ElectroMech

Solutions | Service | Satisfaction

Newsletter Q 1 : 2011-12

MOPE infuses ₹450 million equity

ElectroMech FZE spreads its wings in Africa and Qatar

Stahl launches special hoists for LNG plants

EMPOWER

Lifting & Handling

ElectroMech widens range of solutions up to 1000T with launch of Shuttlelift RTGs and an association with Sibcranex

Contents

Motilal Oswal Private Equity (MOPE) infuses ₹450 million equity in ElectroMech

Motilal Oswal Private Equity (MOPE) has committed to invest ₹450 million in ElectroMech through its India Business Excellence Fund (IBEF). Through this investment, MOPE has picked up an equity stake in the company.

MOPE is a wholly owned subsidiary of Motilal Oswal Financial Services Ltd. (MOFSL), a diversified financial services group with businesses in securities, asset management, private equity and investment banking. MOPE has launched the India Business Excellence Fund (IBEF), a ₹5 billion India focused Private Equity Fund. IBEF has an investment focus of providing growth capital to mid-market companies, typically in the range of ₹200 to ₹600 million, across various sectors.

The fund is headed by Mr. Raamdeo Agrawal, a renowned investor in the Indian financial markets known for his 'value investing' philosophy and picking up companies with a huge growth potential.

This investment puts ElectroMech on an extremely firm financial footing and forms the cornerstone of our aggressive growth strategy which will ensure that ElectroMech will reach stratospheric heights in the industrial cranes market globally.

ElectroMech FZE spreads its wings in Africa and Qatar

We have recently forayed into the African market with our association with **Zenith Steel Fabricators, Kenya**. Zenith Steel is one of the largest steel fabricators operating in the East and Central African regions with offices in more than seven countries. They will be supplying cranes using ElectroMech crane kits and their expertise in steel fabrication.

The first lot of crane kits has been dispatched to Kenya recently and we expect to increase our business in this region in the coming years.

Our presence in the Qatar market will be further enhanced through a new channel partner, **Construction Development Company (CDC)**. CDC is one of the **leading Industrial groups in Qatar.** CDC's trading arm will be responsible for marketing and providing local service and installation support to ElectroMech projects.

These new tie-ups underline our commitment and endeavor to serve our customers in the Middle East and Africa in the best possible manner. The localization of our after-sales service support and structural fabrication activities in these territories will enable us to provide turnkey solutions to the customer at competitive prices.

Prestigious installations in Abu Dhabi

Italian construction and civil engineering company, Impregilo S.P.A. has landed a contract with Abu Dhabi Sewerage Services Company (ADSSC) to build the first of the three lots of the Strategic Tunnel Enhancement Program (STEP) in Abu Dhabi. STEP involves construction of a 40km gravity tunnel to collect waste water from the Abu Dhabi Island and mainland, and convey it to the treatment plant in Al Wathba. The new project involves construction of the first 15km of the tunnel, with an excavated diameter of 6.3 meters, and six access shafts to depths of between 40 and 50 meters. Impregilo has also been awarded the third and final lot of the contract which includes construction of 10km of 7m diameter water tunnel.

Impregilo selected ElectroMech FZE as its partner for installation and commissioning of Gantry cranes required on this project. ElectroMech FZE has successfully commissioned the first lot of 30MT, 90m lift Double Girder Gantry Cranes. All the cranes will be put in 24x7 operation working on one of the most challenging projects in the region. These installations further demonstrate ElectroMech's capabilities in executing large scale projects on a global platform.

Take my word!

Tushar Mehendale
Managing Director

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

As an ambitious company that is bent on attaining the leadership position in the material handling industry globally, we, at ElectroMech, are always doing something newer and more exciting. Thus, it gives me pleasure to introduce one more issue of our newsletter, EMPOWER that chronicles the latest at ElectroMech.

Considering the long-term growth plans of ElectroMech and to ensure proper funding for this growth, ElectroMech took on an exciting move of inducing Private Equity investment in the company. This paves our way to pursue exciting growth opportunities involving strategic investments, consolidations and new product introductions. India is all set to reach a figure of USD 5 Trillion in GDP by 2020 from a level of approximately USD 1.5 Trillion currently. This massive growth, expected to happen in the compressed time frame spread over the next decade, throws up a lot of exciting challenges. We, at ElectroMech, believe that this is a once-in-several-centuries opportunity that needs to be tapped properly as this opportunity is never going to come up again. Hence, having the right financial partner with us helps us in making our foundations stronger and fuels our growth plans.

This issue also talks about the two latest tie-ups we have entered into - Sibcranex of Russia and Shuttlelift of USA. This could have been considered to be a political coup in the eighties as getting Russian and American collaborations for the same company was quite unlikely. However, the world has changed for the better and India is the place where the action is.

Through Sibcranex, we aim at participating in the growth set to unfold in the Indian steel industry where more than 100 Mn MT of annual steel producing capacity is estimated to be set up in the next decade.

Through Shuttlelift, we are introducing an exciting new product - **Rubber Tyred Gantry cranes** for industrial applications. We believe that this product can revolutionize the way bulky items are handled at sites and improve productivity and enhance safety of men and material.

We are proud to be associated with several prestigious infrastructure projects like coal power plants, water supply, sewage, nuclear power plants and renewable energy. This issue shares with you some details of the projects that we have been associated with.

Technical leadership is something that is not developed overnight. The Stahl Ex range of products is a perfect example of this. Being in existence since 1920s, the Ex range of products from Stahl continues to dominate the global market technologically. We have an interesting write-up in this issue showcasing Stahl Ex's technical prowess.

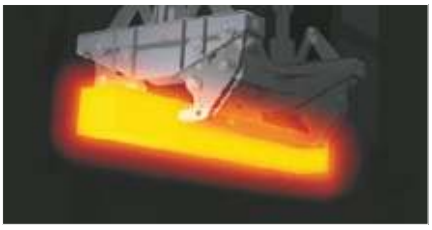
Our services subsidiary, Cranedge continues to cover newer ground every passing day. In this issue, we are proud to share with you the way Cranedge helped one of our esteemed customers derive maximum ROI by refurbishing old equipment and enhancing productivity and safety.

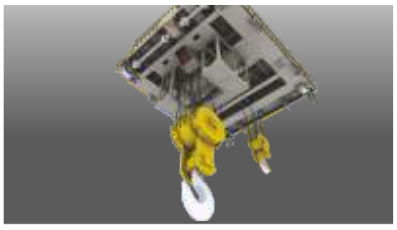
Happy reading!

Tushar Mehendale

New

Competent solutions for handling challenges in steel, nuclear and ore processing plants in association





In a recent development, ElectroMech and Sibcranex JSC, Russia entered into an agreement to serve the Indian market with heavy duty cranes for special applications. Sibcranex JSC are the designers of Heavy Duty Cranes with modern digital control systems for special applications in steel plants, nuclear, thermal, hydro power plants and aluminum plants.

After elaborate discussions with the ElectroMech R&D team headed by Mr. S. Raman, an industry specialist possessing more than 40 years' experience in crane production and Mr. Sanjay Bhise - Design Chief at ElectroMech, the delegation from Russia expressed complete satisfaction about the admirable design and manufacturing capability as well as the quality systems at ElectroMech's Pune plant. As a result, Sibcranex JSC has agreed to collaborate and provide engineering support for different exotic applications. This will enhance ElectroMech's elaborate product portfolio.

> "Sibcranex's formidable experience in process cranes coupled with ElectroMech's established manufacturing capabilities will help Indian companies to get world-class and proven crane technology at very competitive prices."
>
> Tushar Mehendale, MD - ElectroMech

with Sibcranex, Russia

From left : Mr. AVR Murty - CEO, ElectroMech, Mr. Raj Shrivastav - Business Head, ElectroMech, Mr. Artem I Tsymbal - Commercial Division Head, Sibcranex, Mr. Igor F. Tsymbal - General Director, Sibcranex, Mr. Alexander A. Antonov - Deputy Chief Designer, Mr. Tushar Mehendale - Managing Director, ElectroMech

About Sibcranex

Sibcranex JSC was formed as a spin-off from Sibtyazhmash, Krasnoyarsk, Russia with the focus on catering to the requirements of overseas customers. Sibtyazhmash is one of the world's leading manufacturers of special duty, large capacity cranes with almost 70 years of experience in the business and over 60 years of presence in the global market. This Siberian Heavy Machine Plant was created in 1941 on the basis of engineering works existing from as early as 1873.

In India, during 1992 and 1996, Sibtyazhmash supplied 7 Ladle Cranes to Jindal Steel, Toranagallu (now JSW). Apart from this, Sibcranex has also supplied cranes to Tata Steel Kalinganagar and Steel Authority of India Ltd. (steel plants at Burnpur, Rourkela and Bokaro).

SIBCRANEX

Heavy & Special Duty Cranes

ElectroMech Advantage

Over three decades, ElectroMech has proven its competency in designing, manufacturing, installation and servicing of cranes across diverse industries. Today, ElectroMech's plant at Pune, spanning over 20000sq.m is designed to handle large scale crane manufacturing with high precision and quality.

The plant has been awarded ISO 9001:2008 certification from Bureau Veritas (BV) and has achieved the prestigious welding approval certificates from Germanischer Lloyd (GL). This plant is equipped with CNC cutting machines, semi-automatic girder manufacturing, a large paint booth and shot blasting facility. ElectroMech is renowned for providing prompt service support even in the remotest places, ensuring high up time of cranes.

Our association with Sibcranex will enable us to manufacture advanced technology heavy duty cranes with sophisticated control systems. We will also be undertaking upgradation of clients' existing cranes from thyristor control to digital VVVF control systems. Our large manufacturing facility at Pune is all set to take up the challenges of such new projects.

LANCO | Kondapalli Power project

Lanco Infratech Ltd. is one of India's top business conglomerates and among the fastest growing. It has subsidiaries and divisions across a synergistic span of verticals. These include construction, power, EPC, infrastructure, property development, and renewables. A member of the UN Global Compact, Lanco Infratech Ltd. is recognized for its Good Corporate Governance.

Lanco Kondapalli Power Ltd. (LKPL) is an Independent Power Project (IPP) located at Kondapalli near Vijayawada in India. Set up at a cost of around ₹12,400 million (US$275 million), this Combined Cycle Power Project operating on natural gas as primary fuel is being developed in various phases.

LKPL has taken up the implementation of a 2 x 371 MW plant under its stage III expansion project. The ultimate capacity of the Lanco Kondapalli Power Plant after completion of Phase III will be around 1500 MW.

Expectedly, LKPL paid a great deal of attention to every piece of equipment being selected for this project. Considering the magnitude and critical time frame for the project, along with quality and reliability of the equipment, equally important was the manufacturing and project execution capability of the partnering companies. When the tender for various hoists and cranes, which included challenging TG hall cranes was floated, 5 companies participated in the bid. Mr. Minocha- CEO, Mr. RNS Tomar- Vice President and Mr. Bimal Sen- Asst. General Manager personally interacted with each of the bidders to evaluate their capability and credentials. This helped ElectroMech in understanding the finer details of the project requirements and demonstrating our 'solutions approach', thus winning the trust of the Lanco team in our capabilities.

Through these discussions and interactions, ElectroMech shone through, convincing the Lanco team to opt for our cranes.

The complete scope includes

- 150/25T x 25m DG Crane for Steam Turbo Generator building
- 90/20T x 15m - 2 Nos. DG Crane for Gas Turbo Generator building
- 50/25T x 25m DG Crane for Steam Turbo Generator building
- 20/5T x 9.6m DG Crane for Clarified Water Pump house
- 12T x 11.4m DG Crane for Boiler Feed Pump building
- 5T x 8.5m DG Crane for Gas Insulated Substation building

We sincerely thank Lanco Infratech Ltd. for awarding this prestigious project to ElectroMech.

Prime Electric, Global Wind Power, Walchandnagar Industries and Thermax trust ElectroMech

Order fulfillment

It has been a hectic schedule for team ElectroMech during the last few months. Deadlines were being adhered to and cranes were delivered and commissioned at sites far and wide. Here are a few noteworthy installations of higher tonnage cranes.

Prime Electric Ltd., Delhi

First of the three 150T (SWL) cranes ordered by Prime Electric Ltd. was successfully load-tested at ElectroMech plant for 25% extra overload (as per IS 3177 standards) in the presence of Mr. More and Mr. Shastri from the client company.

Global Wind Power Ltd., Mumbai

Cranes installed and commissioned mentioned below.

- 100T x 26.4m DGEOT - 1 no
- 63/25T x 26.4m DGEOT - 2 nos
- 50 (32+32)T x 26.4m DGEOT - 1 no
- 25T x 11.3m DGEOT - 1 no

Walchandnagar Industries Ltd., Pune

Walchandnagar Industries Ltd. (WIL) is a reputed name in the manufacture of critical equipments. The company caters to varied sectors such as defence, power, space, industries, etc. WIL had placed an order with ElectroMech for two Double girder goliath cranes with capacities

- 150MT x 24m span x 15m height of lift
- 100MT x 24m span x 15m height of lift

ElectroMech designed, manufactured and commissioned these cranes. The cranes have been put up in the new Baramati plant of WIL.

ABUS crane (100T) installed at Global Wind Power Ltd., Mumbai


Goliath crane (100T) installed at Walchandnagar Industries Ltd., Pune

New order : Thermax Babcock & Wilcox Energy Solutions Pvt. Ltd., Pune

- 50/10T x 30m DG EOT - 5 nos
- 20T x 36m DG EOT - 2 nos
- 15T x 36m DG EOT - 2 nos
- 10T x 36m DG EOT - 11 nos
- 10T x 30m DG EOT - 11 nos
- 1T x 10m outreach Abus wall travelling crane - 3 nos

Pivotal role in Mumbai's unique water supply project

ElectroMech supplies **tunnel mucking cranes** and special hoisting equipment for lowering and assembling of Tunnel Boring Machine.

Clients : ➢ **Soma Construction Company** ➢ **Unity-IVRCL Ltd.** (A joint venture company)

Mumbai - the business capital of India - the city of dreams for millions - has been growing exponentially. This growth is taking place in a narrow, long stretch of the costal land. The existing 21 million and growing population naturally needs adequate supply of water for today and tomorrow.

The Tansa Dam situated around 75km from Mumbai is the major source of water supply to Mumbai since it was built in 1892. The existing pipeline which carries this water to Mumbai was laid down in the British era. Over decades, the pipeline has rusted and eroded due to which bursting and leakages are quite frequent. Naturally, it interrupts the water supply, creating shortage.

To avoid this, MCGM (Municipal Corporation of Greater Mumbai) has undertaken a very ambitious water supply project by building a new underground leak-proof tunnel which is 8.3km long. The tunnel is being constructed at the most critical part of the supply system over a stretch of 15km from Gundovali village (near Bhiwandi) to Bhandup. The construction work of this prestigious project has been awarded to two construction majors namely, Soma Construction Company for Phase I (Gundovali to Thane) and to a Joint Venture of Unity Infraprojects Ltd. and IVRCL Ltd. for Phase II (Thane to Bhandup).

MCGM has undertaken a very ambitious water supply project by building a new underground leak-proof tunnel which is 8.3km long. This prestigious project has been awarded to Soma Construction Company (Phase I) and to a Joint Venture of Unity Infraprojects Ltd. and IVRCL Ltd. (Phase II). ElectroMech has supplied special tunnel mucking cranes for both the phases where shafts of 140 meters are to be excavated at 4 different locations. A special type of crane is provided to assemble the Tunnel Boring Machine. This crane will be installed 100 meters below the ground level.

soma

IVRCL Infrastructures & Projects Ltd.

ElectroMech has supplied special tunnel mucking cranes for both the phases where shafts of 140 meters are to be excavated at 4 different locations. ElectroMech has also provided cranes of 105MT for lowering the Tunnel Boring Machine up to 100meters below the ground level. Additionally, a special type of crane, which will be installed 100 meters below the ground level is provided to assemble the Tunnel Boring Machine. This crane has four winches operating in tandem for precision work, which is required for the Tunnel Boring Machine assembly.

32MT Goliath cranes are deployed at the entry and exit points of the shafts, where high-speed hoisting equipment, incorporating 3.4 meter long rope drums rotating almost non stop lift the muck at 40 meters /min.

The criticality of the cranes operating on these projects lies in 'Continuous operation without any down time' and ElectroMech's proven track record on several infrastructure projects makes it an ideal choice to ensure that uninterrupted work.

Partners in progress

Cranedge at Bharati Shipyard Ltd.

Shipbuilding in India

Global shipbuilding investment has reached an all-time high and order books are full to the extent that International yards are refusing to accept orders for delivery before 2012. The overworked European and East Asian yards have inadvertently offered India an entry point into this lucrative market. Hence, India has started on a solid footing, with its focus on the offshore segment, followed by bulk carriers and containers, ranking it ninth by investment in the shipbuilding sector. Going by the present growth trends, the industry, with a current order book of $3.7 billion, is projected to grow at a compounded annual growth rate (CAGR) of 30 per cent, burgeoning to $22.1 billion by 2020. Proposed capacity additions by various shipyards are expected to move the country up in the global rankings and India can surely compete on costs and deliver quality ships on schedule by leveraging its vast pool of skilled manpower.

About Bharati Shipyard Ltd.

Bharati Shipyard Ltd. (BSL) is the foremost privately operated shipyard in terms of shipbuilding facilities in India. BSL has earned its reputation by constructing a large array of specialized sophisticated vessels for diverse offshore, coastal and the marine market sectors. The BSL product range includes highly maneuverable and power-packed offshore vessels including AHTS, PSVs and MSVs of varying bollard pulls, Tractor and ASD tugs, state-of-the-art dredgers, deep sea fishing vessels, cargo and container ships, tankers and Ro- Ro Vessels.

Bharati has four shipyards under operation - Goa, Ratnagiri, Ghodbunder near Mumbai, and Kolkata - and has invested about $150 million. Currently BSL has an order book of about $980 million and seventy-five per cent of these orders are for export.

Bharati shipyard is undertaking a Greenfield project at Dabhol spread over 300 acres of land on the banks of the river Vashishti wherein most modern infrastructural facilities for shipbuilding are being created. The Shipyard is designed by First Marine International of UK. The yard will have capacity to build among other vessels, Jack-up Drill Rigs, Offshore Structures and ships up to 100,000 DWT. For this, BSL had purchased a shipbuilding yard from Swan Hunter (NE) Ltd., Newcastle, UK with all equipment in as-is-where-is condition and moved it to their new site in Dabhol.

Swan Hunter (NE) Ltd. is a renowned shipbuilder in Europe existing since 1880, operating out of a 40 acre yard in Wallsend, on the banks of the river Tyne. The yard is now owned by the North Tyneside Council and shipbuilding activities have ceased there. However, Swan Hunter continues to provide engineering, design and management support to the shipbuilding and offshore industry.

A new challenge for Cranedge

Shortly before the summer of 2010, Cranedge received a request from BSL, who needed an all-encompassing solution to erect and commission two used cranes that had been procured by them. The Cranedge team held an internal review and planned their visit to Dabhol on the Konkan coast where Bharati Shipyard Ltd. is located. The equipment, which included 7 cranes had been in storage for 10 months and initially BSL required Cranedge to refurbish and erect two 55/10.10 MT Morris make EOT cranes. As a first step to erecting the cranes, team Cranedge proposed to undertake a detailed health check up of the cranes, constituting an inspection of mechanical and electrical assemblies. This approach was immediately accepted by the BSL senior management. The inspection and health check up of the cranes was conducted over a seven-day period and on 8 June, 2010, the Cranedge team submitted a report along with an offer for the overhauling along with various components which needed to be replaced. The report recommended cleaning, servicing and lubrication of all the major components such as gearboxes and motors of both cranes. Electricals and the electrical panel were to be refurbished and several components such as limit switches, cable trolleys and wire ropes which were either damaged or missing were to be replaced. In addition to these corrective measures, the report also suggested the addition of features such as gravity limit switches, radio remote controls and anti-collision devices to the cranes. Impressed by the Cranedge approach, BSL entrusted Cranedge to supply all the parts and spares required to bring the cranes into operational readiness.

Once the initial order had been executed to BSL's satisfaction, they engaged ElecrtoMech to refurbish the remaining 5 cranes, certainly making us partners in their progress.

Cranedge - scope of work at Bharati Shipyard Ltd.

- **55/10/10MT, 30m span, 23m height of lift DG EOT Crane - 2nos**
  Make-Herbert's MORRIS, England. Year of manufacture -1969
  Complete overhauling, assembly, erection, commissioning, electrical circuit modifications were done as per our logic to start the 55/10/10MT crane
- **30MT, 30m span, 23m height of lift DG EOT Crane - 1no**
  Make-Carruther, England. Year of manufacture -1969
  Complete overhauling, assembly, erection, commissioning
- **10MT, 29m span, 21m height of lift DG EOT Crane - 1no**
  Make-Carruther, England. Year of manufacture-1969
  Complete overhauling, assembly, erection, commissioning
- **10MT, 29m span, 21m height of lift DG EOT Crane - 1no**
  Make-Demag. Year of manufacture -1982
  Complete overhauling, assembly, erection, commissioning
- **6MT & 8MT - Deck Cranes on Floating Dock** -
  Supply of CRD with CRD cable, installation at site and commissioning

All spares related to overhauling were supplied by Cranedge.

Launch of **Rubber Tyred Gantry Cranes** (RTG)

On 7 February, 2011, ElectroMech formally announced the launch of Rubber Tyred Gantry Cranes in India through a newly formed association with Shuttlelift of USA. With this collaboration, ElectroMech extends its range of product offerings to customers, further enabling us to provide a truly customized material handling solution.

The Shuttlelift range of Rubber Tyred Gantry cranes consists of 3 models.

- **SL (Shuttlelift), ranging from 15 T to 1000 T**
- **ISL (Industrial Shuttlelift), ranging from 15 T to 150 T**
- **SB (Single Beam), ranging from 15 T to 100 T**

Each of these models has its own strengths and is suitable for a myriad of applications, thus bringing greater flexibility and efficiency to almost any business.

Model : SL

Model : ISL

Model : SB

Innovative solutions from Shuttlelift

Shuttlelift is a subsidiary company of Marine Travel Lift, a market leader in the US for boat hoists, which has been in the business since 1954. The Shuttlelift brand was born in 1987 as a result of a requirement from National Aeronautics and Space Administration(NASA), USA. NASA required Marine Travel Lift to develop a solution using their cranes to retrieve the fuel container discarded into the sea by a space shuttle after its launch. The company customized one of their boat hoists for the application and catered to the requirement. The success and versatility of this machine led to the development of the 'SL' range of products from Marine Travel Lift and the establishment of Shuttlelift, Wisconsin, USA.

ElectroMech
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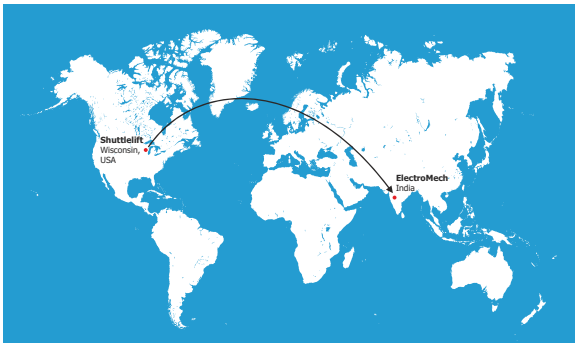


ElectroMech now brings to India RTGs from Shuttlelift, Wisconsin, USA

India Partner of

SHUTTLELIFT®

RTG - Suitability for Indian markets

For the Indian market, these cranes will be primarily suitable for construction, windmill manufacturing and heavy engineering. The Shuttlelift RTG cranes have several inherent advantages and are a boon for several types of projects and sites. Firstly, they offer a great deal of flexibility in terms of their applications as well as area of operation. RTGs are not limited by rails or unprepared surfaces and can operate on almost any level surface that a plant or project site has. Moreover, they can be dismantled and moved from site to site. The fact that an RTG is self-driven through a diesel engine, makes it all the more versatile for use in remote areas where electricity may not be available. This also does not hinder its field of operation with cable reeling drums or Down Shop Leads.

A mobile crane could topple, but there is no such possibility with an RTG as the centre of gravity of the load is always within the perimeter of the crane, i.e. within the wheels. This makes the structure inherently stable and enhances its 'go anywhere' ability.

Features and advantages

- Easy to install, operate, dismantle & transport
- Offers flexibility in handling
- Several standard models and customized systems to suit capacity from 15T to 1000T
- Proven performance for efficient and safe handling of precast segments, steel structures, pipes, concrete slabs, windmill components, heavy equipment and machinery
- No specific ground preparation is required. Eliminates need for a concrete yard and RCC structure for rail tracks
- Load is carried between the wheels unlike other mobile cranes, thus making it safer
- Excellent customer support and after-sales service in India from ElectroMech

RTG - A safer way of material handling

From safety point of view, a Shuttlelift RTG is certainly a better solution than some of the methods used for moving bulky loads today; such as mobile cranes operating in tandem. While a mobile crane could topple, there is no such possibility with an RTG as the centre of gravity of the load is always within the perimeter of the crane, i.e within the wheels. Because of its design, an RTG will always be able to carry its rated load, as there is no deration due to extensions of booms. Their robust construction also makes the structure inherently stable and enhances its 'go-anywhere' ability. RTGs require little or no surface preparation for operation and can be used on almost any surface from smooth asphalt to a ploughed field, while carrying full load! Moreover, for heavy and unwieldy objects such as long pipes, windmill blades or precast concrete segments, a single RTG is capable of moving the load in a safe and efficient manner. In comparison, two mobile cranes would need to be used, meaning two machines, two operators working in tandem as well as all the implications of having to maintain the extra equipment.

Apart from safety and flexibility advantages, in some cases, a detailed cost benefit analysis can also prove an RTG to be more economical when compared to a gantry crane of the same capacity. For example, to cover a large area, such as a storage yard, a gantry crane would need to be as wide as the yard or multiple cranes would be needed. Moreover, the additional costs of a foundation, rails and a cable reeling drum would need to be incurred. In comparison, an RTG requires no special foundation and is self driven, hence no restrictive CRDs are required. The maneuverability also means that the crane only needs to be large enough to contain the object to be lifted. Thus, using an RTG crane could result in a reduction in overall project costs as well as bring with it the advantage of greater flexibility.

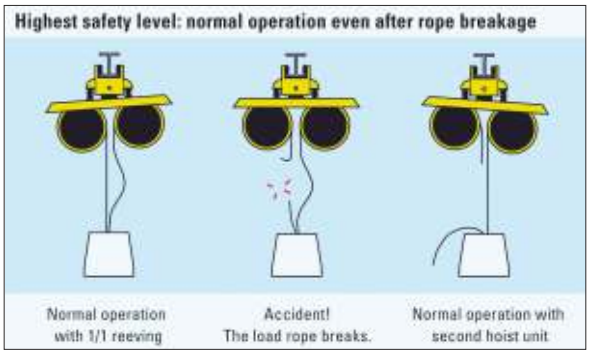
To know more, e-mail: mobilegantry@emech.in
or call Suhail Bajaj on +91 99755 96538

Partner of
STAHL CraneSystems

Stahl CraneSystems develops hoisting technology for Liquid Natural Gas (LNG) equipment. ElectroMech brings this technology to India.

Natural gas becomes liquid at the temperature of -161°C. In this state, it is odorless, colorless, relatively innocuous and 600 times more compact than in its gaseous state.

Liquid Natural Gas (LNG) can be pumped into tankers and transported over great distances by sea. This makes it a significant alternative to pipeline-bound natural gas. The use of LNG is advancing all around the world. Many countries are investing in liquid gas plants .



Maximum safety level for pump maintenance in liquid gas tanks: if a rope should break, the load is shifted to the second hoist and normal operation continues.

Gas liquefaction is complex and working with the easily inflammable gas is always hazardous. As a technology leader for explosion-protected crane technology, Stahl CraneSystems supplies suitable lifting technology for all sectors of LNG technology.

The products range from small explosion-protected chain hoists for day-to-day maintenance work, to heavy, double-safety LNG wire rope hoists which guarantee maximum safety during work in the liquid gas tanks. In the last two years alone, Stahl CraneSystems has supplied LNG crane technology to the value of many millions of Euros and now achieves 11% of its total turnover from this market.

Pump maintenance at –161°C

To maintain its liquid state, LNG is stored in special cooling tanks at –161°C. Pumps feed the cold liquid into a pipe system through which it is finally transported to the specialized tankers. Up to five times a year, these pumps must be lifted from the bottom of the 70m high tanks and moved into the open for maintenance work - a tricky business in which mistakes must be avoided. If a broken wire rope causes the pump to fall and be damaged, in addition to the material damages, a long and expensive production down time would be caused. The LNG wire rope hoists from Stahl CraneSystems have been specially developed for such applications: explosion-protected in compliance with ATEX and IECEx, equipped with two rope drums, two ropes, two gears and two motors. If a rope should break, the valuable load is taken up by the second hoist and work can continue without a break.

Design without hooks

Off-standard ropes are required for the extreme conditions prevailing in the tank. These ropes are connected permanently to the pump and remain inside the tank. For maintenance work, both ropes are connected to the wire rope hoist by means of rope clamps, so no hook is necessary. When the pump is raised, only one rope acts as a hoisting rope, the second rope runs slack alongside as a backup. The ingenious point of this design: in an emergency at load change a rocking suspension allows the whole hoist to 'tilt' so that the center of gravity of the load lies centrally under the wire rope hoist again. The off-standard suspension absorbs the shock from the load change and relieves the stress on the suspension at this critical point. Thanks to their redundant design and rocking suspension, the LNG wire rope hoists from Stahl CraneSystems are deservedly regarded as the safest hoists in the market.

The world is opting for LNG

The first LNG terminal in the Netherlands is to open in Rotterdam in 2011, Stahl CraneSystems will supply Explosion protected wire rope hoists as required.

Double Certification

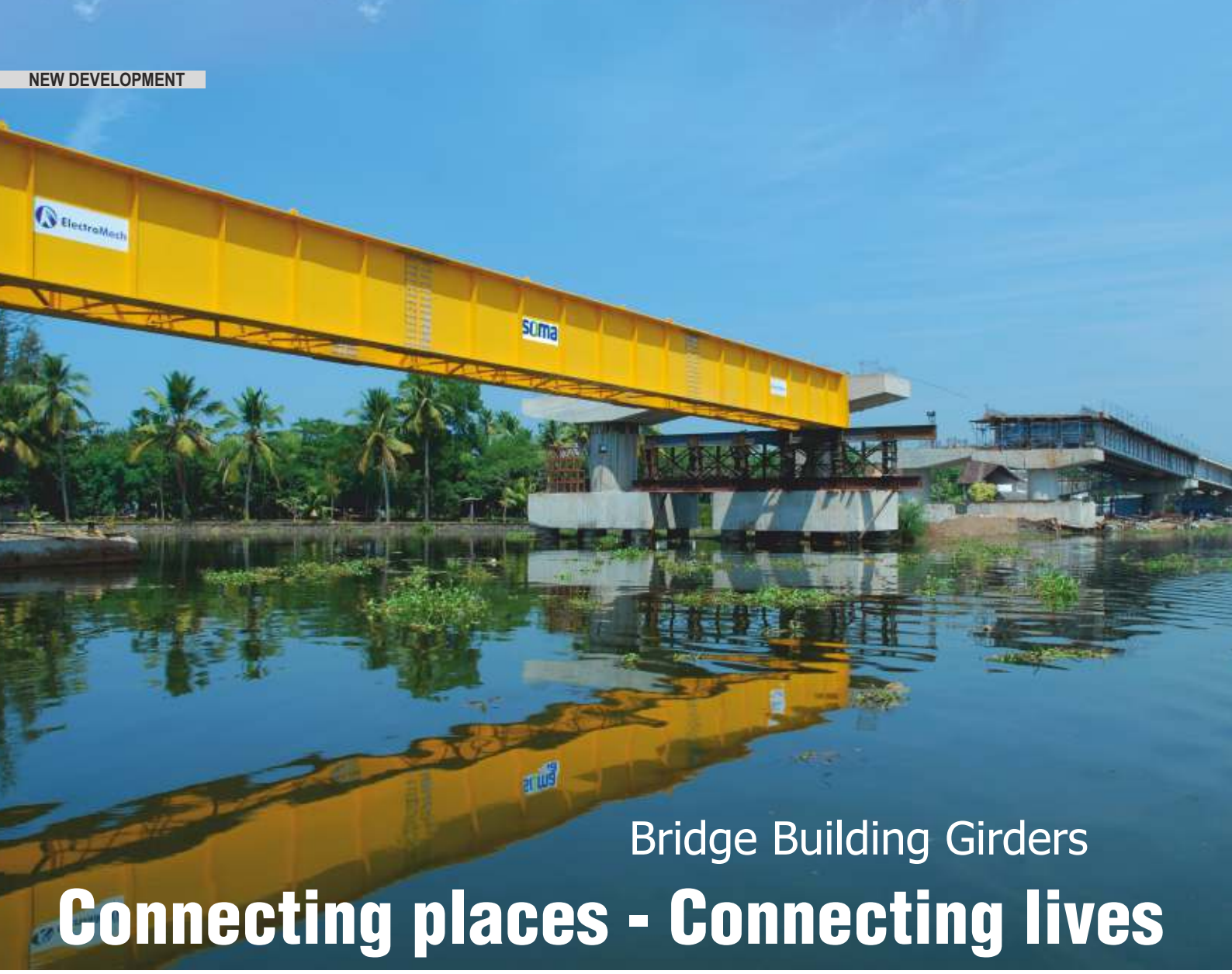
Stahl CraneSystems products are now available with IECEx certification in addition to ATEX. The main goal of the IEC scheme introduced in 1996 is to harmonize standards so that IECEx could in future supersede the ATEX model. IECEx is at present of major importance in particular outside Europe. Indian standards will now adopt all the IEC standards and shall actually replicate the IEC standards with its new release.

To know more, e-mail: runal@emech.in or call Mr. Runal Jadhav on +91 99701 73366.

Double safety for hazardous areas: off-standard hoist for maintenance work in liquid natural gas tanks. Rocker suspension.

Arduous working conditions in Qatar: dust, sand, heat and saline atmosphere have no adverse effect on the wire rope hoist.

The hoist can travel along a rail system.



Bridge Building Girders

Connecting places - Connecting lives

Roads, highways and bridges form a network that unites the nation, brings people together and expedites communication. Bridge construction has undergone revolutionary changes over the years. Advanced, gigantic construction equipment and the use of precast and pre-fabricated components have reduced much of the cumbersome manual labour and has increased the speed of construction significantly. ElectroMech, with its proven expertise in material handling, is also a part of this construction revolution.

Soma Enterprises Ltd., the infrastructure construction company is an esteemed user of different types of ElectroMech gantry cranes on a number of major projects for varied applications. ElectroMech has always stood up to Soma's unique requirements and expectations. As a result, Soma puts its complete trust in the capabilities of ElectroMech, thrusting newer challenges our way, which we have always lived up to.

This recent, new challenge was not an exception. ElectroMech was to supply bridge building girders 60 meters in length. The girders were required at the site of a bridge construction at Cochin in Kerala. The task, apparently simple, demanded great precision and manufacturing using special jigs and fixtures. Transportation, material costs, operational simplicity and actual joining of pieces posed several challenges for ElectroMech, which braced against them successfully and provided the client with the best solution.

The solution was devised in the form of separate pieces of girders, precisely manufactured, each of 15 meters in length. Accurate positioning of pieces of girders was ensured using special fixtures at ElectroMech plant. Arrangement of nuts and bolts for joining them eliminated the need of any welding on the site. Such girders can conveniently be used and reused for constructing bridges quickly, using advanced technique.

The bridge building girders supplied by ElectroMech offer great operational simplicity, re-usability, accuracy and ease of transportation. All this results into considerable reduction in the turnaround time of the project, hard work, material costs and risks.

Equipped to meet bigger challenges

Moving into the new corporate office

Recently, the new corporate office building adjoining our factory premises in Pirangut, Pune was inaugurated in a modest ceremony. This new office admeasuring 14000 square feet is spread over three floors.

With an expanding client base and our global tie-ups, the scope of our operation is widening considerably and is poised to continue to do so in the future. The large and spacious office with 118 workstations and 42 cubicles / cabins will not only accommodate the newly inducted manpower, but is also designed to accommodate the future needs of manpower, ensuring we maintain our standards of service.

Mr. Anandan Pillai, PLM - ABUS, who has been working at the Pirangut location since 2006, says "The brilliant space planning for smooth work flow and good use of natural light also make the premises a great place to work. The overall ambience is very conducive to meet our promise of **Solutions, Service, Satisfaction** and is designed to perfectly match our work culture."

People are the most important asset for ElectroMech. The work-friendly office inspires our design and sales team to think of pertinent solutions to various challenging requirements and respond with greater efficiency. Many of our customers in India and abroad visit our factory for evaluation, technical discussions, placing orders, inspection and training. To ensure that they are greeted and treated properly without having to wait, the new office houses 10 meeting and conference rooms of varying capacity and a large training room that can accommodate 60 people.

If you are one among our customers, vendors, associates or simply a well-wisher of ElectroMech, do visit us and experience the warmth in service.

Giving technology a facelift

While meeting the challenging requirements of our clients with the right handling solutions, ElectroMech always aims at bettering its manufacturing technology for higher performance and durability of its cranes. In one such attempt, we have recently installed a shot blasting facility and a large paint booth.

The open top, open sided down draft, wet type paint booth is 50m long, 8m wide and 5m high allowing high quality surface treatment even to the largest cranes we manufacture. The booth uses EOT cranes and battery operated transfer trolleys for job movement.

With this new facility, our cranes will now have better corrosion resistance, leading to enhanced life as well as better aesthetics due to a uniform paint finish. The painting booth also ensures that the painting process is carried out in a more eco-friendly manner. This is one of the unique facilities among crane manufacturers in India.

Honing skills

Learning and acquiring new skills has been a regular practice at ElectroMech. Taking the tradition forward, the campus witnessed four useful training programs in the past quarter.

- Crane Engineering training for newly appointed team members particularly from Design and Sales departments
- Welding machines operations training for staff and operators imparted by experts from ESAB India Ltd.
- QMS Internal auditors' training
- Basic training program in fire, safety and first-aid

Attendees of all the sessions enjoyed the training programs and reported to have benefitted from them. They were issued certificates of having completed the training successfully. Such training sessions certainly reflect in the heightened level of the team performance.

ElectroMech at exhibitions

Bauma Conexpo Show 2011, Mumbai

FY 2010-11 was a busy year for the ElectroMech marketing team as our participation in various exhibitions generated a tremendous response from different industry segments. Of these participations, Bauma Conexpo Show 2011 held at Mumbai was of special significance. The launch of Shuttlelift RTGs (Rubber Tyred Gantry Cranes) was given a clap using this exhibition as a platform. Due to the uniqueness of RTGs in the Indian market, they received a very encouraging response from construction, wind energy and heavy engineering segments of the industry. Here are a few snippets of the various exhibitions for those who might have missed them.

Bauma Conexpo Show 2011, Mumbai

MBS 2010, Pune

ACMEE 2010, Chennai

Intec 2010, Coimbatore

Take a tour through our newly updated website **www.emech.in** You will surely find it interesting and informative.

ElectroMech story featured on NEWS

The growth of ElectroMech is indeed a role model for several SMEs. This was recognized by the business news team of NewsX channel. A feature on ElectroMech was telecast in March 2011 in India Inc. program on the channel NewsX. You can also watch it on our website.

ElectroMech
Solutions | Service | Satisfaction

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