



MS_{MAGAZINE}

TABLE OF CONTENTS

- 2 Leading lifeboat annual surveys across Latin America!
- 3 Editorial "Ubuntu Culture Drives Success at Talleres Industriales"
- 4 Permanent Hull Repair
- "Canal Barges & Cranes Strengthens Fleet with Acquisition of High-Capacity Barges"
- 11 Comprehensive Windlass Repair Solutions
- 12 Class Approved Wet Welders
- 13 ROV Technology Hull Cleaning
- 14 Introducing the Tisa Oil Spill Control
- 15 High-Altitude Technicians Safeguard Vessel Integrity at the Panama Canal
- 16 Ours Cartoons Bargie, Safe Buay and Octupus Man

Talleres Industriales, S.A.
Av. Central Cl. 16, Colón, Panamá.
+(507)4339500
talleres@talleresindustriales.com

LEADING LIFEBOAT ANNUAL SURVEYS ACROSS LATIN AMERICA!



At TISA Lifeboat & NDT Services, S.A., sister company of Talleres Industriales, we take pride in our extensive and comprehensive capabilities to conduct lifeboat annual surveys across Latin America. One of the standout advantages of selecting Talleres Industriales for your lifeboat survey needs is our ability to provide a complete, turnkey solution. From structural and electrical to mechanical repairs, our state-of-the-art facilities are fully equipped to address all aspects of lifeboat maintenance and repair. This ensures that any issues identified during the survey are resolved promptly and efficiently. By entrusting your lifeboat surveys to TISA Lifeboat, you benefit from a streamlined process that minimizes operational downtimes and guarantees adherence to all safety regulations and standards. This not only enhances the safety and reliability of your lifeboats but also provides you with peace of mind knowing that your equipment is in expert hands.



talleresindustriales -shiprepairs



@talleres_industriales



talleres industriales



"UBUNTU CULTURE DRIVES SUCCESS AT TALLERES INDUSTRIALES"



Talleres Industriales embodies the Ubuntu philosophy, "I am because we are," as the cornerstone of its operational success. With over 15 specialized departments, this well-diversified afloat ship repair company thrives on collaboration and mutual support. This culture fosters a strong sense of unity among the more than 300 permanent employees and up to 600 temporary workers, all working harmoniously towards a shared goal—keeping vessels moving efficiently. By embracing this collective approach, Talleres ensures that each department contributes to the overall success of the company, reinforcing its reputation as a leader in the ship repair industry.

The spirit of Ubuntu at Talleres Industriales transcends departmental boundaries, creating a cohesive environment where teamwork and collaboration are paramount. This philosophy has allowed the company to harness the strengths of its diverse workforce, ensuring that all employees are aligned in their commitment to excellence. Whether it's complex structural repairs, mechanical overhauls, or underwater maintenance, the shared goal of keeping vessels operational unites everyone at Talleres. This team effort not only enhances the company's efficiency but also fortifies its standing in the industry as a reliable and innovative service provider.





WORLD RECORD-BREAKING: "COFFERDAM REPAIRS"



Divers taking templates of damaged sections



Reinforcing templates to build cofferdams

Following a grounding incident off the coast of Buenaventura, Colombia, a Panamax bulk carrier arrived at Balboa Anchorage after our Technical Director and Diving Superintendent submitted a repair plan for an extensive repair operation that showcased the region's advanced maritime engineering capabilities.

MS_{MAGAZINE}

The vessel, suffering significant hull damage breaches, required the installation of the largest cofferdams ever utilized in this type of specialized repairs done by only a few companies worldwide.



Fabrication of cofferdam A

Cofferdams is the name given to the structure used for underwater repairs and is designed to provide a dry working environment.



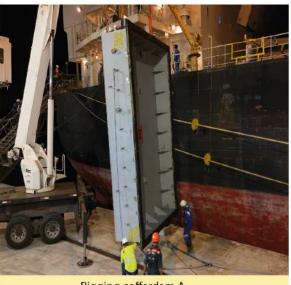
Welding of cofferdam A

Allowing fitters and class-approved welders to access and restore the compromised sections of the vessel's hull plating with one side full penetration welding specialized certified process. Jobs are done having "safety" as our highest priority.



Mobilization of cofferdam A

This world record repair process was both complex and demanding, involving the design and manufacture of 6 mega largest cofferdams ever built, sizes ranging from 5 meters to 4 meters up to the biggest one of 9 meters by 7 meters.



Rigging cofferdam A

Overall, the replacement was over more than 20 tons of steel. Key structural repairs focused on multiple water ballast tanks and fuel oil tanks, with specific attention to internal members across various sections of the vessel.

MS_{MAGAZINE}

For instance, in Water Ballast Tank #5 on the port side, sections of bottom plates were inserted between frames 33 and 39, with dimensions of up to 3000mm x 2500mm x 16mm, using high-grade AH steel.



Cofferdam B Ready For Installation

Additionally, significant complementary reinforcement on stiffeners and angle bars across critical frames to restore the vessel's structural integrity involving complex stiffener installations.



Throughout the 30-day work operation, the technical team faced numerous challenges, including weather, logistics, and ensuring compliance with stringent classification society standards. Despite these obstacles, the repair was completed successfully, restoring the vessel's operational status and demonstrating the exceptional technical expertise available at Panama.



This project not only underscored the importance of advanced maritime infrastructure but also sat a new benchmark for cofferdam repairs.



Lowering Cofferdam E

The logistical challenges were compounded by the sheer scale of the cofferdams and the remote location of the repair site.



Moreover, the underwater environment presented additional difficulties. The divers, equipped with the latest diving technology, had to contend with low visibility, strong currents, and the risk of underwater debris.



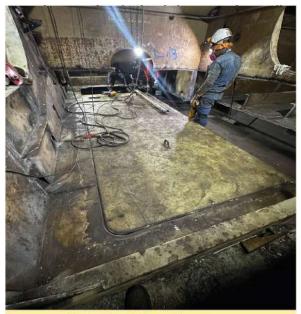
Cutting Damage Section

One of the key aspects of the project was the collaboration with classification societies, whose stringent standards had to be met at every stage of the repair.



Welding Bottom Insert

Regular inspections and tests were conducted to ensure that the repairs were not only effective but also complied with international maritime regulations.



Fitting New 7 Meters Insert

This involved close coordination with surveyors who monitored the progress and quality of the work, ensuring that the vessel could be returned to service without any compromises on safety or performance. The completion of this project has solidified Panama's reputation as a leader in maritime repair services, capable of handling even the most complex and large-scale operations.



Looking forward, the knowledge gained from this project is expected to influence future developments in cofferdam design and underwater repair methodologies.



Removal of Cofferdam B

The lessons learned and the techniques developed will undoubtedly serve as a reference for similar projects worldwide, further enhancing Panama's position as a hub of maritime excellence.



Talleres Team

This world-record-breaking cofferdam repair is a real evidence to what can be achieved through innovation, collaboration, and a relentless pursuit of excellence. It marks a significant milestone in the maritime industry and sets a high bar for future operation with remarkable efficiency, ensuring that every weld and structural modification met the stringent criteria set forth by the classification societies.

The successful deployment of the world's largest cofferdams for this repair operation has set a new industry standard, demonstrating that even the most complex maritime challenges can be overcome with the right combination of expertise, technology, and teamwork.



Looking ahead, the knowledge gained from this project will be invaluable in future operations, paving the way for even more ambitious maritime engineering feats.

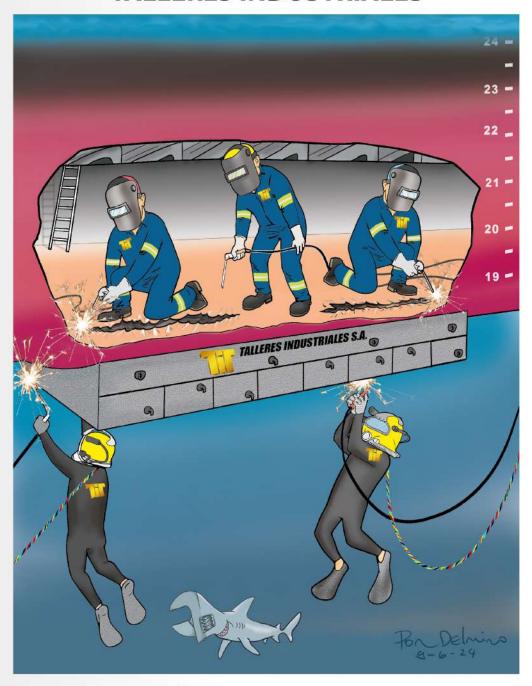


This record-breaking repair has not only saved a valuable vessel from potential decommissioning but has also pushed the boundaries of what is possible in underwater ship repair.





PERMANENT REPAIRS UNDERWATER BY TALLERES INDUSTRIALES

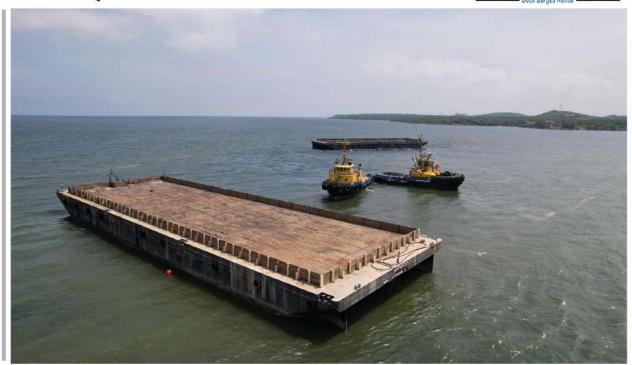


24/7 Class Approved Turn Key Marine Solutions



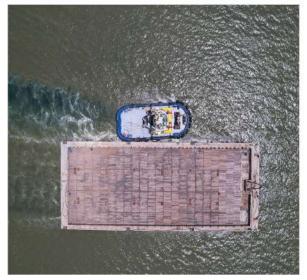
"CANAL BARGES & CRANES STRENGTHENS FLEET WITH ACQUISITION OF HIGH-CAPACITY BARGES" _





Canal Barges & Cranes sister company of Talleres Industriales is proud to announce the expansion of our fleet with the addition of two state-of-the-art deck barges, CBC Monica Ruiz and CBC Denise Marie. These new barges, each boasting a 5400-ton capacity, are a significant enhancement to our existing capabilities, enabling us to offer even more robust solutions for marine infrastructure construction transportation of heavy materials.





With these additions, our company reinforces its commitment to provide reliable and versatile services, ensuring that we meet the growing demands of our clients with precision and efficiency.





COMPREHENSIVE WINDLASS REPAIR SOLUTIONS

Talleres Industriales is at the forefront of providing comprehensive windlass repair services for vessels, offering a seamless, turn-key solution that ensures minimal disruption to your operations. Our expertise allows us to perform windlass repairs either at anchorage using our versatile crane barge or alongside the berth with shore cranes, providing flexibility to meet your specific needs.





Once the windlass is dismantled, our team transports the components to our state-of-the-art workshop, where our skilled machinists and welders take over. Upon completion of the repairs, Talleres Industriales ensures the windlass is recommissioned back onboard in record time.



CLASS APPROVED WET WELDERS













We are proud to receive this approval and become one of the very few companies worldwide to certify grade A wet welding. The journey has just started for Talleres - "More to Come."



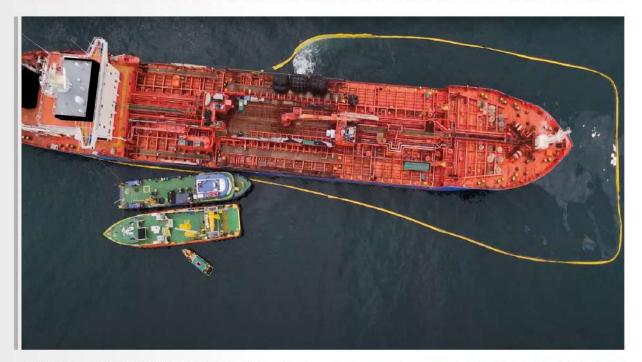


This robot cop is taking no prisoners.
Biofouling better watch out.





INTRODUCING THE TISA OIL SPILL CONTROL



Talleres Industriales is proud to introduce our latest addition to our environmental protection fleet, the Tisa Oil Spill Control vessel. Designed with cutting-edge technology and equipped to handle even the most challenging oil spill scenarios, this vessel represents our unwavering commitment to safeguarding Panama's waters. The Tisa Oil Spill Control is outfitted with a 2,000-foot oil boom mounted on a reel on its deck, allowing for rapid deployment and containment of spills.

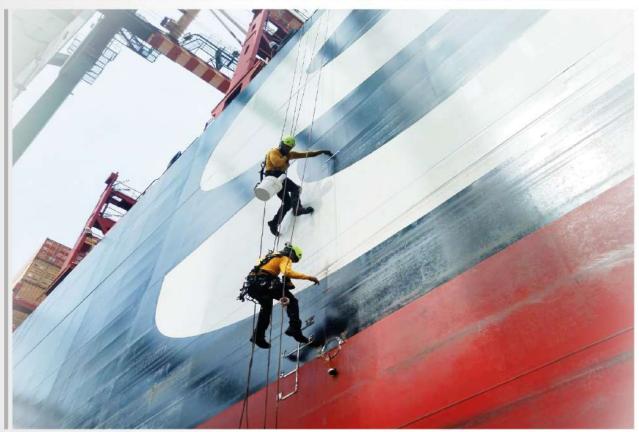




In addition to its impressive containment capabilities, the Tisa Oil Spill Control is fully stocked with a comprehensive range of a ccessories and consumables needed for effective spill management. The boat is equipped with advanced skimmers designed to efficiently recover spilled oil from the water surface, along with absorbent materials that are critical for mitigating the effects of oil contamination.



HIGH-ALTITUDE TECHNICIANS SAFEGUARD VESSEL INTEGRITY AT THE PANAMA CANAL



Talleres Industriales' skilled technicians in Panama are at the forefront of maritime repairs, taking on challenging tasks that require precision and expertise. Specializing in high-altitude works, these professionals rappel down the towering funnels, cranes, and superstructures of vessels navigating the Panama Canal, ensuring that each job is completed safely and efficiently.

Their dedication and specialized training enable them to tackle even the most complex repairs, minimizing downtime for vessels and ensuring smooth operations in one of the world's busiest maritime corridors. clients trust Talleres Industriales for its commitment to quality and safety, knowing their vessels are in expert hands.









talleresindustriales -shiprepairs



@talleres_industriales



talleres industriales