacture and install the cranes in just 12 weeks which was well before the stipulated time.

Sr. no.	Type	SWL	Span	LT	HOL	Application
1	DG Gantry	30MT	15.00m	150m	9m	Outdoor
2	DG Gantry	30MT	15.00m	100m	9m	Outdoor
3	DG Gantry	40/10MT	25.00m	110m	10m	Outdoor
4	Single Girder	8MT	23.40m	80m	10m	Indoor

We have installed several ElectroMech gantry and EOT cranes at our facility for manufacturing precast elements. Our handling requirement is very unique in the precast industry in India where elements weighing 40MT are to be lifted.

Inspite of several other options, we were impressed with the good assistance and best solution offered by ElectroMech. Gantry cranes offered to us can lift as well as stack heavy elements in one cycle, which avoids duplication of handling and efforts. It is an advantage as the gantry cranes are equipped with double hooks and parallel hoisting arrangements.

I would like to mention that Mr. Tushar Mehendale and his expert team are providing us with great support and engineering solutions tailored as per our specific requirements. We involve ElectroMech right from the project planning stage and receive good cooperation. I would say, though we have a few more cranes of other makes, ElectroMech is one of the best."

Mr. Ajit Bhate, Managing Director
Precast India Infrastructures Pvt. Ltd.

Bajaj Auto integrates its vast press shop using three ElectroMech cranes for handling and tilting of heavy dies

Solutions for automobile

For Bajaj Auto's new four wheeler manufacturing plant in Waluj, ElectroMech's track record in providing diverse solutions across the automotive industry made us the obvious choice for their press shop cranes. ElectroMech cranes ensure safe and efficient handling of dies, ensuring quicker die changes. Careful planning of the three cranes, along with a unique die tilting arrangement enable the press shop to meet the desired production volumes with ease.

About Bajaj Auto Ltd.

Bajaj Auto Ltd. is the flagship company of the Bajaj Group and the fourth largest two wheeler manufacturer in the world. Bajaj Auto approached us to design a handling system for the press shop of its new four wheeler division. The R&D facility and the manufacturing unit for its new four wheeler division are located at Waluj in Aurangabad.

The challenge

In this plant, hydraulic presses ranging from 400MT to 1200MT are arranged in parallel rows, which require large and heavy dies to be loaded & unloaded very frequently during the shift.

Additionally, the bay perpendicular to the rows of presses is used for maintenance and storage of dies as well as for the finishing of moulded parts. This bay has a gantry girder support only on one side, while the other side faces the open press shop bay.

The challenge was to design a handling solution that allowed optimum space utilisation by covering the maximum possible shop-floor area of both bays. Another critical requirement of the solution to be offered was one that is common across almost every heavy duty press shop - die tilting. This is required for ease of loading & unloading and maintenance of dies. Bajaj Auto expected our cranes to be sufficiently equipped to address this requirement as well.

Solutions from ElectroMech

After carefully studying the material flow in the press shop and assessing future requirements, team ElectroMech recommended the use of three cranes. Two of these would be double girder EOT cranes and one would be a double girder semi-gantry crane. They were planned and designed to cover the entire space in two adjacent bays of the press shop.

Each of the bays where the press machines operate has a 35/10MT, 21.3m span, 18m (13m + 5m) height of lift, double girder crane installed. These cranes are primarily used for loading & unloading of dies and are operated continuously and rigorously for die handling as well as tilting. The 35MT main hoist is used to handle the die whereas the 10MT auxiliary hoist assists in tilting the die through 180^0. These cranes will also be used for press maintenance and hence have an additional 5m height of lift below ground to access the foundation of the presses.

Since the direction of travel of the cranes in the two bays is perpendicular to one another, they have an overlapping long traverse path and there was a danger of them colliding with each other during operations. This hazard was completely eliminated by fitting anti-collision devices for both the cranes. Thus, a high level of inherent safety is ensured.

industry press shops

The solution designed for die tilting and maintenance operation in the bay perpendicular to the main press shop is a 20/10MT, 8.8m span semi-gantry crane. This crane is used for storage and maintenance of dies and for handling of finished products. To ensure maximum space utilisation and coverage of the shop-floor, one end of the crane is mounted on the existing overhead gantry girder and the legs on the other side run on floor mounted rails.

A die being rotated by 180^0 using the auxiliary hoist






A representation of India's landmark project, Signature Bridge being executed by Gammon on the banks of river Yamuna, Delhi

Our contrib
India's late

Gammon, a leading infrastructure development player in India has often placed its trust in ElectroMech as its one-stop material handling solutions provider. ElectroMech has always contributed its best by getting involved with Gammon right from the initial project planning stages to help achieve the smoothest possible project execution. Designing a precise engineering solution, taking into consideration the complexities and challenges of respective projects has always been the key strength of ElectroMech, a fact proven by the number of ElectroMech cranes performing at the various milestone projects undertaken by Gammon and other infrastructure companies simultaneously across the world.

Gammon is currently executing two gigantic and unique infrastructure projects, one in Patna and the other in the nation's capital, Delhi. Both these projects will create a landmark in the respective cities through their distinctive design, apart from their functional role in enhancing the transportation network within the city.

ElectroMech is proud to be associated with these projects.

A glimpse of the landmark projects

Signature Bridge, Delhi

Delhi Tourism & Transport Development Corporation Ltd. (DTTDC) has undertaken the construction of Signature Bridge in New Delhi which will connect Wazirabad to the inner city via a bridge across the Yamuna river. The project involves the construction of a 0.675km eight lane bridge, a water sports and recreational centre and a tourism park adjacent to Signature Bridge site.

The aim of the project is to reduce the traffic on the existing Wazirabad Bridge as well as market the location as a tourist destination. Once operational, this Signature Bridge will dramatically improve access between north and west Delhi. It is also expected to become one of Delhi's key attractions, encouraging domestic and international tourism to the capital city of India.


ElectroMech's castellated double girder gantry crane at the prestigious Signature Bridge project, Delhi

Signature Bridge is an unsymmetrical cable-stayed bridge. The boomerang-shaped pylon consists of two inclined columns, which are rigidly connected to the driving lanes and bend mid-way. The height of the steel tower is approximately 150m. The upper portion of the pylon anchors the back-stay cables as well as the main span cables, arranged in a harp like manner. Graphics on the bridge structure are featured for the 'first-time' in the world. The pattern chosen reflects Indian culture and at the same time symbolises a modern and progressive India. The tip of the pylon is created by a 30m high steel and glass structure, which will be illuminated to create a landmark visible from afar at night.

ution in building two of st landmark infrastructure projects

Ganga Path Project, Patna

This is one of the prestigious projects commissioned by Bihar State Road Development Corporation (BSRDC). This project involves development of a 11.9km long 4-lane elevated road corridor between AIIMS and Digha in Patna. Once concluded, the road will provide much relief from the traffic congestion in the city, particularly on the narrow Ashok Rajpath as it will connect the Loknayak Ganga Path at Digha end. This project is undertaken for the construction of 2-lane semi-elevated and 4-lane elevated highway over Patna canal as approach road of rail-cum-road project across the Ganga at Digha.

It will have 2km of 2-lane semi-elevated and 9.90km of 4-lane elevated roads. This elevated road will have major crossings at Bailey Road and Ashok Rajpath and will have connectivity with important places like Danapur railway station, proposed Patliputra railway station and AIIMS. Besides, it will also have connectivity with the Loknayak Ganga Path and one railway bridge at Khagaul (Patna-Delhi) line.


60MT, 33.5m span double girder crane with castellated girder design carrying out operation at the Ganga Path project, Danapur, Patna

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> Loknayak Ganga Path project is a very challenging project. To avoid land acquisition, BSRDC proposed this elevated road plan into the canal which has the same width as that of the elevated road. During the project designing stage, we found that there is a major land constraint for erection of the girders and hence found that this 60MT double girder gantry crane is suitable for this particular challenge. This crane has proved to be very helpful in the erection of precast girders as it requires very small width of land for travelling and both way carriage movements. The full width and vertical height of this crane is an added advantage to maintain project timelines and fast installation of the girders. I would also mention about the prompt service and support by ElectroMech team in regards to the servicing of the crane for this project. Overall I can say, for the project requirement, this crane has done a fantastic job".
>
> **Mr. U. M. Kulkarni, GM - Projects**
> Loknayak Ganga Path - Patna, Gammon India Ltd.

The project requirements

Gammon has been appointed as the construction contractor for Signature Bridge and Loknayak Ganga Path elevated road projects, which are being executed simultaneously. Both projects use precast segments to construct the bridges, hence heavy-duty gantry cranes are required for handling precast segments and girders. Being equally prestigious, critical and time-bound projects, Gammon was looking for a competent and reliable crane solution provider. Considering the solutions capability and reliable performance of ElectroMech cranes for various other challenging projects executed by Gammon, they selected ElectroMech as a partner for these prestigious projects too.

60MT castellated double girder gantry crane with 40m span and 12m lift height at the Signature Bridge project, Delhi

60MT, 33.5m span double girder crane with castellated girder design, installing precast segments on the bridge

The solutions offered by team ElectroMech

The material handling requirement for such infrastructure projects is always challenging considering the vastness of the project and the site conditions themselves. After thoroughly evaluating all the requirements individually, the ElectroMech team suggested a 60MT double girder gantry crane with 40m span and 12m height of lift for the Signature Bridge project in Delhi. For the Patna project, two double girder gantry cranes of 60MT capacity with an auxiliary hoist of 6MT, spanning 33.5m and 25m height of lift were recommended.

Considering the rigorous outdoor use in extreme climatic conditions, very high quality components are used for the construction of these gantry cranes. These cranes have a unique castellated girder type design, which offers numerous benefits including:

- Reduction in the structural weight helps in lowering the wheel loads up to 30%
- Approximately 20% reduction in wind loads due to reduced surface area of main girders.
- Low wind load improves stability of the structure while working against wind.

> We have installed 60MT ElectroMech double girder gantry crane for our Signature Bridge project. This crane has special castellated girder type design which enables us to carry out the erection work at heights easily. This feature helps to reduce the wind force at the height during girder installations over the Yamuna river bed. This crane is very stable and firmly executes its operations. The other advantage is that it operates on DG set which has helped us to reduce the cost for cables considerably with the increase in the length of the project. I would like to appreciate ElectroMech for their excellent crane commissioning, and last but not the least, this crane has contributed a lot in the swift execution of the project and hopefully other sites will also get benefitted by this type of crane".
>
> **Mr. Lovelesh Seth, Project Engineer**
> Signature Bridge - Delhi, Gammon India Ltd.

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Gammon benefits from ElectroMech's modular design

For construction companies, it is the norm to write off the cost of their capital equipment such as cranes in a single project. This, of course, directly affects the profitability of the project. Conversely, being able to reuse their cranes for another project offers a huge advantage in terms of profitability, a scenario that several of ElectroMech's construction clients have been able to benefit from. ElectroMech cranes have proved themselves to be rugged, reliable and long lasting. Several EPC companies use them over the years on a number of projects - one after the other. Admirably, ElectroMech has reconfigured and modified its cranes for several of our clients prior to shifting them to their new project site to ensure optimal performance and ensure economics.

For this project too, this factor was taken into account at the design stage itself. Once the cranes have completed their duty at their respective projects, they can be easily used at other projects by changing their span or height of lift as required. In fact, at the Loknayak Ganga Path site, the site conditions necessitated different configurations of crane heights, a condition that could have warranted the use of different cranes depending on their location within the site. ElectroMech's team of engineers came up with an ingenious solution that allowed Gammon to use the same crane to construct the complete flyover in two different configurations as well as facilitate easy modification to suit the requirement at future projects.

➢ Three different spans in a single crane

After careful consideration of the typical projects undertaken by Gammon, the cranes were designed to allow fixing the legs and cabin at any of three different locations. With this arrangement, the crane span can be adjusted to 19.4m or 28m or 33.5m for the Loknayak Ganga Path project crane. While in the Signature Bridge project crane, the span options available are 19.4m, 28m and 40m. This arrangement will allow the crane to be configured to suit almost any future project that Gammon executes, in minimal time.

➢ Flexibility to work at different heights

At the Loknayak Ganga Path site, Gammon had a limitation with the working height at one end of the bay due to a high tension electricity line. We offered a solution to this situation by designing height adjustable crane legs. The crane legs are designed to operate at two different height of lifts. Initially the legs are assembled for a lift height of 18m and later the leg extension sections can be added to assemble the crane for 25m lift height in order to carry out construction in the area post clearance of the electricity line.

➢ Maximum coverage in spite of site constraints

Every project demands optimum solutions to suit the site requirements, which govern the design of any material handling equipment. At the Loknayak Ganga Path site, a canal on the side of the bridge site posed a constraint for the installation of the gantry crane. This meant that the crane legs would have to be very close to the edges of the bridge segments, leaving very little margin for error. The design was optimised for minimal hook approaches to ensure maximum coverage of the clear span between the gantry legs.

ElectroMech's castellated double girder gantry crane at the prestigious Signature Bridge project, Delhi

Zoomlion ElectroMech receives India's single largest order for Tower Cranes from Indiabulls

About Indiabulls

Indiabulls Real Estate is among India's top Real Estate companies with development projects spread across residential complexes, integrated townships, commercial office complexes, hotels, malls, Special Economic Zones (SEZs) and infrastructure development. The company has partnered with specialists from India and abroad to work on various aspects including design, landscaping, engineering and structural strength of each of the developments. It employs the most advanced construction equipment and technologies to guarantee on-time delivery and reliability of construction.

Indiabulls is also in the business of providing high-end construction equipment on rent to various EPC companies. Recently Indiabulls had a requirement of 10 nos. of Tower Cranes to be provided on rental for two large and prestigious projects. After a thorough evaluation on various parameters such as life-cycle cost, delivery period, reliable performance, high equipment availability and service assurance, the obvious choice for Indiabulls was Zoomlion ElectroMech Tower Cranes.

The Tower Crane models supplied to Indiabulls include

Sr. no.	Crane	Max. capacity	Jib length	Tip load	Nos.
1	TC7052A-25	25t	70m	5.2t	2
2	TC7035B-16	16t	70m	3.5t	8

The total value of the order was INR 17.5 crores.

ZEIPL Tower Cranes for an LNG terminal

ITD Cementation is a leading name in EPC projects. In 2014, they were awarded with a contract for the civil construction of an LNG terminal being set up at Mundra SEZ by GSPC LNG, a unit of the state government owned Gujarat State Petroleum Corporation. In order to efficiently complete this project, they procured from Indiabulls 4 nos. of Zoomlion ElectroMech Tower Cranes on rental.

IHI, Japan is the principal contractor for this entire project which specialises in building LNG terminals who, in turn, awarded the contract for civil construction to ITD Cementation. The project includes construction of the two LNG tanks each one of 100m diameter and 45m height. Two Zoomlion ElectroMech Tower Cranes will be deployed for constructing one tank.

ZEIPL Tower Cranes for Reliance Industry's new J3 facility

RIL has two large refineries at Jamnagar in Gujarat. As a part of their expansion, a third refinery, popularly known as Reliance J3 is being set up in the vicinity of the existing refineries. Indiabulls has deployed 6 nos. Zoomlion ElectroMech Tower Cranes for this prestigious construction project. Interestingly, ElectroMech has also supplied explosion-protected EOT & gantry cranes in association with Stahl CraneSystems for this project.

ITD Cementation, LPG Gas Terminals, Gujarat State Petroleum Corporation, Mundra SEZ, Gujarat

Main manufacturing bay after installing refurbished cranes

INOXWIND Energizing INDIA

cranedge

upkeep • upgrade • upraise

Cranedge is renowned for providing exemplary service to its customers across the globe. This reputation is the result of a firm belief by our team that we play an invaluable role in keeping the production at our customers' plants moving smoothly. Such an association over the years obviously results in building friendly relations with the customers. And a response with the lightning speed to every customer requirement comes from within. Here is one classic example of how Team Cranedge responded to a customer's need in a distress situation.

About Inox Wind

The Inox Group is a two billion dollars, professionally managed business group with diverse business interests. The group has more than 100 business units across India and the distribution network spread across more than 50 countries around the world.

Inox Wind is an Inox Group company and a renowned name in the renewable energy sector. The company undertakes turnkey wind power projects and also supplies windmills for projects by other power companies. Inox Wind is a fully integrated player in the wind energy market with state-of-the-art manufacturing plants at Una (Himachal Pradesh) for hubs and nacelles and Rohika, near Ahmedabad (Gujarat) for blades and tubular towers. Inox Wind manufactures key components of the Wind Turbine Generator (WTG) to ensure high quality, based on the most advanced technology, reliability of performance and cost competitiveness.

Background - Inox Wind, Rohika (Ahmedabad) plant

This world-class plant manufactures blades and tubular towers required for windmills. Ten overhead cranes integrate the handling requirements in this vast plant. Recently, in an unfortunate incident, this factory caught fire, gutting it along with the machinery, including the ten overhead cranes.

Being a renowned manufacturer, Inox Wind is known for honouring their delivery commitments. After this unfortunate incident, the entire team at Inox Wind was determined to rebuild the facilities in the shortest possible time and adhere to the delivery commitments made to their customers.

The challenge

EOT cranes play a crucial role in the manufacturing process of blades and towers. It is near impossible to handle the long and heavy structures without EOT cranes. Considering this aspect, re-installing the cranes was among the top priorities for the Inox Wind team. For this, they had two options, first to order completely new cranes and the second was to refurbish the existing cranes. Looking at the awful condition of the damaged cranes, the client team was about to rule out the repair option. While checking the shortest possible delivery period for the new cranes, they realised that it would take 8 to 10 weeks to manufacture, erect and commission these cranes. This was indeed too long a period to wait for. In order to meet the delivery commitments, it was imperative to start production in just 4 weeks.

Inox Wind, which has an AMC for all their cranes with Cranedge, shared its concern with the Cranedge team to see if they could offer a more suitable solution. Team Cranedge was on site the same day to assess the extent of the damage to the ten cranes. They found that all the cranes were severely damaged and completely non-functional. The Inox team voiced its intention of installing new cranes, but also mentioned the hurdle of long delivery period and emphasised the need to make the plant operational within 4 weeks.

Refurbishing and restoring these completely damaged cranes was a great challenge and accomplishing it in just 4 weeks was a near impossible task. However, the Cranedge team decided to tackle the challenge head-on since that was the most viable solution considering the urgent need to restart production.

Cranedge team demonstrates it at Inox Wind

A friend in need is a friend indeed!

The mission

The suggestion to refurbish the cranes was put forth to the client. For the Inox team, the idea initially sounded over-ambitious. However, after knowing about Cranedge team's proposed plan of action they cleared the project. From that minute, the entire team started working with breathtaking pace. The ElectroMech factory was intimated for the required spares to be despatched on a war footing with clear instructions for trucks to leave in a few hours with the first lot. Everyone from our global network was reached to source spares for the foreign make cranes. At Cranedge HQ, an urgent meeting of suppliers was called to request them to co-operate and supply customised items by working round the clock.

On site, several engineers were deployed from the next day. Schedules were set, work plans chalked out minutely. The teams were formed to work in rotation so that round the clock working could be possible. The excellent co-ordination, perfect planning and hard work of dedicated team yielded results on day 15 when four cranes were made operational. They were almost recreated using just frames, tested for full operation and handed over to the client for use in production. Everyone at Inox Wind was awestruck with this performance of the skilled team.

But, for Cranedge, it was not the end. The remaining six cranes were also brought to normalcy with equal enthusiasm and speed within the next 30 days.

Now the production at Inox is in full swing. Everyone is happy since the job was well done and in time. Everyone is assured of safety because it is done by team Cranedge.

No wonder, impressed with this performance, Inox Wind has awarded ElectroMech with another contract for 25 cranes for their new project coming up in Madhya Pradesh.


Before


After


Before


After


Before


After

cranedge

upkeep • upgrade • upraise

Known for excellence in customer service Now recognised with an award

Cranedge, the service subsidiary of ElectroMech was born out of the conviction for offering a trouble-free crane maintenance experience. It has been our endeavour to set a new benchmark in providing services for overhead cranes of all makes.

Cranedge was honoured with the **'Excellence in Customer Service' award by Manufacturing Today** at the 3rd edition of their annual conference and awards ceremony. Selected from among more than 300 nominations, the award was conferred upon Cranedge for its efficient and systematic approach towards offering its services to customers.

Innovative 100 Award - Once again!

ElectroMech is honoured to be listed among the '100 Most Innovative Companies in India' by Inc. India, for the second year in a row! The award identifies and brings forward innovative mid-sized organisations and their leaders in India who, through their innovative actions, have introduced breakthrough changes in the Indian context and can become role models for others to emulate. Each innovation was judged on four parameters: uniqueness of idea, replicability, scalability and sustainability, and tangible business impact. ElectroMech was recognised for its innovations in three categories:

Innovative Globaliser

Mr. Tushar Mehendale, ElectroMech's Managing Director was honoured with the Innovative Globaliser Award for his innovative approach during difficult times which helped ElectroMech to gain the position of a Market Leader. Since taking over the reins in 2000, Mr. Tushar Mehendale has led the ElectroMech team towards one goal, 'To make ElectroMech the biggest and the best'. It was Mr. Mehendale's vision and commitment to provide the very best solutions to our customers that has helped ElectroMech to emerge as India's largest industrial crane manufacturer and one of the most trusted brands for Industrial cranes in over 35 countries!

The saga of innovation continues at ElectroMech in every facet of business and team ElectroMech looks forward to becoming a global leader in innovation in the years to come.

'Innovation in Marketing' award for a 'novel' idea

The marketing team at ElectroMech recently developed an innovative way to educate crane users for best practices and timely maintenance of their cranes, in the form of illustrated stories, under the Cranedge brand. It effectively communicates the need for routine maintenance in order to improve productivity and ensure workplace safety. This is a unique idea being effectively used for customer education while promoting services. This idea of a comic story book was adjudged as an **'Innovation in Marketing'** by the jury members.

Innovation in Product

ElectroMech received the award for the development of the **Stacker Crane**. First developed indigenously in 1999, a new version of this product was launched in 2014, making it more efficient, compact and smooth. The Stacker Crane is a combination of an EOT crane and a reach truck and offers several advantages over other product alternatives available in the market. This product was also featured on their on-line portal.

ElectroMech awarded as 'Outstanding Company in Material Handling Sector' for 2014 at the EPC World Awards 2014

This award recognises outstanding contribution by a company in the fields of infrastructure, EPC and construction.

ElectroMech received this award for its contributions towards the Mumbai Water Supply Project by way of supplying **Tunnel Mucking Systems** - a unique solution developed to meet the precision, speed, safety and extraordinary height of lift demanded by the project. With the help of our Tunnel Mucking Systems, the project was successfully completed in a record time and established new records on a global scale.

ElectroMech Knowledge Forums

Industry bigwigs discover a panacea for profitable execution of projects

We at ElectroMech, look forward to interacting with our clients at the ElectroMech Knowledge Forums that we conduct in different parts of the country. At these Forums, we share the new challenges tackled by ElectroMech, new solutions developed and admirable projects completed by using ElectroMech solutions by a variety of industries. These Forums offer a platform for our valued customers to share their future plans and challenges with us, so we can work towards helping them with a well-crafted solution.

ElectroMech Knowledge Forums are practically a gathering of the who's who from different industries. It includes top officials of various companies, consultants, industry veterans and other opinion leaders. Apart from tabling new ElectroMech solutions, these Knowledge Forums also serve as a platform for the top leaders in the industry to interact with each other and share their concerns related to their specific area of business.

During October, November & December of 2014, ElectroMech Knowledge Forums were organised in Gurgaon, Noida, Delhi and Bengaluru, where team ElectroMech shared with the audience the various new product developments and solutions provided for various challenging projects during the year. Zoomlion ElectroMech also announced the introduction of India-specific models of newly developed Tower Cranes.

Each of the Forums was attended by more than 100 delegates from various companies and the joyful gatherings were appreciated by everyone for the knowledge enrichment they provided. We sincerely thank all the participants for being with us and spelling out their expectations from us for their future projects. Thank you everyone for trusting us and encouraging us to excel in our field of operation.

ElectroMech and Zoomlion ElectroMech were a part of these events and enjoyed a buoyant response from the visitors

bC India 2014, Delhi & CeMAT, Delhi

CeMAT 2014

ElectroMech was a part of CeMAT India Exhibition which focuses on warehousing and logistics. ElectroMech is well known to be the customised material handling solutions provider for a wide spectrum of industries. ElectroMech has designed and developed a unique crane called stacker crane which finds a variety of applications in warehouse and storage spaces. It is the combination of a reach truck and an EOT crane designed to offer superior advantages compared to the products and systems currently available in the market for similar applications.

With this participation, ElectroMech was successful in reaching out to its potential clients who showed keen interest and appreciated the concept.

bC India 2014

bC India is one of the biggest construction exhibitions in India showcasing the latest trends in the construction industry. This event was held from 15th to 18th December 2014 at the India Expo Centre in Greater Noida and was attended by over 26,000 business visitors from 635 companies from over 25 countries.

ElectroMech and Zoomlion ElectroMech were a part of this event and enjoyed a buoyant response from the visitors.

The major attraction at the ElectroMech stall was the scale model of a gantry crane used on various construction projects. Gantry cranes find wide applications in precast yards, metro rail projects, tunnelling projects and bridge construction projects. A customised design of such a crane is the semi-gantry crane which is a perfect solution where space is a constraint.

Zoomlion ElectroMech displayed a 'Made in India' Tower Crane TC5013-5 and the 2MT passenger hoist. This crane is specially designed taking into consideration the typical requirements of the Indian market. The Zoomlion team from China was present to be a part of the exhibition. The displayed crane was sold to Mapsko Group during the exhibition for their township project in Gurgaon. The passenger hoist too was sold during the exhibition to Sai Infra Equipments Group from Bangalore.

Sumit Hakhoo joins as Sales & Marketing Head

Team ElectroMech welcomes Sumit on board

Sumit took over as Head of Sales & Marketing at ElectroMech in February 2015. Sumit has over 14 years of enriched experience in Sales and Marketing of industrial products across a diverse spectrum of industries. During his stint with various renowned companies, he has worked for domestic as well as international markets. With a bachelor's degree in Mechanical Engineering from MIT, Pune and post-graduation in Marketing Management from SIBM, Pune, he began his career as a front-line Sales Engineer and in a short span grew to be a part of the management team, heading the Sales & Marketing function in his previous company. He has extensive experience in customer relationship management, business development and in formulating successful strategies for business growth.

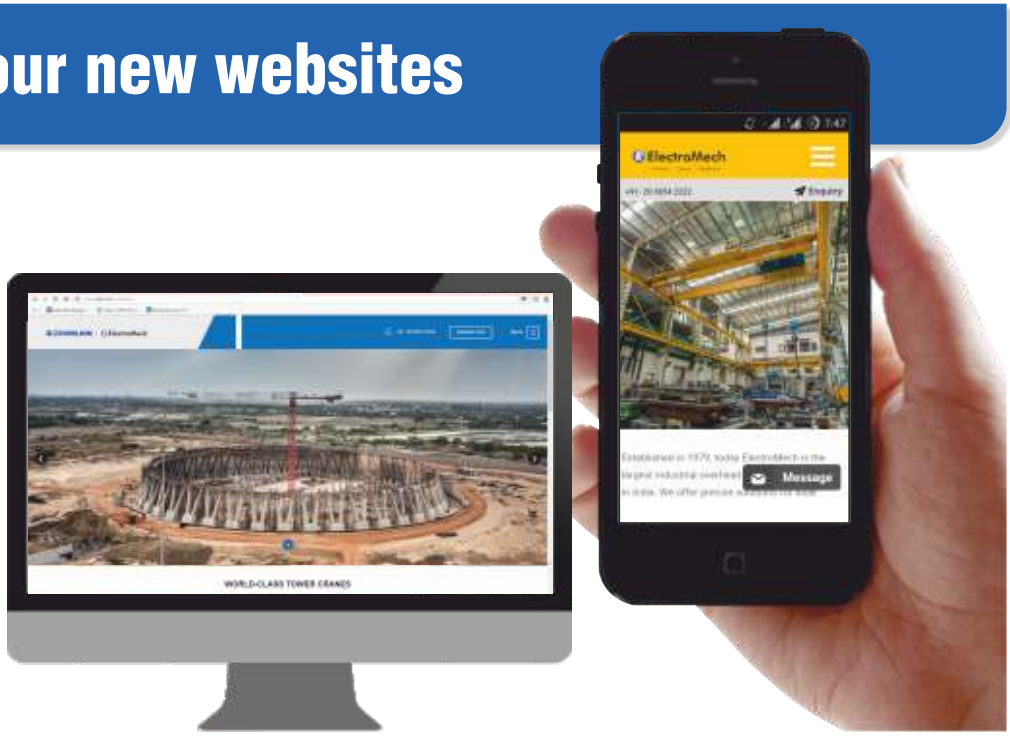
Under the able leadership of Mr. Sumit Hakhoo, we are confident of reaching new markets by enhancing our reach and ensure a higher level of customer satisfaction through renewed systems and processes.

Experience our new websites

www.emech.in
www.zeipl.com

We always endeavour to ensure a good experience to our customers through each of our acts and every interaction. As a part of this effort, we have recently revamped our websites. Easy navigation, easy browsing and an altogether new experience.

Do visit and let us know what you think!



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ElectroMech
Solutions | Service | Satisfaction

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