

TALLERES INDUSTRIALES, S.A.

24/7 SHIP REPAIRS AND MARINE SOLUTIONS -



MAIN FEATURES

DRY DOCK IN THE MIDDLE OF THE OCEAN

Major windlass repairs at Balboa Anchorage PAGES 5 -7

ANCHOR CHAIN REPAIRS

Extensive Afloat Anchor Chain Repairs PAGES 10 – 12

TRAINING, DRILLS, ALWAYS READY!

Pollution Division
Department Certifies
Personnel OMI LEVEL 1
PAGES 14- 15

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AUDITED AND CERTIFIED

ISO 9001:2015 / 45001:2018 certified



There are 12 words that come into our minds when we see all our certifications. Teamwork, Trust, Solutions, Creativity, Quality, Procedures, Experience, Compliance, Safety, Training, Competence, and Expectations.

All these 12 words are the spine bone of our relationship with class surveyors and ISO auditors that depend on our performance to have a successful project. We work side by side with all class surveyors on routinary or complex repairs, on which we are expected to give fast and cost-efficient solutions with the highest standards of quality and safety.

We feel proud to maintain all our certifications and to keep the trust of all major class societies surveyors at the Panama Canal area. We look forward to many more missions together.

www.talleresindustriales.com





@talleres_industriales



talleresindustriales -shiprepairs

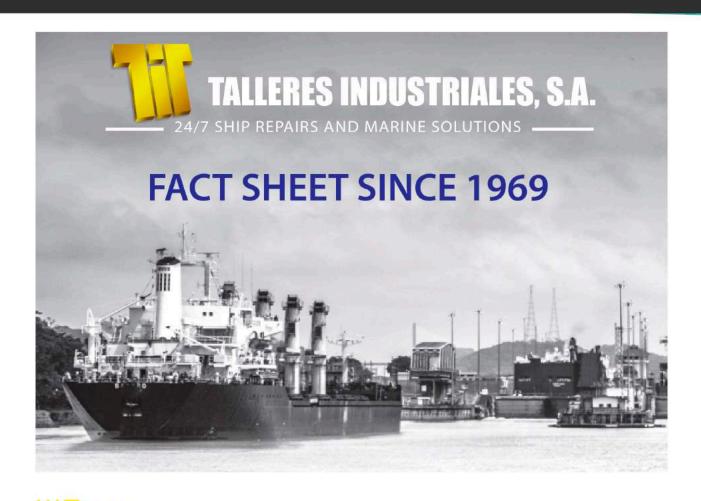


IN HOUSE TRAINING

One of Talleres' most important value is Education. We are confident that having the qualified human talent will differentiate us from the rest, and therefore we must invest heavily on this. Talleres has a state-of-the-art auditorium specially designed for customized training of our personnel. We have so many years of experience that confirms that using our own expertise, resources, and know how to train our labor force is the most effective and common-sense thing to do.

Even though "lack of time" is our biggest enemy, we always manage to elaborate tailor-made training sessions to our staff. In-house training has allowed Talleres to develop a cost-effective solution for different disciplines such as commerce, diving, pollution, welding, electrical, safety and others. Most of the time our supervisors and senior managers take the role of the professor and mentor to teach based on their previous experiences.

Also, we commonly invite some industry leaders (surveyors, client's international auditors) to join our programs. We offer world-class training to the shipping industry at the Panama Canal area through a combination of theoretical knowledge and practical skills on the field and our special sites and workshop. We will keep investing in our people as part of our potion for success.



52 years providing ship repairs and marine solutions at Panama and Latin America

455,808 hours, non-stop working 24/7 for the ship repair industry since 1969

55,000 jobs have been accomplished since 1969

35,000 vessels have been attended since 1969

10,000 workers are the approximately labor force that have worked in Talleres since 1969

22 countries have been visited by our personnel to solve problems onboard vessels

3 generations of employees have been working since 1969







DRY DOCK IN THE MIDDLE OF THE OCEAN



A ship management company from Europe reported a problem on the starboard windlass of one of their Panamax chemical tankers. Crew had opened the gear box for inspection and then found bearing sediments in the oil tank. These symptoms could have many root causes, so a deep inspection and repair needed to be done on short notice.

Mission was to expedite for all works to ensure vessel is ready for re-employment asap. Immediately after arrival to Balboa anchorage, Talleres arranged a team of mechanics and riggers to dismantle the windlass and remove it with the use of a floating crane barge. Complete unit was brought to our workshop for proper inspections and repairs.















The windlass was transferred ashore in our supply boat. Once in the workshop, our mechanics team separated the gearbox from the windlass with special tools. Shaft and guide pins were found damaged and had to be skimmed and fabricated on our machining workshop.

In addition, damaged brass bushings needed to be fabricated. Gearbox was inspected and oil was removed and renewed.



Planetary unit needed to be repaired and bolts, seals, and bearings were also replaced. Windlass was assembled during the weekend; crane barge was once again in action to deliver and install in position but this time facing adverse weather conditions.

Windlass was installed and tested. Then some adjustments were done, and job was finally completed. No matter how complex a job seems to be, we make it look simple.



WHO IS WHO IN OUR TEAM



Miguel Nuñez Warehouse & Procurement Supervisor Purchasing, Procurement



Basilio Soto Electrical Supervisor Electrical, Troubleshoot, Repairs, Rewinding, Maintenance



Agustin Rodriguez Rewinding Supervisor Rewinding, Electrical, Troubleshooting



Noemi Aparicio Marketing, Social Responsibility Social Media, Magazines, Human Resources

UNDERWATER MAGNETIC PARTICLE INSPECTION SOLUTIONS



Talleres' divers have been trained and are certified to perform Underwater Magnetic Particle Inspections (UW-MPI). This method of testing is done to find fractures or hair line cracks on the structure and welding seams of a vessel that may not be so visible to the human eye.

Cracks are found due to stressed and fatigued points on a vessel or due to lack of fusion on a welding procedure. MPI will clear the scenario and will give our divers the correct length and location of the crack being inspected. Testing of weld butts underwater are done basically in two scenarios. The first one is when performing underwater welding repairs in which class needs proof of an adequate weld quality after completion.

The other scenario is when performing underwater hull maintenance jobs or inspections in which cracks are found on the hull or on the rudders. MPI is an added value that ensures the safety of the ship and helps ship owners know the actual condition of their assets.



MAJOR ANCHOR CHAIN REPAIRS



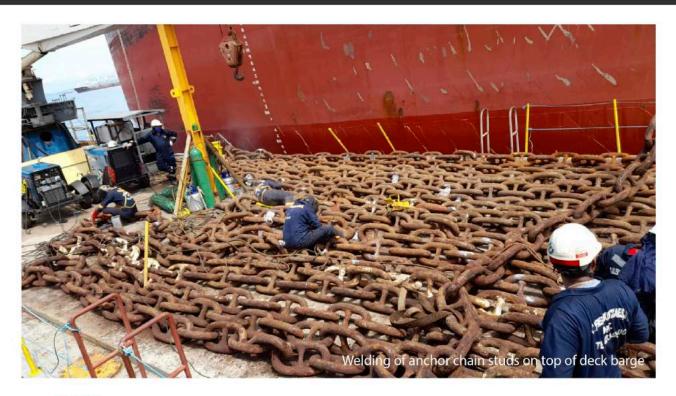


Earlier during the past month we were contracted by a ship manager in Asia to perform complete repairs on the starboard anchor chain of a Neo Panamax vessel at Balboa anchorage, under the guidance of Lloyds Register surveyor. Job consisted of the repairs of more than 3 dozen loose links, more than 70 weak studs, and the replacement of more than 10 missing studs. Furthermore, some of the stud's axial and lateral positions had exceeded their limits.

Job needed to be accomplished with special welding procedures specification (WPS), certified welders' PQR, and BV Grade 3, which Talleres could gladly provide. Upon arrival to Balboa anchorage, our certified team as well as our fully equipped supply boat and crane barge, were waiting for her to drop anchor.



MAGAZINE







Vessel crew deployed the anchor and chain onto the barge deck and our crew and barge crane operator positioned the chain in order to commence repairs. First, a general cleaning of the links by brushing and grinding had to be done in order have the surface ready for welding. Welding team immediately started to identify working studs and evaluate damages with the assistance of the NDT team.

Pre-heating and welding as per WPS were performed. After welding and cooling down of surface, MPI test was performed on all kenter shackles. There are essentially no jobs usually done at dry dock that Talleres cannot perform afloat.





ECO FRIENDLY ROV UNDERWATER HULL CLEANING



POLLUTION DIVISION CERTIFIES PERSONNEL - OMI LEVEL 1

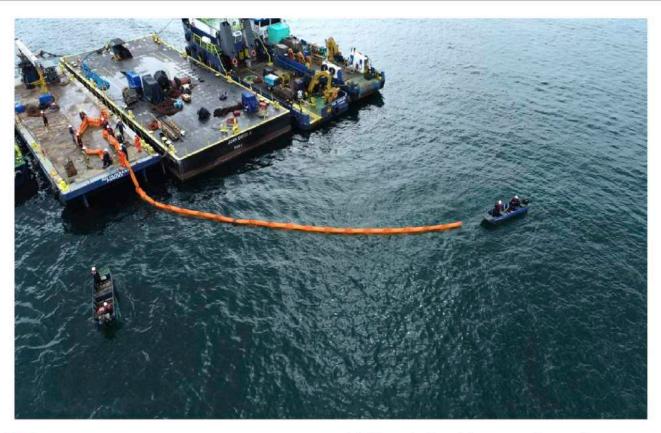




Talleres Industriales is ensuring all its marine personnel to have *Oil Spill Response* training, to enable them to perform safely and effectively in the case of an emergency. Demonstrating its full commitment, both our Management and Operations team must immediately attend any spill situation which may occur within the company or to any of our clients.

The certified instructor, with over 20 years of experience, imparted the *IMO OPRC Model Course 4.02 for Oil Spill Response*, in a period of two days of intensive training.







Day one was conducted with instruction and theory in a classroom. The second day was field activities with attendees participating in our workboats including pulling containment booms into position in the water. At Talleres Industriales, we understand contingency planning is vital in all spill situations. For effective oil spill preparedness, we will continue with training programs to enhance our skills and perform drills to always be on the front line to meet the challenges of spill management and cleanup.



100 MILLION USD BACKUP IN OUR OPERATIONS

