



NOVEMBER/2020
"Panama National Holidays Celebrations"

TALLERES INDUSTRIALES S.A.

24/7 SHIP REPAIRS AND MARINE SOLUTIONS

MAGAZINE



MAIN FEATURES

**IMAGINATION, EXECUTION
AND OUT OF THE BOX
SOLUTION**

PAGE 4-6

**REPLACING DAMAGED SHELL
PLATING OF A POST-PANAMAX
FLAT BOTTOM**

PAGE 10-12

**SUSTAINABILITY - OUR
MISSION**

PAGE 14-15

COMMITMENT DURING DIFFICULT TIMES



CLASS APPROVED NDT AND ULTRASONIC THICKNESS GAUGING PERFORMED BY OUR STRATEGIC PARTNER

Tisa Lifeboats & NDT Services, S.A. is one of Talleres' strategic partners in our listed services for our clients. They specialize in the lifeboat inspection and repair; load testing for ship's cranes, davits, and lifting equipment; as well as non-destructive testing and ultrasonic thickness gauging services. Our partners are trained to guarantee the highest levels of professionalism, ethics, promptness, and quality in their bids and services rendered.

Tisa Lifeboat & NDT Services, S.A. has supported the global marine industry in Panama, handling multiple lifeboat inspections and repairs, as well as NDT and UT inspections 24/7 in a trusted and reliable way.



Colon Maritime Investor
Colon, Rep. of Panama
www.tisalifeboatndt.com
info@tisalifeboatndt.com
+507 61129231

TABLE OF CONTENTS

- 1 - November edition cover page
- 2 - Our Strategic Partners – NDT, UT Services
- 3 - “Half a Century” Providing Peace of Mind and Ready for More - Editorial
- 4 - Amazing Jobs – Imagination, Execution and out of the box solution
- 7 - Our Strategic partners – Deckma Hamburg
- 8 - Marine Solutions – Salvage operation of a lifeboat at anchorage
- 9 - Learn About us – Who is Who in Our Team
- 10 - Amazing Jobs – Replacing Damaged Shell Plating of a Post-Panamax Flat bottom
- 13 - Our People – Honoring the Legends
- 14 - Our Culture – Sustainability: Our Mission
- 16 - Our Strategic Partners – HullWiper



talleresindustriales -shiprepairs



@talleres_industriales



www.talleresindustriales.com

EDITORIAL



“HALF A CENTURY” PROVIDING PEACE OF MIND AND READY FOR MORE

More than fifty years ago, Rafael Arosemena together with a small group of enthusiastic engineers and technicians started a new ship repair company in Colón, on the Atlantic side of the Panama Canal. Back then, he could hardly imagine the company’s current achievements and worldwide reputation.

Some of the key factors for the company’s success during all these decades have been: commitment, adaptability, sacrifice, a sense of urgency, trust, corporate and social values, and giving our clients peace of mind.

Today, the company has a very strong management team, fully committed and working along a skilled and globally trained workforce ranging from 300 to 400 employees.

Our business model “an emergency room for ships” has been tested during this new Covid era, giving priority to the safety and health of all our employees. Every day we are dealing with and overcoming unpredictable and unknown factors, which are part of the reality that we must adapt to.

We are ready for another exciting 50 years full of challenges and goals to accomplish; however, we must not forget what made us successful to thrive during our first half-century. We must follow our Founder’s legacy of community reinvestment, social volunteering performance, and clear values. We have a great responsibility toward our country and the global maritime community.

LINO AROSEMENA, CEO

IMAGINATION AND EXECUTION, OUTSIDE THE BOX SOLUTION

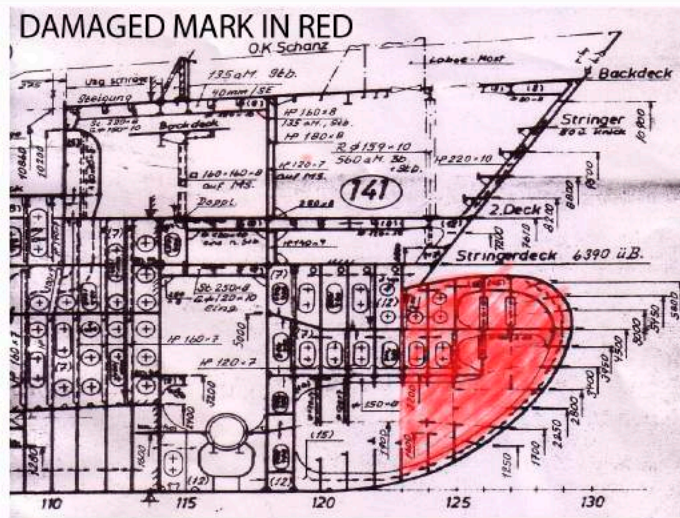


When all conditions might suggest that dry dock is the only solution to our clients' needs, Talleres puts together a strategic solution that includes creativity, experience, know-how, and outside the box philosophy to exceed our clients' expectation. On this particular project, a bulk carrier suffered a major damage to her bulbous bow at Cristobal, Panama. Due to the deformation and rupture, in which most of the steel had lost its properties, a temporary repair was not feasible.

First, we were called for an underwater assessment of the damage, since part of the bulbous bow was submerged. After our initial report, the owners started to search for a dry dock according to Class and Underwriters; it was the only way to perform permanent repairs since the bottom part of the bulbous bow remained underwater. This is when we decided to push our imagination and creativity to make things happen and respond with effectiveness to our client.



We work as strategic partners with our clients!



We asked the owners to allow us until the next morning to present our tender. Our proposal included the design and fabrication of a 12-ton cofferdam large enough to enclose the bottom section of the hull and secure a dry environment. Fabrication and installation had to be done within 2 weeks.

After our proposal was approved, we proceeded with the fabrication of a new bulbous bow.

Templates were taken from onboard to adjust to the original drawings. Simultaneously, the 12-ton cofferdam was fabricated in our workshop by our experience engineers and installed by our commercial divers.

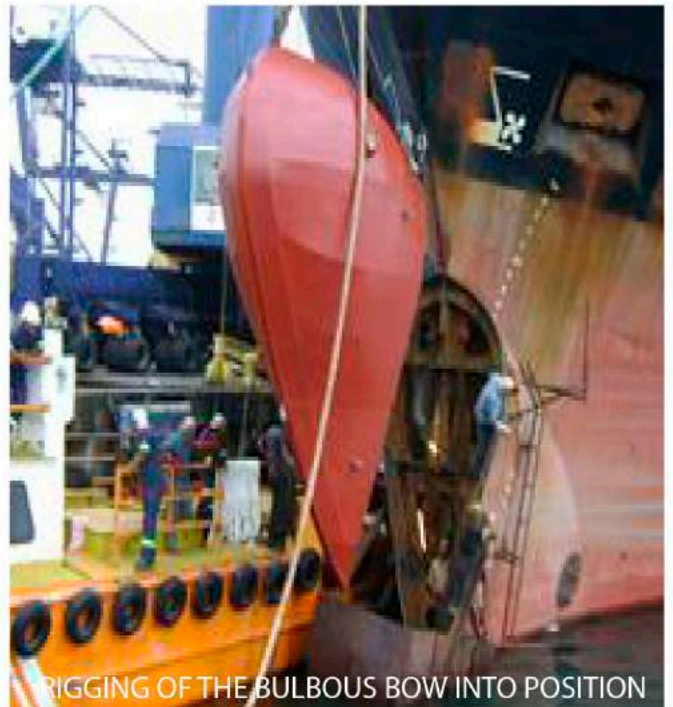
The staging was installed around the affected areas and fitters started to crop out the damaged sections of the bulbous bow.



FABRICATION OF THE BULBOUS BOW IN OUR WORKSHOP



FINAL COATING



RIGGING OF THE BULBOUS BOW INTO POSITION



The job involved major logistics and rigging with shore cranes and industrial chain blocks. The task was accomplished smoothly with a great team effort. Repairs were completed on time, to the satisfaction of all stakeholders. This repair reinforced our mission which is to provide immediate solutions for ship repairs and reduce the economic impact for our clients while promoting employment, ethical values, and environmental responsibility.

MISSION ACCOMPLISHED

**We take the challenges
others don't.!**



WE HELP TO PROTECT THE ENVIRONMENT



DECKMA
HAMBURG

specializes in the measurement of oil in water



TALLERES IS THE LOCAL REPRESENTATIVE OF DECKMA IN THE PANAMA CANAL

Almost 10 years ago, Talleres partnered with DECKMA HAMBURG GmbH, a half-century-old German company, which we found fully compatible with our goals, beliefs, and mission.

DECKMA HAMBURG GmbH is a well-established company, supplying oil-in-water monitors and systems to the marine and industrial market. Deckma's measuring applications provide safety to the marine industry at the Panama Canal and worldwide, by having a continuous overview of the oil particles and other contaminants in the ships' residual water. This is the most important prerequisite to effectively protect the marine environment. Balboa and Cristobal are key ports to calibrate, repair, or install these monitors during a vessel's waiting time for transit or cargo operations.

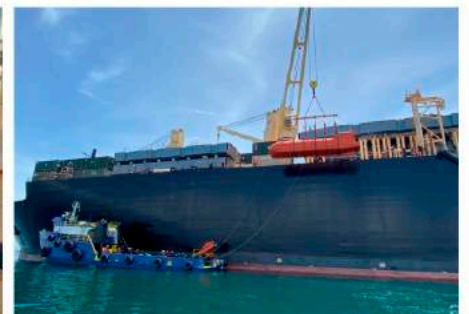
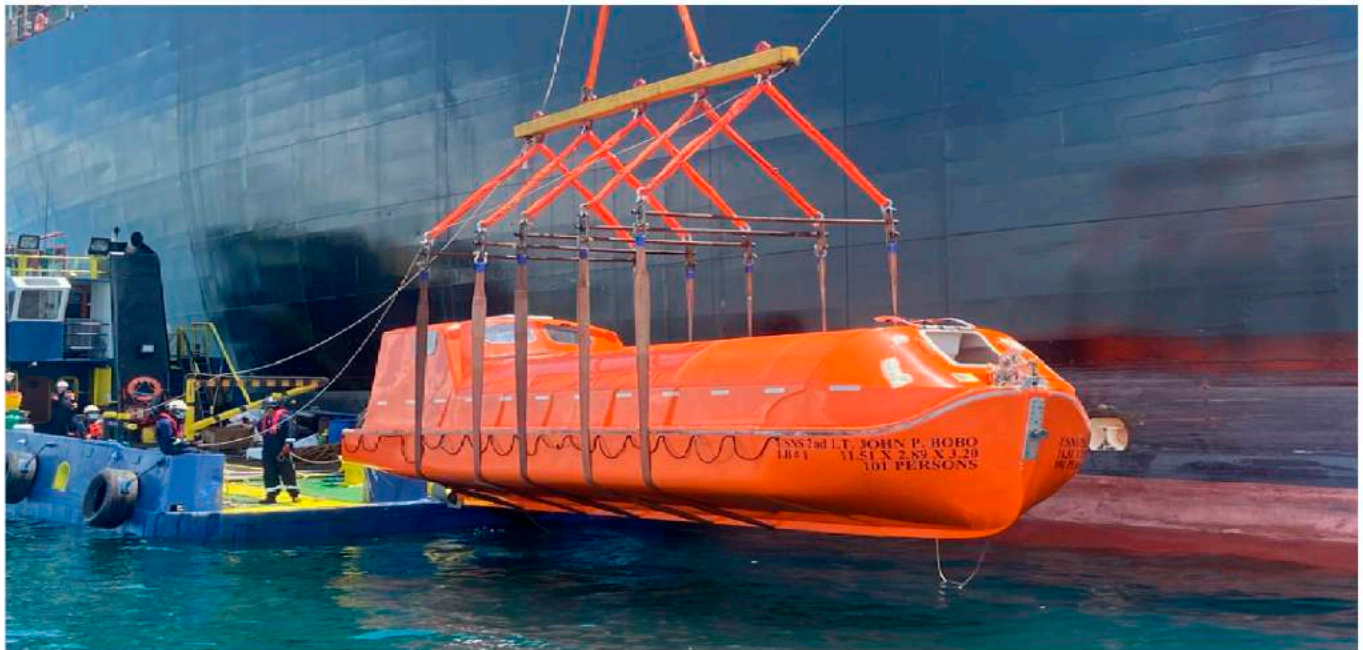
SALVAGE OPERATION OF A LIFEBOAT AT ANCHORAGE

A month ago, we were called to recover, secure, and perform a rigging operation of a lifeboat that unexpectedly fell into the sea during a drill. Luckily, the damage was only on the boat's aft structure and none of the crew got hurt.

We managed to immediately recover the lifeboat from the sea and secure it to our supply boat, alongside the vessel during the night. Our engineers worked 24/7 on a plan to retrieve the lifeboat from the water, which was approved by the owner.

The job was performed as follows: a certified 10-ton spreader bar and lifting straps were provided to lift the 5590 kg boat. For this operation, we had to use our commercial divers to secure the straps around the boat since the aft lifting eyes were damaged. The lifeboat was then lifted with the vessel's crane, to the owners' satisfaction. Talleres has all resources on-site to perform 24/7 turnkey solutions in record time.

MISSION ACCOMPLISHED





Juvencio Pizza
 Technical Manager
 +507 6112-0047



Guillermo Rosina
 Cristobal Area Senior Project Manager
 +507 6112-0051



Sergio Burke
 Balboa Area Senior Project Manager
 +507 6005-6954



Victor Espino
 Senior Project Manager
 +507 6030-3381

WHO IS WHO IN OUR TEAM

There are more than 100 years of combined working experience among our Technical Management staff, ready to help overcome any challenges on your path. Each of our managers has a specialty in the field, but since we at Talleres are multitasking, they have seen and solved countless problems successfully. On the next edition, we will keep introducing key staff that most likely you know by name, text messages, emails, or now via virtual meetings.

PERMANENT REPAIRS ON THE FLAT BOTTOM OF A POST-PANAMAX TANKER

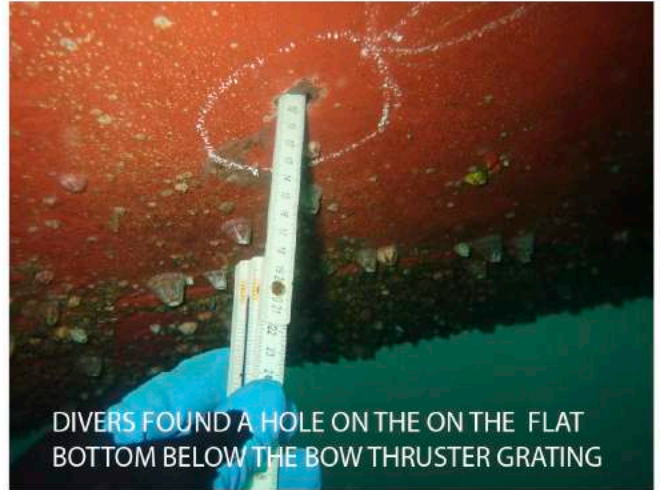


POST PANAMAX TANKER AT ANCHORAGE

In June, we were contacted by a ship manager to perform a damage assessment with an underwater survey at the Chiriqui Grande oil terminal. We mobilized 600 km from our base to meet the vessel and assist without delays.

During this urgent inspection, divers found a water ingress on the flat bottom, below the Stern Thruster tunnel, affecting the bilge holding tank. The rupture was immediately plugged to allow the vessel to sail to Cristobal for permanent repairs, as per class requirements.

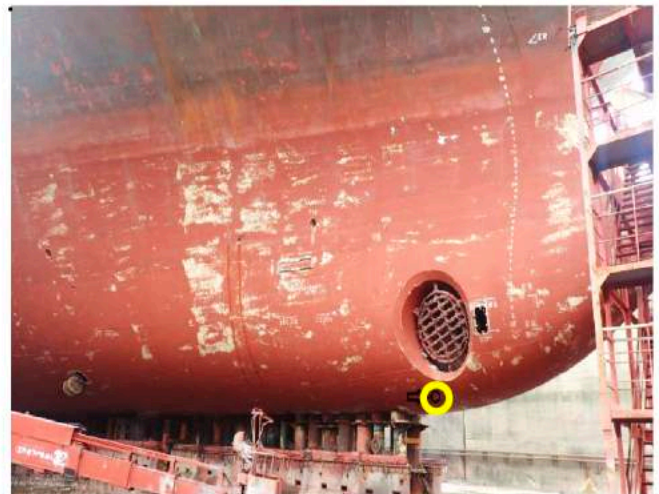
The welding repair procedure was immediately issued to the owners and class for approval. Once we got the green light and the vessel arrived at Cristobal, we started the fabrication of a custom-made cofferdam, due to the plate curvature. Ultrasonic thickness gauging was undertaken to determine the size of the new insert bottom 500x420mm plate and the internal reinforcements.



DIVERS FOUND A HOLE ON THE ON THE FLAT BOTTOM BELOW THE BOW THRUSTER GRATING

Once the divers installed the custom-made cofferdam and made the area safe to work, the marine chemist issued the 'gas-free' certificate, our fitters proceeded to cut the damaged bottom plating and reinforcements inside the bilge holding tank.

The last phase of the job was the most delicate and included the fitting, preparation, beveling, and welding of the new plating.





DIVER READY FOR ACTION



DIVERS MAKING TEMPLATE FOR COFFERDAM



FABRICATION OF CUSTOM MADE COFFERDAM

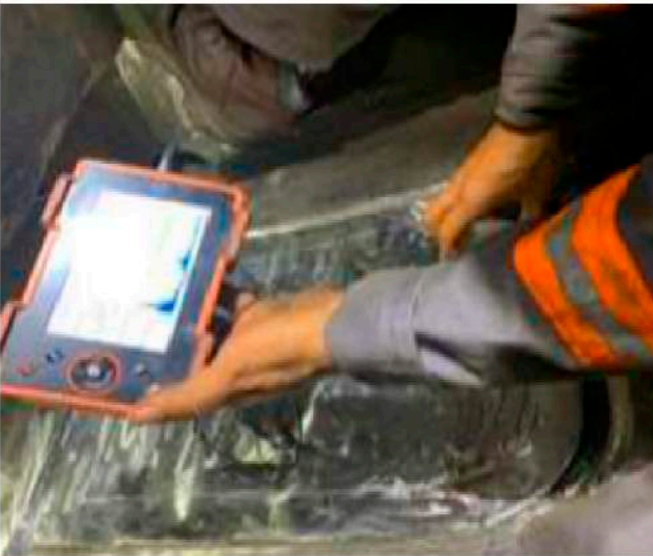
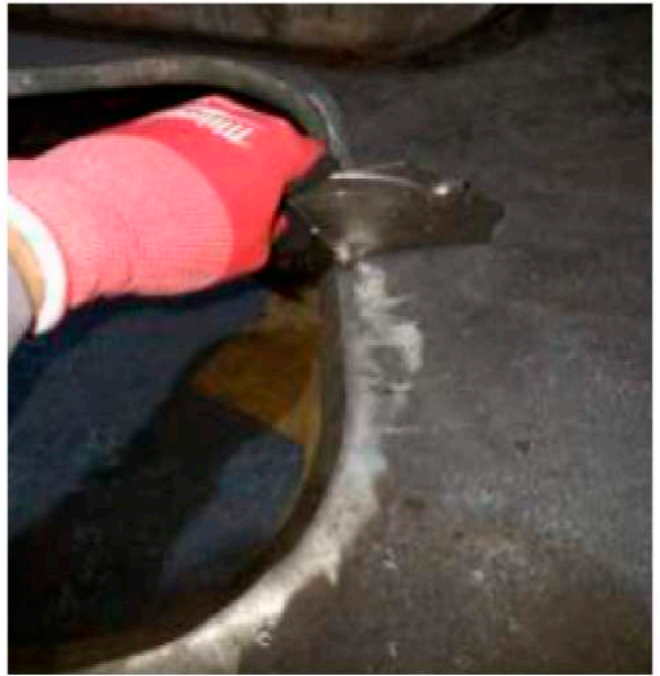


DIVERS RIGGING COFFERDAM

This procedure, which involves welding full penetration from one side without backing, consisted of various passes, in which the root pass is the most critical of all. The NDT engineer is involved during the whole process performing visual, liquid penetrant, vacuum and ultrasonic testing of the entire process.



COFFERDAM IN POSITION FOR INTERNAL REPAIRS



The job was completed to the satisfaction of the owners and class surveyors.

MISSION ACCOMPLISHED

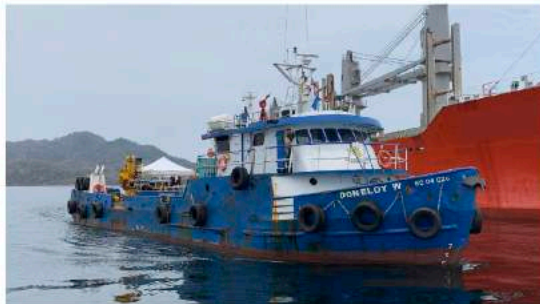
FOUR MEN – 175 YEARS OF LOYALTY HONORING THE LEGENDS



BARGE MR. HUSBAND



RICARDO HUSBAND 49 YEARS OF SERVICE



SUPPLIER DON ELOY



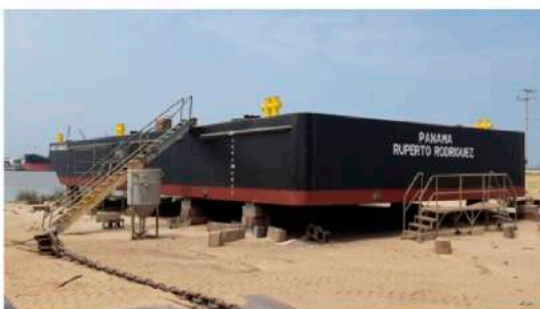
ELOY WILLIAMSON 49 YEARS OF SERVICE



SUPPLIER RONALDO B.



RONALDO BRATHWITHE 39 YEARS OF SERVICE



BARGE RUPERTO RODRÍGUEZ



RUPERTO RODRÍGUEZ 38 YEARS OF SERVICE

The legacy of these four remarkable professionals and human beings will always be remembered because they represent the values that Talleres stands for.

SUSTAINABILITY - KEY MISSION IN TALLERES' BUSINESS MODEL



Talleres' mission, through our safe, educated, and committed workforce, endeavors to make a positive contribution to the world. We believe in our mission by managing the environmental and social risk in our society, for the benefit of future generations around the world. Talleres will always focus on local issues that respond to global problems as well.

Talleres has a long history of achievements related to social responsibility programs during our first half-century. We have been very active and have also partnered with many organizations to fight against poverty, hunger, and to improve the education standards in our community and country and will continue committed on being part of the solution.

"We are responsible with our community and the environment."





"We believe in the wellbeing, safety and happiness of people"

Moving forward – 2021 – based on our current pandemic status, we are focusing on our stakeholders’ needs – biosecurity, health, education, combatting corruption, and climate change. We are constantly reviewing our strategy for the upcoming years. To reach our goals we must fully engage all levels of the organization. We must work together and strengthen our relationship with all our stakeholders for a common goal benefitting our future generations. This is not only the right thing to do but what is expected from us.



HULLWIPER

AT THE PANAMA CANAL

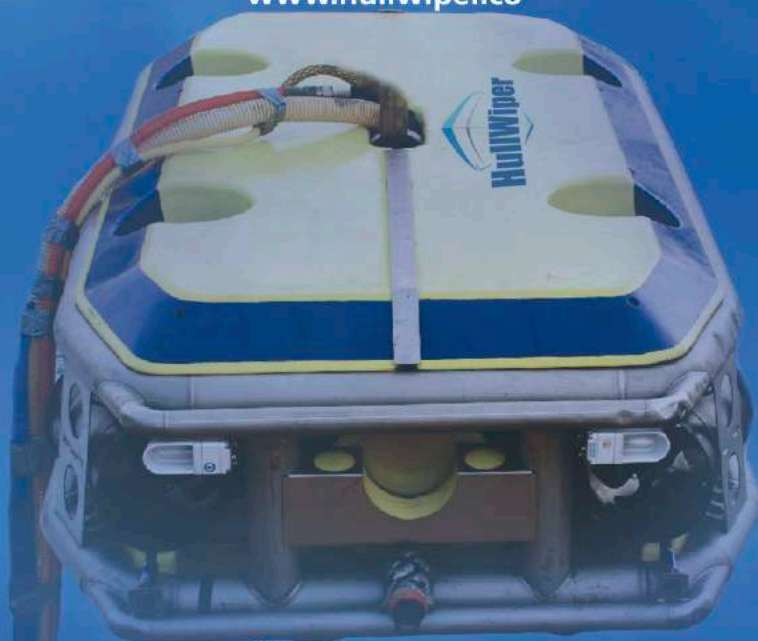


**BIOFOULING WILL NEVER
GO IN THE WATER AGAIN.**

HullWiper captures all the biofouling it cleans using its onboard filter system, keeping vessels and the Panamanian oceans clean.

www.talleresindustriales.com

www.hullwiper.co



HullWiper

TIT
TALLERES INDUSTRIALES S.A.