



M S MAGAZINE

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**TALLERES INDUSTRIALES
PROUD SPONSOR OF
DEPORTIVO ÁRABE UNIDO**



Talleres is proud to be part of the 2023 official sponsors of the Club Deportivo Arabe Unido, the best Panamanian football team. Teaming up with the local professional football club represents our love and passion towards the city where our company was founded. Talleres is known for always supporting local organizations that enhance the growth of our Province, and what a better way to follow this line than supporting our lifetime team.

This is a fantastic opportunity for our company to promote our values and demonstrate our commitment to sport and excellence. By partnering with the Deportivo Arabe Unido club, we can work together on social responsibility initiatives and have a positive impact in the community. We also hope to establish a positive emotional connection with the club's supporters and look forward to developing a successful relationship.



talleresindustriales -shiprepairs



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TALLERES AROUND THE WORLD



2023 has been the year to go back on the air and visit our clients around the world once the pandemic period has ended. In today's interconnected environment, companies often forget the importance of visiting customers.

At Talleres, we have started visiting clients all over the world to strengthen and create solid bonds by hearing about their problems, needs, challenges, concerns, and goals.

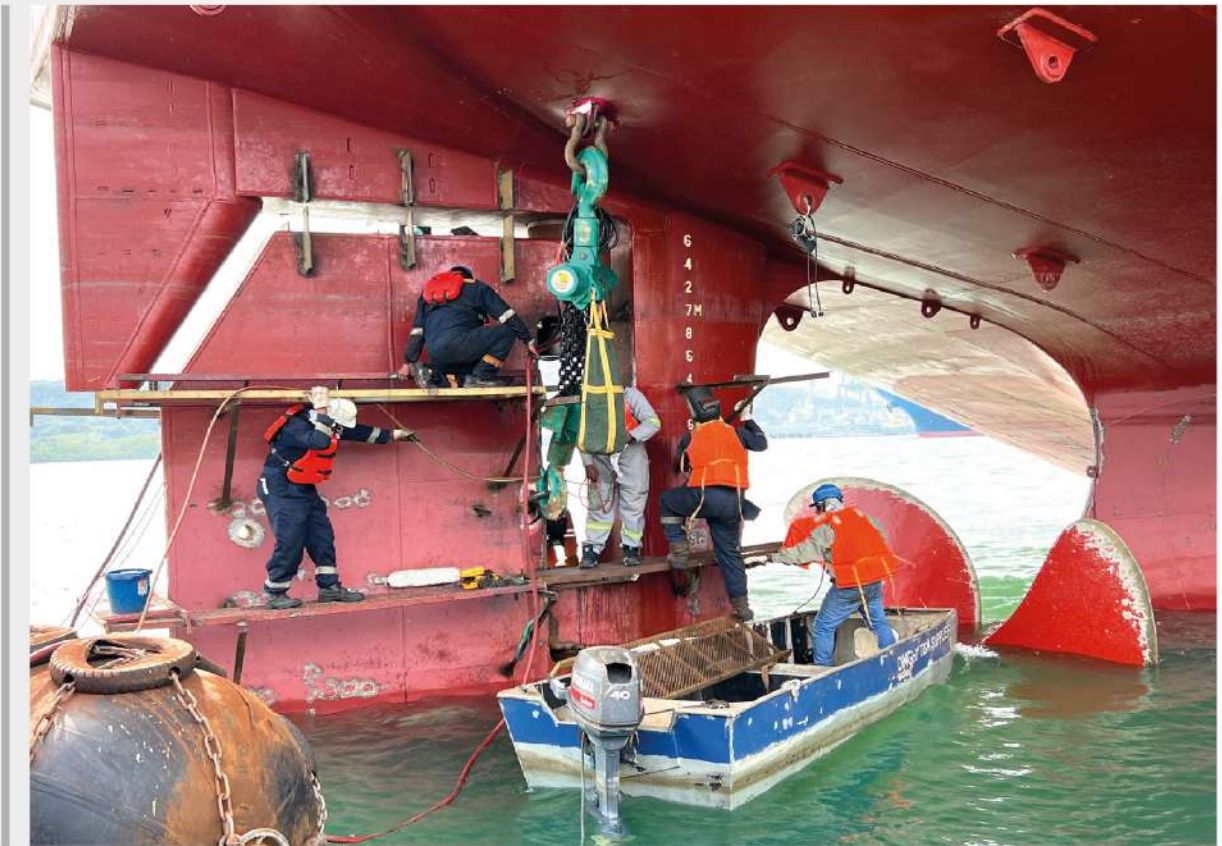
Europe, Asia, and North America are some of the territories that we have and will be visiting this year. Being close to our clients has always been an important task for us and being in their shoes is the key to developing our sense of empathy. Talleres is always looking to get honest and personal feedback from our clients about our service standards and support; that is the key to our success because it allows us to respond with an improved service value proposal.

PANAMA CANAL AREA

ISO 9001:2015 / 45001:2018 certified



AFLOAT RUDDER REPAIRS



Out of the box solutions have always been part of Talleres' Business Model. We are always giving alternative solutions to owners in need of a quick, professional, and cost-efficient solution. .





In this case a 30,000 DWT bulk carrier trusted us with their rudder problems and diverted the vessel from South America to Panama for permanent repairs to her rudder.



The scope of this out of the box project involved removal of rudder blade afloat to replace the rudder stock bush and the lower pintle bush. To achieve this task, first, we had to fit and weld pad eyes to the rudder and vessel hull to secure the rudder blade with our special 50-ton pneumatic chain falls.



Talleres arranged all the necessary resources to perform this 24/7 project; from lay berth, shore crane, floating equipment, 50-ton pneumatic chain falls, to manpower such as class approved welders, machinists, mechanics, riggers, and safety officers.





We then replaced the lower pintle and upper rudder stock bushing according to the bushing approved procedures. After all workshop jobs were completed, then the installation maneuvering started. .

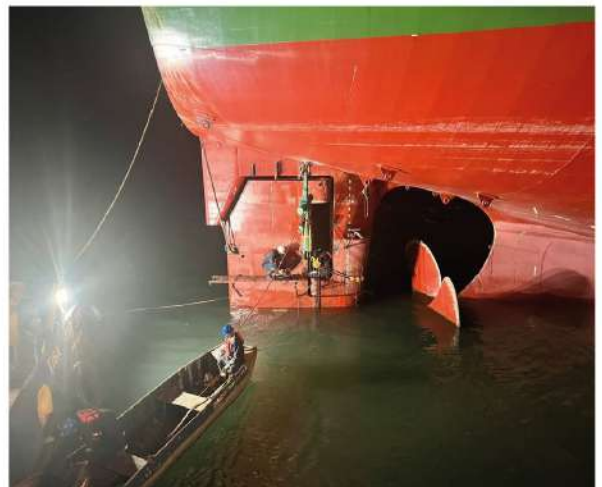


Then we opened the access to the rudder stock nut and rudder pintle nut to release hydraulically the rudder stock from the rudder blade and remove the nut. Inside the engine room, another team of mechanics furnished to lift the tiller head and rudder stock inside the steering room and dismantle the rotor from the rudder stock.

In this final stage, our engineers proceeded to connect the rudder blade with the rudder stock by hydraulic means meeting the pushup requirement. Rotor was connected to the rudder stock and the tiller head was connected to its foundation as well as other systems required. Outside fitters proceeded to install, fit, and weld cover plates. Finally, our NDT team performed all the tests required by class. We feel proud to be the helping hand of shipowners around the world in ongoing difficult and stressful situations like this one.



Finally, outside the delicate removal of the rudder blade, maneuvering to the working site took place successfully. Once at the yard, we removed the lower pintle nut from the rudder. Rudder pintle was machined in our industrial lathe and skimmed as per makers instructions.



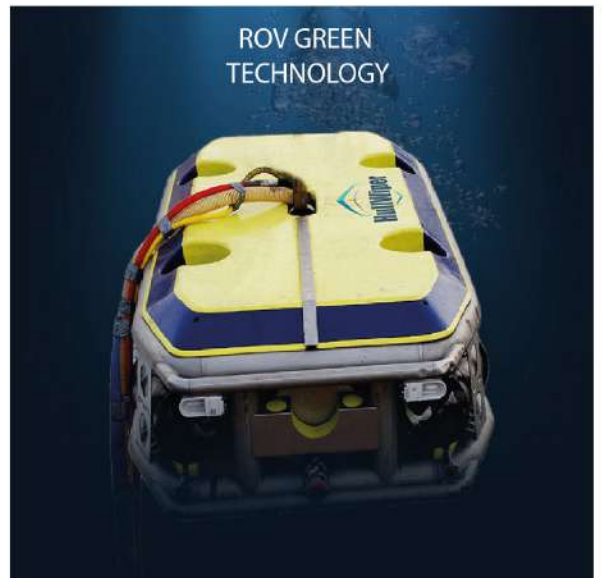


HULL CLEANING TECHNOLOGY ROV TEAM



Leadership and Teamwork capabilities are crucial in Talleres Industriales. Underwater Cleaning of vessels with high technology ROV is one of Talleres services, which is based on a diverse team of talented individuals where each one of them focuses on achieving objectives.

Early this year our team was reinforced with maker's engineer Mitchell Malpass who contributed to the ongoing improvement of our 24/7 ROV Hull cleaning division.



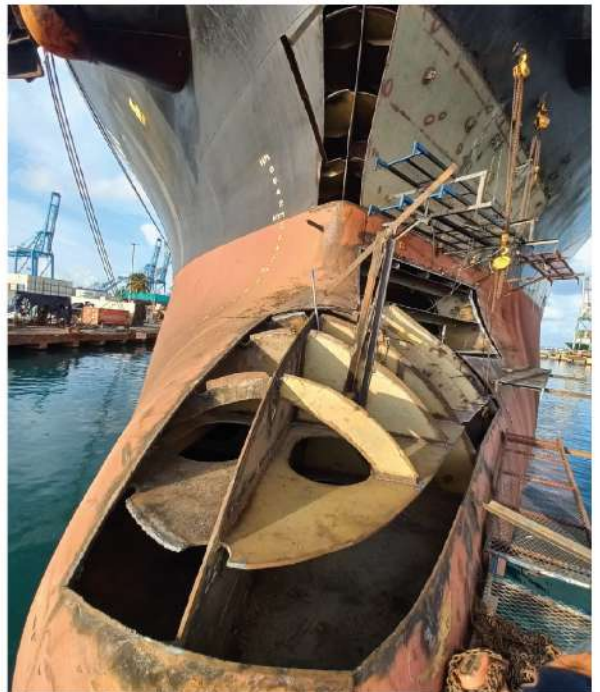
WATER BLAST SERVICES



Water blasting is a solution that allows to maintain integrity of the surface by high-pressure water cleaning. The use of high-pressure water blasting, for surface preparation and surface cleaning can eliminate rust, old coatings, product residues, and even damaged concrete prior to re-pouring. In addition, it ensures proper adhesion of the new coating to the original surface.

Talleres Industriales has invested in state-of-the-art HPWJ X-Series diesel water blasters with working pressures from 5,000 to 40,000 psi (350 to 2757 bars). This unit is easy to mobilize to terminals and onboard vessels at either Cristobal or Balboa Anchorages. The range of use also includes pipes and cargo tanks cleaning.

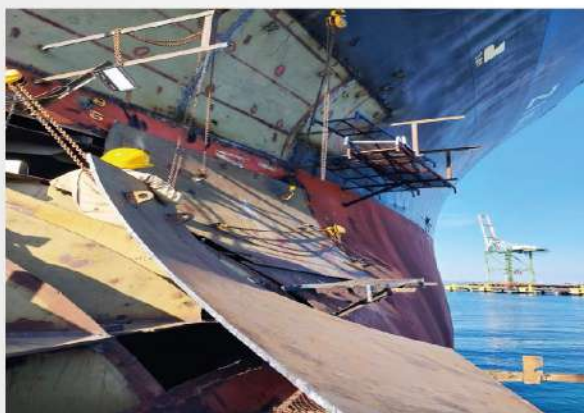
BULBOUS BOW REPAIRS



Bulbous bow is one of the most difficult structures to repair and renew on a ship due to her formed, complex construction, and plating thickness. Earlier this year a vessel suffered major damage on her bow structure due to collision with a floating barge in Argentina, South America.



Vessel had damage in the fore peak tank, stem, and bulbous bow. All sections with single and double shapes. Owners approached Talleres in Panama and after receiving our technical advice and reviewing our repair plan they diverted 5800 nautical miles to perform permanent repairs with our company at the Atlantic side of the Panama Canal.



Upon arrival, the vessel was docked at the repair berth and immediately cropping of damaged sections started.



We then realized the precision of the bending and shaping of plates that had to be performed which were going to be critical for the outcome of this project. The damage was considerable at the bulbous bow, stem area, and fore peak tank. These were made of high tensile steel plate and totaling close to 8 tons of steel. Port side hull plating was fractured and deformed in forward void space and all internal members consisting of side longitudinal, web frames, stiffeners, brackets, and collision bulkhead had to be renewed. All steel profiles were manufactured in our workshop and class approved welders and fitters installed them around the clock.





Upon completion pressure and NDT test was performed to all welds. This project was very challenging, and we had to go the extra mile to avoid our good clients' further delays and make sure they got back at sea to accomplish their commercial commitments.



At Talleres, we will always do our very best to meet and exceed our clients' expectations and goals.



SHIP TO SHIP TRANSFER OPERATIONS 24/7



STS (Ship to Ship) transfer operations at night at the Balboa Anchorage are becoming routine for our team. When the vessels are moored alongside each other, good planning by the Mooring Master and team is essential for a successful outcome in nocturnal jobs. The supervisor must be on full alert with proper communication and lighting for the operation to go smoothly. The hoses are particularly difficult to maneuver in these adverse conditions when rain and high winds are involved. This is the reason why we execute our pre-planning strategy before we reach the STS site. As a team, we continue to look forward to our next operation, in any sea-going conditions. For sure, we will be ready to face the challenge.



“PAUSE AND DRILL” PART OF TALLERES CULTURE



Emergencies can happen anywhere and at any time and the emergency drills exercises are hands-on activities that build muscle memory and allow participants to actively engage in learning. Being prepared and planning are critical to protect lives, the environment, and property. The main objectives of these drills are to ensure that everyone knows: What are the hazards and risks at the workplace? What and how to do in the event of an emergency? Preparations In order to minimize the impact, every person in such a situation must know exactly what to do. This requires detailed emergency management and repeated exercises or drills. We keep investing to provide a safe environment for all our staff and the best way is to train our people with the possible emergency scenarios to build up their skills related to emergency preparedness and response.

ON SITE BIOREMEDIATION, AN IMPORTANT EVENT THAT SETS A REFERENCE IN PANAMA



This process is a historical milestone since it is the first time it has been implemented in Panama.



Between February 13 and April 6 of this year, Talleres Industriales and its Pollution Control Division implemented an on-site bioremediation strategy in a wooded lot in Rousseau area, considered a protection zone of the Panama Canal. The purpose of this project was to restore to their original conditions the soils impacted by a hydrocarbon spill.



The contaminated area was intervened through a multi-step process that included the extraction of stained organic material, application of biodegradable surfactant solution and nutrient solution to increase the bio stimulation of microorganisms and bacteria, ending with the application of an organic fertilizer with earthworms raised in Panama, improving soil biodegradation conditions.

The result of the applied strategy was successful since at the end of the first month, the levels of Total Hydrocarbons have been reduced, on average, by 63.23%. Levels will continue to decline over time as densities of bacteria and microorganisms in soils will increase. .



With this project, Talleres Industriales demonstrates that it leads the control strategies for hydrocarbon spills; and now it returns an environment altered by pollutants to its natural condition, whether in the soil or in the water.



May 1st

A worker is a creator
and a great asset to
every nation.



INTERNATIONAL
LABOR
DAY

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