



DECEMBER /2021

# TALLERES INDUSTRIALES, S.A.

24/7 SHIP REPAIRS AND MARINE SOLUTIONS

MAGAZINE *Special Edition*



## AMAZING PROJECTS OF 2021

[www.talleresindustriales.com](http://www.talleresindustriales.com)



### CERTIFIED COMPANY



#### EDITORIAL LINO AROSEMENA, CEO

On this final edition of TALLERES' magazine, I would like to start by thanking all of our employees, clients, strategic partners, and stakeholders in general, for the support and trust during this 2021 full of new projects and challenges in the ship repair industry.

In 2022 we will focus more on one of our main values which is Education. We all agree that having the human talent will differentiate us from the rest, and therefore we must invest heavily on this. Even though time is our biggest enemy, we will manage to program tailor-made training sessions to our staff.

We are ready for the upcoming year, full of new challenges and goals to accomplish. We have a great responsibility toward our country and the global maritime community, and therefore we will give 110% to achieve our stakeholders' expectations.

We hope you enjoy this magazine!!!



## 52 YEARS PROVIDING PEACE OF MIND AND READY FOR MORE



*Special Edition*

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, social values and giving our clients peace of mind. Talleres' employees are the main assets of our business, and they determine the success or failure of it. The work our engineers, technicians, divers, and employees in general, do onboard vessels and workshops determine what customers and partners see. Brochures, websites, marketing, and trade shows do not mean anything if people do not perform. Our Technical staff are the real commercial team of Talleres.

In this business, performance is critical, nothing else. We are proud to have in our team a group of experienced, talented, and committed employees willing to go the extra mile to achieve the customers' goals and expectations.

## “TALLERES’ PLAYGROUND”



*Special Edition*

Talleres’ ecosystem is at sea. Our daily routine involves giving afloat solutions to ship managers who need fast, safe, and cost-efficient services in the middle of complex, time consuming situations. Our daily playground is at both anchorages of the Panama Canal. To have fun we need to reach the site, and this involves having a fleet of full equipped boats and working platforms to perform our tasks. We must also come with human talent to be able to come with unplanned solutions for customers who need unconventional repairs. We perform all type of dry dock repairs at anchorage and every day we specialize more to make it even more cost-effective.

We have become one of the world leaders in afloat repairs of propulsion systems at the Panama Canal. From Rudder to Propeller repairs as well as replacement of stern seals and tail shafts are just a few systems that we can repair afloat along with strategic partners worldwide. One of our long-term objectives is making ship repair solutions automated, friendly to the environment, and faster to keep the off-hire expenses as low as possible for our trusted clients.

## FAST AND PROFESSIONAL REACTION DURING AN STS OPERATION AT BALBOA ANCHORAGE



Talleres Industriales, along with its strategic partner, Teekay Marine Solutions, performed a ship to ship (STS) operation of 300,000 barrels of unleaded gasoline between two Panamax oil / chemical tankers. The STS support vessel was mobilized to the base to gather up fenders, hoses, and gear to perform the job.

Once alongside, STS personnel were transferred onboard with the crane using a lifting basket. Four primary fenders and two secondary fenders (Yokohama Fenders) were installed in position on the service ship (SS).

Two 12" diameter High Velocity cargo hoses were lifted up by vessel crane and connected on one end. Each hose had a max capacity of 40,000 BPH (barrels per hour) giving a maximum transfer rate of 80,000 BPH. Mooring diagram was shared by both ships and transfer of product from the STBL (ship to be lightered) started. The job was performed around the clock in 36 hours.

## DRY DOCK IN THE MIDDLE OF THE OCEAN



*Special Edition*

A European ship management company reported a problem on the starboard windlass of one of their Panamax chemical tankers. Crew have found cracks on the main bearings, wastage of the foundations, and oscillation during windlass operation.

Immediately after arrival at Balboa anchorage, Talleres arranged a team of mechanics, welders, 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.

## MAJOR AFLOAT PROPULSION REPAIRS AT ANCHORAGE



*Special Edition*

In the middle of the Pacific Ocean, on her passage from Korea to Mobil, USA, via the Panama Canal, a Panamax bulk carrier broke its intermediate propulsion shaft. Owners decided to bring the vessel to Panama to perform repairs at Balboa anchorage with Talleres Industriales. A very complex and unique repair. Trimming the vessel, removing the propeller, pulling back the tail shaft, cutting an access at one side of the hull, removing the broken intermediate shaft, and installing a new shaft.

## UNDERWATER SOLUTIONS



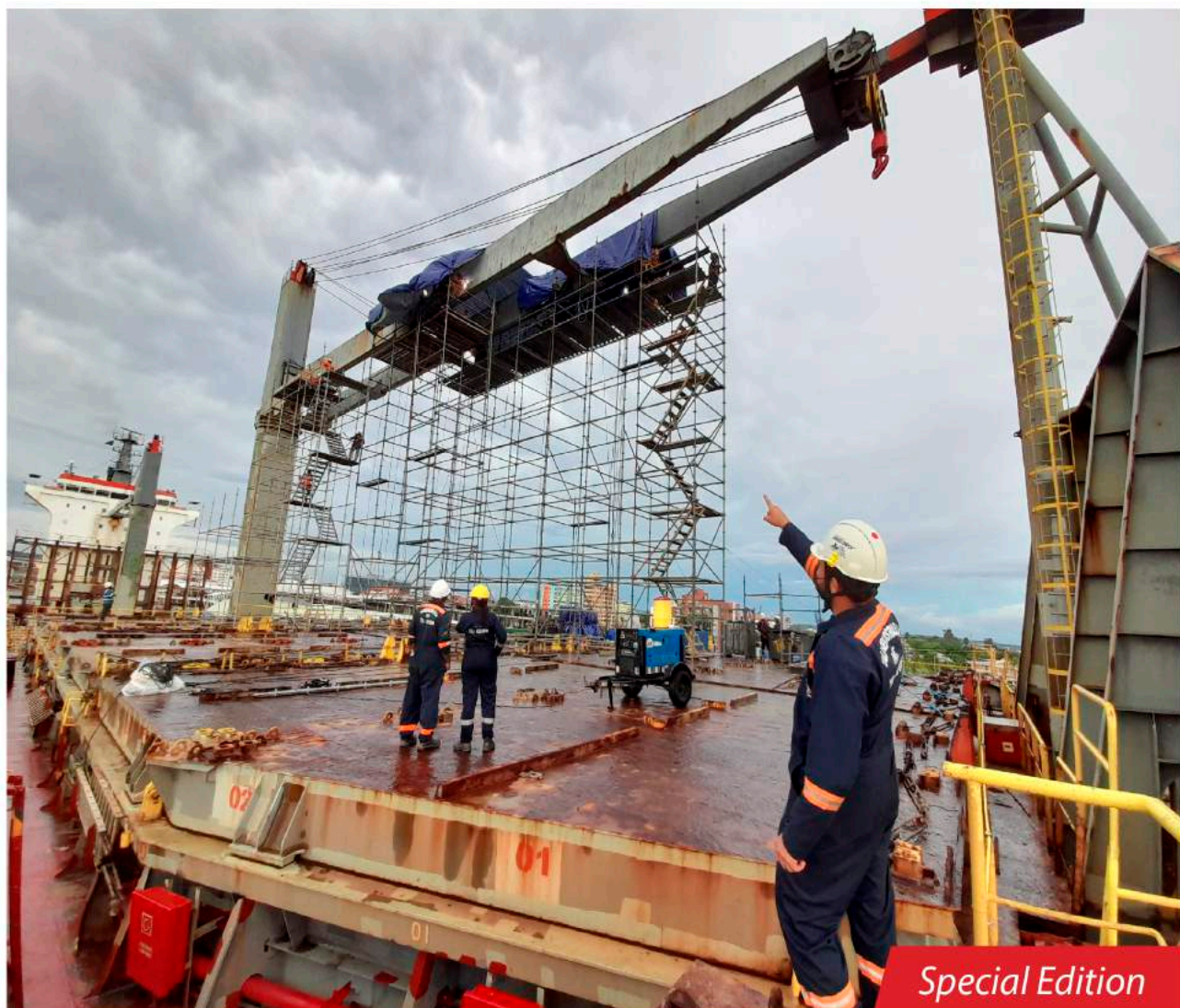
*Special Edition*

Our diving station specializes in:

Underwater Repairs and Engineering – class approved shell plating renewal underwater, propeller & rudder repairs, scrubber pipes renewal. Underwater hull cleaning and propeller polishing – Eco Friendly ROVs. Underwater CCTV / Photography – Class Approved.



## IN SITU STRUCTURAL REPAIR A LONG THE ENTIRE LENGTH OF A JIB BOOM CRANE



Talleres was assigned to perform in situ repairs to a jib crane boom at Cristobal. The requested proposal involved doing repairs in situ by erecting close to 1000 cubic meter of scaffolding on vessel deck in way of the entire forward crane. Multiple steel inserts had to be done through the entire length of the crane.

Corroded areas were cropped, and new sections of plate inserts were bent, fitted, and welded in situ by class approved welders and using approved welding procedures. After completion, all new welds were tested with MPI and Ultrasonic methods.

# STRUCTURAL REPAIRS TO AN ELECTRIC ROPE SHOVEL P&H 4100 DIPPER



*Special Edition*

Talleres Industriales has been collaborating very closely with Minera Panama to support them on the maintenance and repairs of the components used in everyday production operations, keeping the focus on reducing the impact (logistics and economics) of the "out of service" periods.

The size of the components does not matter, as in the case of the Dipper for an Electric Rope Shovel H 4100 which nominal payload is 81.6 MT and its nominal dipper capacity is 45.9 m<sup>3</sup>.

# HELPING TO BUILD THE FUTURE OF THE TOURISM INDUSTRY WITH OUR SISTER COMPANY CANAL BARGES & CRANES



Talleres, along with its subsidiary company Canal Barge & Cranes (CB&C), provided 7 deck barges of different sizes and capacities, to assist China Harbour Engineering Co. with the dredging and construction of one of the biggest cruise terminals in Latin America. The Amador Cruise terminal, located on Perico Island of the Amador Causeway in Panama City, Panama, will be the first cruise terminal on the Pacific coast of Panama.

## COLLISION DURING BERTHING MANEUVERS AT THE PORT OF CRISTOBAL



The job was performed within the given tight window, during bad rainy weather, to the satisfaction of the attending P&I and ABS class surveyors, and applying the highest level of COVID-19 safety protocols.

## EXPERTS ON DRY HABITATS FOR RUDDER REPAIRS



Tailor made cofferdams for rudder

*Special Edition*

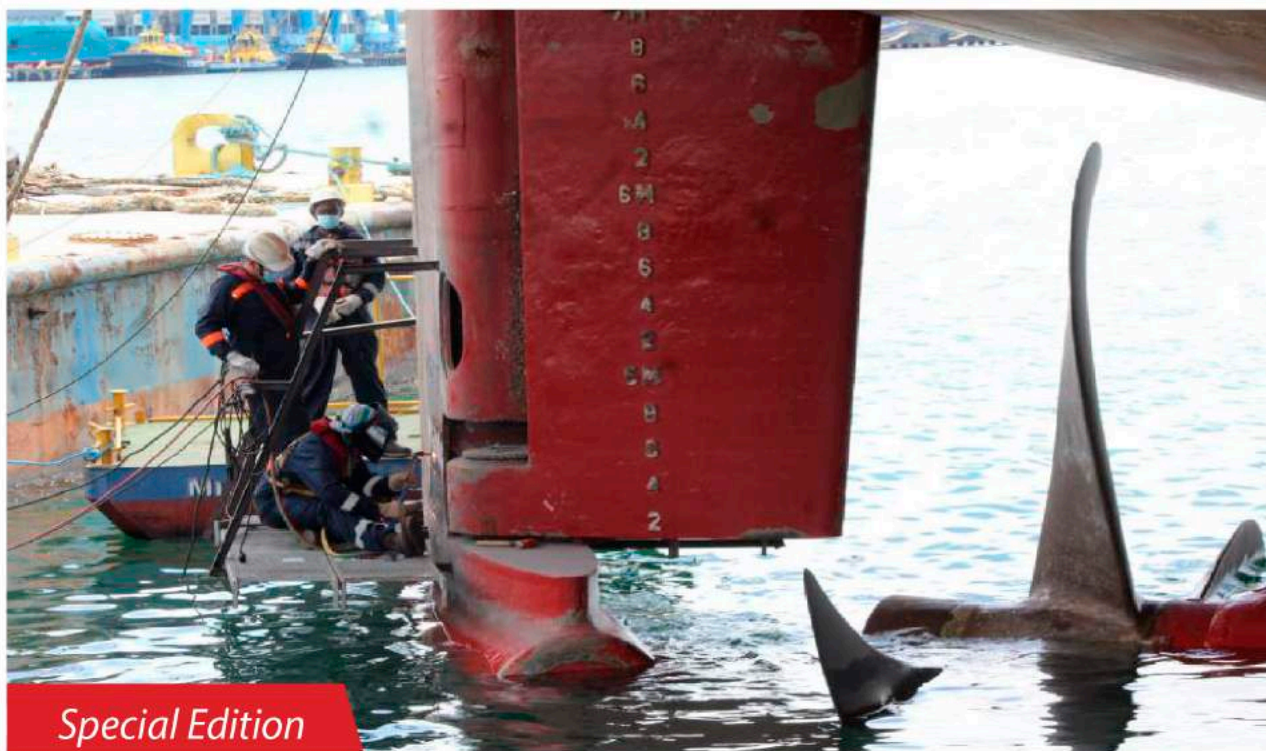


In the shipping industry, having an alternative path is a must, especially in an era full of restrictions, uncertainty, and no time to waste. Providing a backup plan solution for our clients is our mission. Panama has a lack of layby berths to perform repairs and therefore we have made our anchorage into layby berth facilities and workshops.

Our divers and dry welders work as a team to perform these permanent repairs to the highest quality and safety standards. Some types of fractures in the rudder blade may require a different solution to grinding and welding which depending on the area could be done with class-approved wet welders. But when it comes to bigger repairs then an insert must be installed. With a cofferdam installed around the fracture or damage, our team along with a class surveyor can inspect the area, see the extension of the damage in a dry habitat and perform plate renewals on the rudder blade plating as needed.

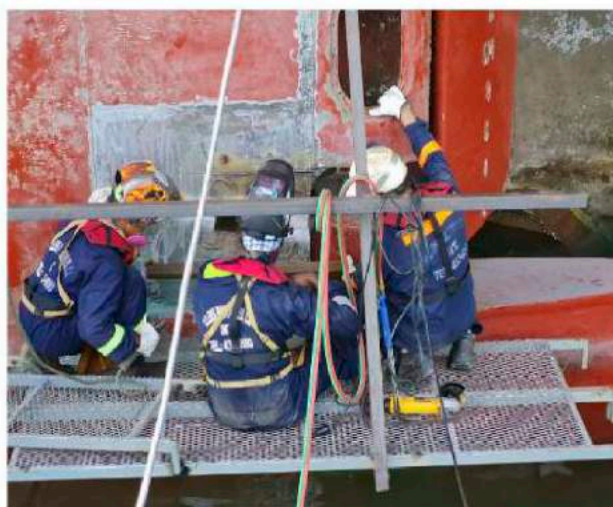


## DRY REPAIRS OF A RUDDER JUST 300 MM ABOVE THE WATERLINE

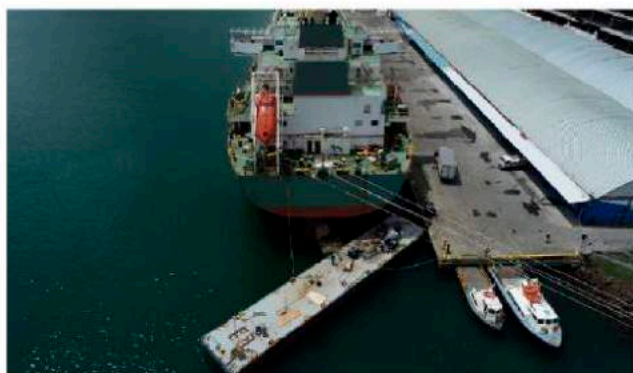


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At Talleres Industriales, rudder repairs have become one of our expertise and very common jobs in our portfolio. Depending on the vessel's draft, rudder repairs will be performed above, below or in between the waterline. Many of our divisions are always involved in getting a piece of the action when we are approached with a rudder defect or damage.



On this new challenge, our diving team discovered on a 40,000 DWT Bulk carrier some fatigue cracks on both sides of the rudder's shell plate and connecting castings area.



# WELCOME 2022 HAPPY & HEALTHY SEASON HOLIDAYS

Merry  
Christmas!



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