



**MICROTECNOLOGY**<sup>SRL</sup>  
ENGINEERING SOLUTIONS

# COMPANY PROFILE

FEBRUARY 2024 EDITION



## COMPANY PROFILE

Our company specialises in the manufacturing and servicing of high-quality cranes and materials handling equipment. With over 25 years of experience in the field, our team of engineers, skilled technicians, workers, and supervisors have honed their expertise in the design, production, and delivery of all types of cranes. We are capable of handling all aspects of the manufacturing process, from fabricating steel structures to assembling machinery, installing electrical equipment and control systems, and conducting rigorous testing before delivering ex-factory at designated erection sites.

Our state-of-the-art factory facilities are equipped to manufacture a wide range of handling material port equipment, including Container Gantry Cranes, STS, Jib cranes, Rubber Tyre Gantry cranes (RTG), and Rail Mounted Gantry cranes (RMG). We pride ourselves on our commitment to quality and customer satisfaction, ensuring that every project is completed to the highest standards and delivered on time.

At our company, we believe in staying at the forefront of innovation and technology. We invest in the latest equipment and training programs for our team, allowing us to continuously improve and adapt to the evolving needs of our clients. Whether you need a custom-built crane or maintenance and repair services, we are dedicated to providing the best possible solutions to help you achieve your goals. We are now focused on developing only new type RTG's such as conventional, hybrid and electrical.







## AFTER SALES & MAINTENANCE SERVICE

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### COMPLETED NEW BUILD PROJECTS

- 2 units of Panamax Container cranes for China port – Partner Fantuzzi /The Sahaisant co.ltd
- 2 units of Post Panamax Container cranes for LCB 1 Port in Thailand – Partner Fantuzzi /The Sahaisant co.ltd
- 1 unit of Post Panamax Container crane for LCB 1 Port in Thailand – Partner Fantuzzi /The Sahaisant co.ltd
- 2 units of Post Panamax Container cranes for Mundra Port India – Partner Fantuzzi
- 4 units of RTG 8 wheels for Oman – Partner Fantuzzi
- 6 units RTG 16 wheels 4 over 1 for PAT in Bangkok – Partner Fels Singapore.
- 2 units of Post Panamax Container cranes for PAT in Bangkok in –Partner PdN SpA
- 8 units RTG 16 wheels for Papua –New Guinea –Partner Fels
- 4 units RTG 16 wheels for PAT in Bangkok – Partner Fels
- 2 units RTG 8 wheels for PAT in Bangkok – Partner Fels

### REVAMPING & REPAIR PROJECTS

- Evergreen container Terminal LCB ( terminal B2 )
- LCB Container Terminal 1
- LCMT Company Ltd.
- Kerry Siam Seaport
- TEREX China
- Hutchison Laemchabang Terminal
- SAHATHAI Terminal
- Siamsuksawat Terminal
- SUMITOMO Heavy Industries Material Handling System Co. Ltd.
- PAT (Port Authority of Thailand)
- Construction & commissioning of Barge with two cranes – charge and discharge container function for Kerry Siam Seaport.
- 4 units RTG, 8 wheels – Source, delivery, and commissioning to Laem Chabang International Terminal.
- 4 units RTG, 8 wheels – Delivery to port, full revamping, conversion from conventional to E-RTG for Kerry Siam Seaport.
- 2 units RTG, 4 wheels – Delivery to port, full revamping, conversion from conventional to E-RTG for Kerry Siam Seaport.
- 8 units RTG, 16 wheels – Source & delivery to port from Europe, full revamping, conversion from conventional to E-RTG for Kerry Siam Seaport.

### RECENT SOURCE AND DELIVERY PROJECTS

- 4 units RTG, 8 wheels – Sourced from Malaysia – Delivered to Thailand (2023).
- 6 units RTG, 8 wheels – Sourced from Sri Lanka – Delivered to Thailand (2023).
- 8 units RTG, 16 wheels – Sourced from Spain – Delivered to Thailand (2023).

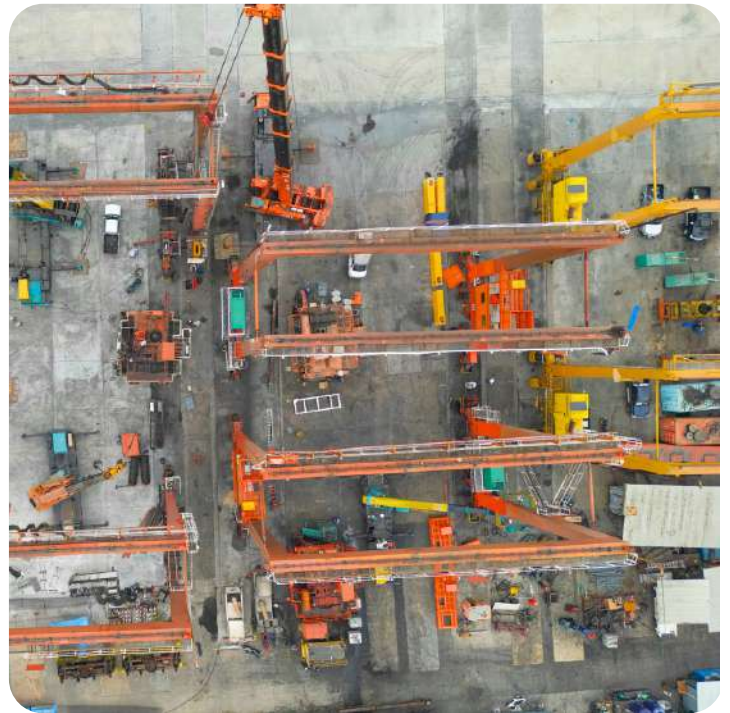


## PROJECT GALLERY

### KERRY SIAM SEAPORT - Au-Udom (Sriracha, Thailand) (2023 - 2024)

#### 8x RTG Revamp from conventional RTG to E-RTG

Full revamping , Mechanical , Electrical (Siemens S7 –m 1500 Drive , Inverter ,PLC and CMS ) hydraulic , all Gear / Bearing and commissioning. Heightening all units from 1 over 5 to 1 over 6.





## PROJECT GALLERY

**KERRY SIAM SEAPORT - Au-Udom (Sriracha, Thailand)**

**Supply 8x (eight) second hand and revamp from conventional RTG to E-RTG (2023)**

Source and arrange delivery of 8x RTGs from Spain to Thailand.



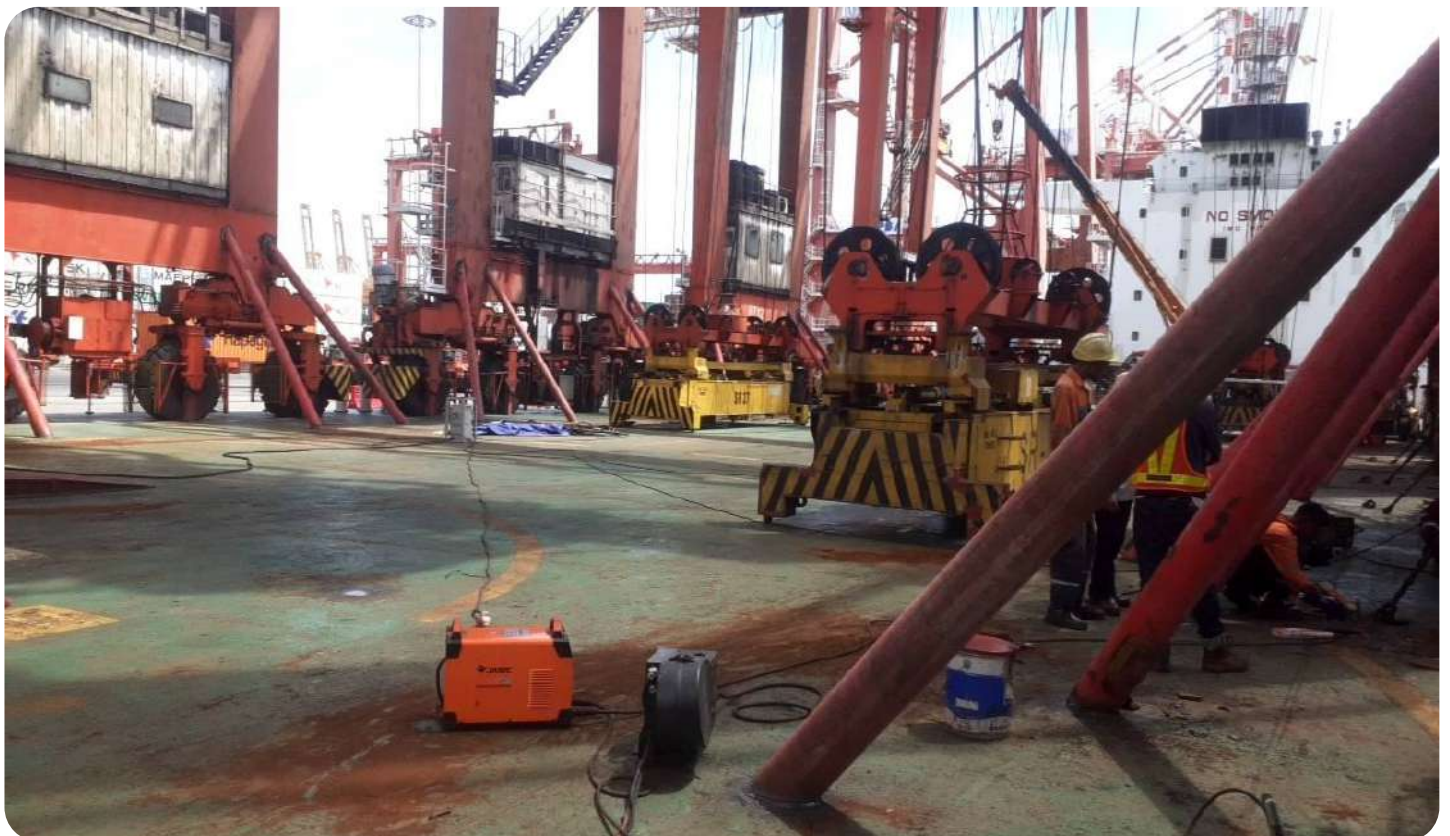


## PROJECT GALLERY

### KERRY SIAM SEAPORT - Au-Udom (Sriracha, Thailand)

Source, supply, sea fastning, delivery 6x RTG from Sri Lanka to Thailand.

Source, supply, transport to site multiple RTG's.



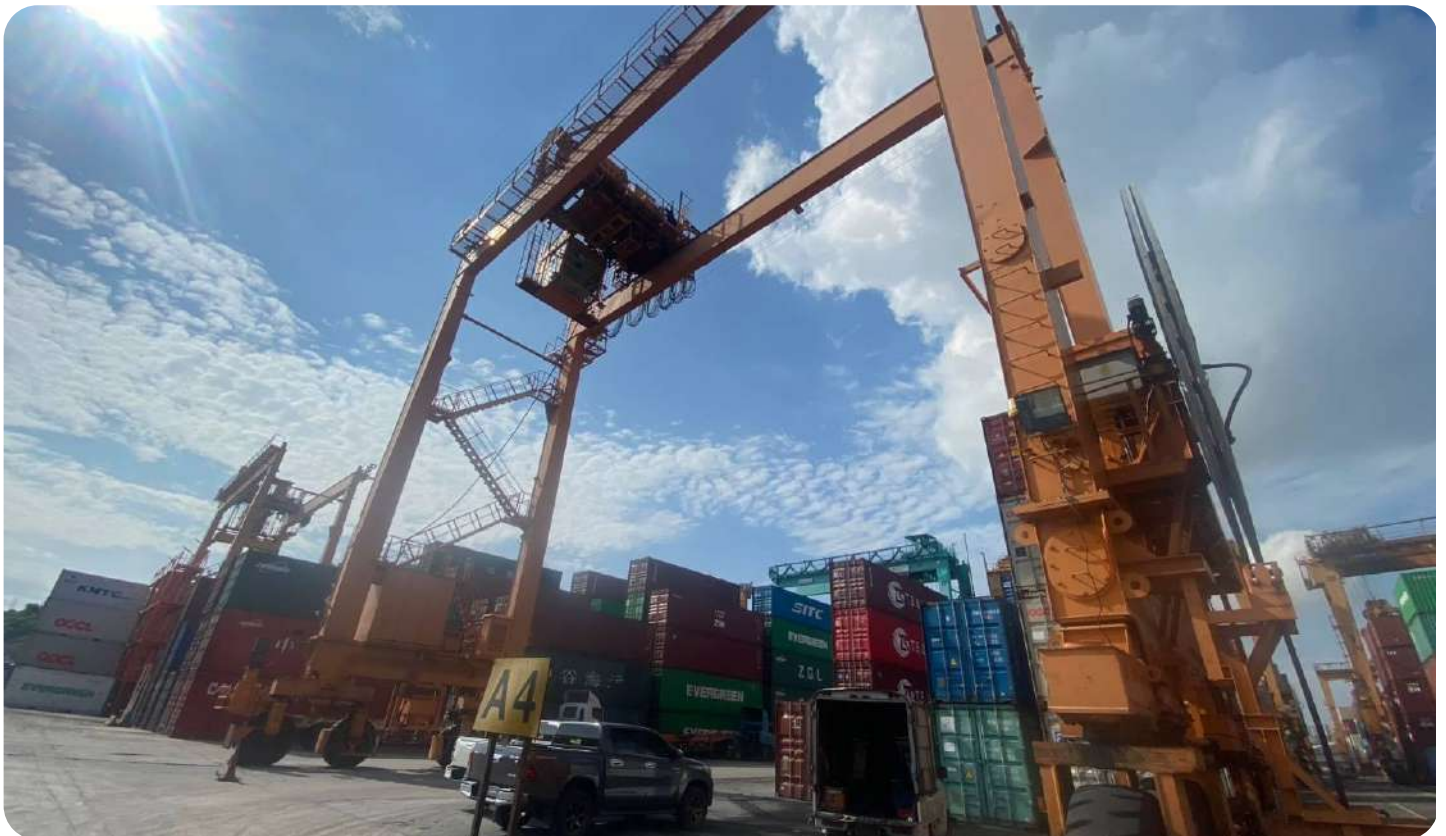


## PROJECT GALLERY

### KERRY SIAM SEAPORT - Au-Udom (Sriracha, Thailand)

#### Revamping for RTG No 3/ 5/ 7/ 8/ (2023)

Full revamping , Mechanical , Electrical ( Siemens S7 –m 1500 Drive , Inverter ,PLC and CMS ) hydraulic , all Gear / Bearing and commissioning.





## PROJECT GALLERY

### PORT AUTHORITY OF THAILAND (PAT) (2022) Full revamping of 3x RTG

Installation and commissioning of Structural, Mechanical, and Electrical systems, which include Siemens S7-m 1500 Drive, Inverter, PLC, and CMS. Additionally, we have performed the necessary hydraulic and gear/bearing operations and completed the operator cabin.

Furthermore, we installed a new Electrical House and carried out the revamping of Operator Cabin 3, both of which are part of the RTG PAT facilities at a location in Leamchabang. Additionally, we have painted the third RTG at the same site.





## PROJECT GALLERY

### LCB1 LAEM CHABANG

#### Revamping and change King PIN junction from Boom /Girder for STS cranes 1/2/3

Our team has conducted a range of repair and refurbishment activities for RTG and STS cranes, covering structural, mechanical, hydraulic, and electronic/electrical systems. These efforts have included modifying and completely replacing sets of rails including Gantrix, installing special connections at boom/girder junctions, and implementing innovative solutions for changing the King Pins at STS crane junctions.





## PROJECT GALLERY

### C1/ C2 - HUTCHINSON TERMINAL LAEM CHABANG

#### Installation of 17x new GenSet Cummins for the SYBRID (Sumitomo Hybrid System)

As the appointed agent and partner of Sumitomo H.I.M.H.S. Co.Ltd., we successfully installed the SYBRID System (Sumitomo Hybrid System) on the RTG in Thailand. Our team has efficiently transformed the conventional system to the Sybrid System, which includes the installation of GenSet CUMMINS. Specifically, we have completed the installation and revamping of 17x RTG located in Hutchinson Laemchabang Terminal C1/C2.

Additionally, we have revamped several other old RTGs to enhance their performance and efficiency.



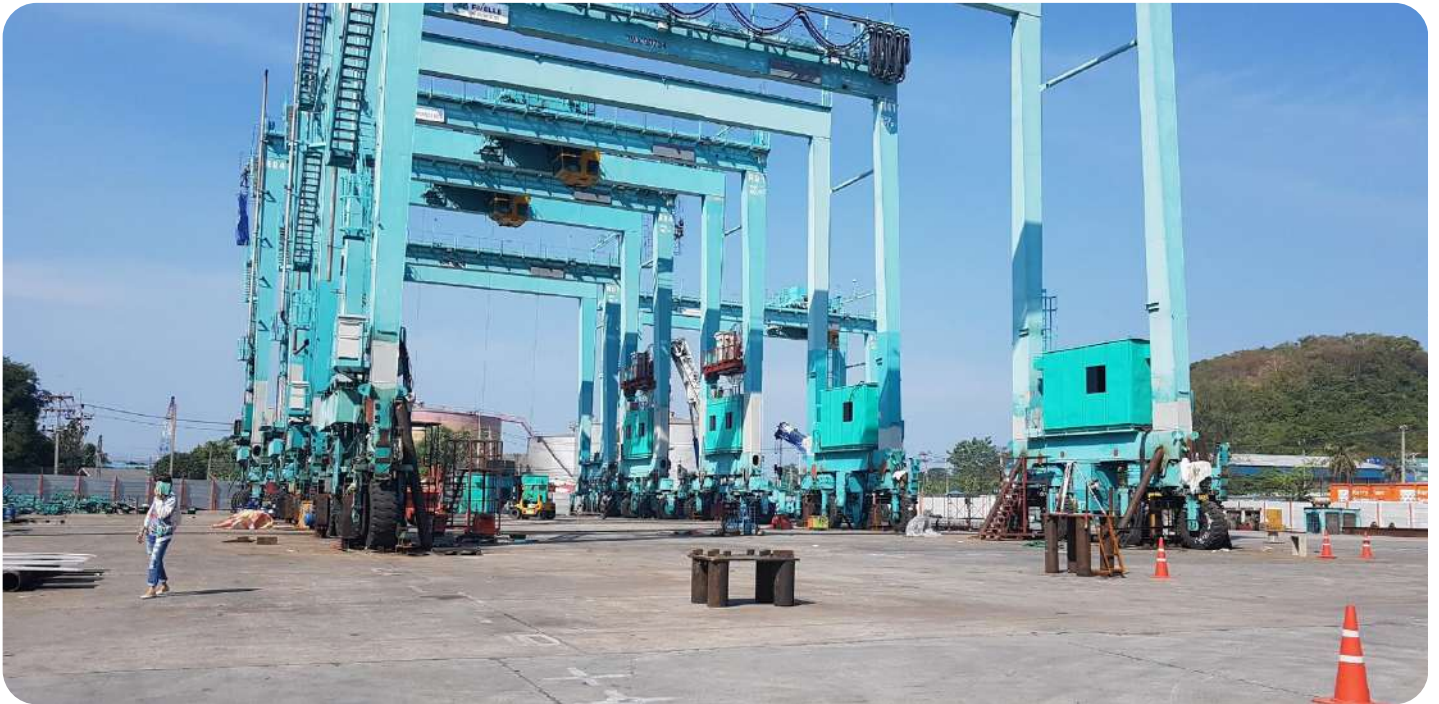


## PROJECT GALLERY

### KERRY SIAM SEAPORT

#### Convert 11x RTG from conventional to electrical

As part of the installation process, 11 RTGs underwent relocation and full revamping, upgrading from a 5 over 1 to a 6 over 1 configuration and transitioning from conventional RTGs to ERTGs.





## PROJECT GALLERY



### **KERRY SIAM SEAPORT – Au-Udom (Sriracha, Thailand)** **Complete Revamping & modernisation for STS Cranes no 1,2, & 3**

Completed comprehensive overhaul for STS Cranes No 1/2/3, which included the following measures:

- Replacement of all rails, Gantrix, clips, and special steel connections at the junction from Boom and Girder
- Replacement of the king pin and spherical hinge
- Modification of the Forestay with a new pin
- Replacement of complete wheels and shaft on trolley
- Modification of Loadcell protection
- Replacement of all bolts to Tie Beam and Legs
- Repair and replacement of Motor/gear/coupling and overall all the motor
- Replacement of break at motor at Gantry and Trolley
- Installation of a new safety break for the hoist drum
- New block shave with guide rollers for wheels Trolley
- New guide roller for wheels and replacement with new plates where needed
- Painting of all the corrosive parts.

This comprehensive overhaul has ensured optimal performance and safety of the STS Cranes No 1/2/3.





## PROJECT GALLERY

### KERRY SIAM SEAPORT – Au-Udom (Sriracha, Thailand) Complete Revamping & modernisation for STS Cranes no 4 & 5

Complete overhaul for STS Cranes No 4/5, which will include the following measures:

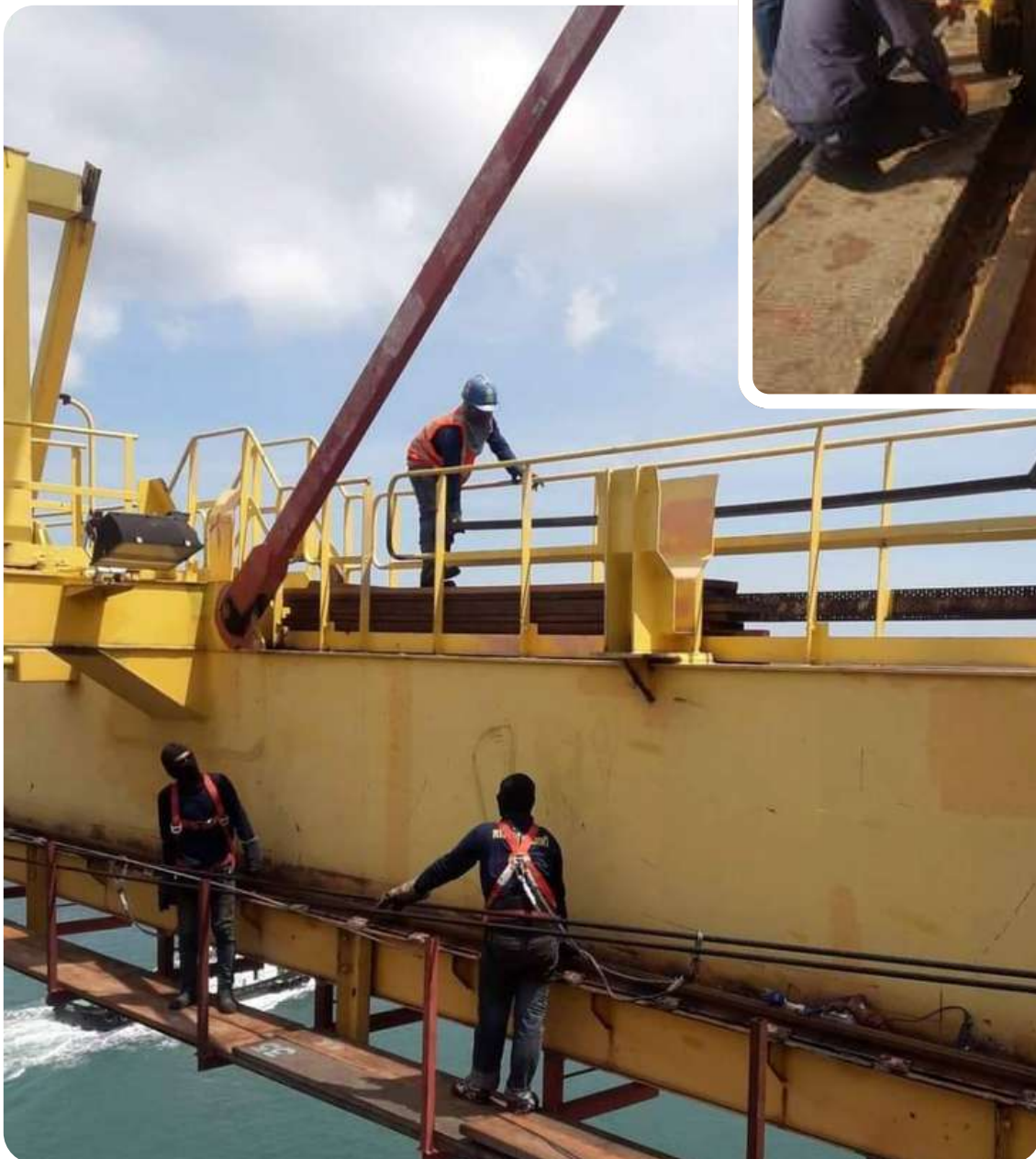
- Replacement of all rails, Gantrix, clips, and special steel connections at the junction from Boom and Girder

- Replacement of the king pin and spherical hinge

- Modification of the Forestay with a new pin

These measures will ensure optimal performance and safety of the STS Cranes No 4/5.

- Refurbishing the trolley by replacing all bolts, overhauling the motor gantry, repairing the brake, and replacing the old wheels with new ones.



## PROJECT GALLERY

### LCB1/LCMT LAEM CHABANG

- Revamping and changing King PIN junction from Boom/Girder for STS crane 2.
- Change the shave with a new one including Spherical Hinge Bearings.
- Change the Rails Clamps for STS cranes No 1, 2, & 3





## PROJECT GALLERY



Port Authority of Thailand (PAT) – RTG new builds



Port Authority of Thailand (PAT) – RTG new builds



Port Authority of Thailand (PAT) – STS new builds



Port Authority of Thailand (PAT) – STS new builds