SHIPBUILDING

Professional vessels in steel and aluminium.

GLOBAL Worldwide

www.sym-naval.com

SHIPYARD New buildings



Design, quality and service.

Ship building and conversion based on quality technical solutions



SYM Naval. Shipyard in Vilanova i la Geltrú *(Barcelona).*

The SYM Naval team has been in the sector consolidated in **shipbuilding**, **conversion** and **repair activities** for ship-owners around the globe for more than 25 years.

We provide quality **technical solutions** to our clients and we are ready to take on the naval engineering challenges that the shipowners' needs require.

We are specialists in the construction of vessels for harbour use, support and transport services, as well as in conversion, repair and maintenance of all types of vessels.

SYM Naval is the only company in the Spanish Mediterranean that builds steel vessels classified by classification societies belonging to the **IACS** (International Association of Classification Societies). Thus, we guarantee the high standards of safety and quality required internationally. We use **cutting edge software** and innovative design technology to be able to provide tailored solutions to the most demanding ship-owners.

The result is **high-quality vessels technologically adapted to the European and international regulations** of shipbuilding and repair, and complying with the flag requirements as well as the regulations of the applicable classification societies.

Our work centers are strategically located in the Mediterranean and in the Caribbean, areas in which **SYM Naval** began the development of its ship repair, conversion and construction activities.

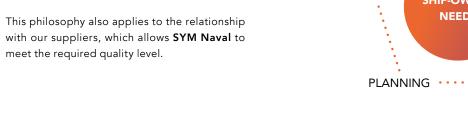
We have our own naval infrastructure, along with a team of highly trained engineers to face any type of need. OUR MISSION: TO PROVIDE INNOVATIVE AND TECHNOLOGICAL SOLUTIONS TO LEAD OUR CLIENTS TO BE MORE EFFECTIVE AND COMPETITIVE.





STRATEGIC BASES. Our centers in the Mediterranean (*Barcelona*) and the Caribbean (*Dominican Republic*).

Our work centers boast **naval technical office.**



OUR PHILOSOPHY. A centralized leadership and engineering concept allows results at reduced costs, with shared workload and expertise and technology transfer between our shipyards in the

Mediterranean and at the Caribbean.



RESPONSIBILITY

WE DESIRE A COMPANY IN WHICH:

OUR TEAM OF INDIVIDUALS, OUR CORE ASSET, FEEL THE REALIZATION OF THEIR ASPIRATIONS AND THE SATISFACTION OF A JOB WELL DONE.

SHIPOWNERS, OUR RAISON D'ÊTRE, FEEL THAT WE ARE THEIR CORE PARTNERS IN THE DEVELOPMENT AND SUCCESS OF THEIR OPERATIONS.





SHIPYARD

Ship repair and conversion in record time.

SYM Naval begins its shipbuilding activity through a deep knowledge of vessels based on its experience in the field of ship repair and conversion.

This shipyard is capable of undertaking the construction of any type of vessel for harbour services and support for rescue, environmental, transport and submarine intervention activities.

Additionally, due to its experience, it can carry out any conversion project, from its design and realization in the **SYM Naval** centers, to its management, collaborating with other shipyards where the conversion is carried out. **SYM Naval** counts on a multidisciplinary team of engineers with extensive experience in designing and creating new vessels tailored to current quality and environmental demands.

TOP-LEVEL MULTIDISCIPLINARY ENGINEERING TEAM.







SYM NAVAL Experts in shipbuilding.

PLANNING

Digitization processes.

SHIP-OWNER PARTICIPATION

Expectations Met 100%.

The **digitization** of our entire shipbuilding and conversion processes is one of our main goals toward to becoming, as a **shipyard 4.0**, a world benchmark.

Ship-owners who work with us have open doors to a close collaboration in the production process, from the design of the vessel to its delivery. This working methodology ensures the total adaptation of the characteristics of the vessel to the operating needs of the ship-owner. Collaboration between the ship-owner and the shipyard eliminates misintepretations and ensures the delivery of the vessel within contractually agreed deadlines.

With this **digitization**, reliability of the maintenance process can also be achieved during the life **cycle of the vessel**. **SYM Naval** counts on professional service for the design and construction of steel and aluminum vessels, in addition to providing worldwide technical assistance and repair for merchant ships and cruises, either in wet docking or via riding squads.

From its base in the Caribbean, SYM Naval offers a technical service to cruises and merchant ships, at port and at sea, which provides technical solutions for works in electrical and hydraulic systems, piping installations, large maneuvers and conversions (steel and aluminum), among many other services.

ISO guarantee. The company has three certifications granted by the Bureau Veritas for the construction, conversion and ship repair and as a technical office for naval engineering. All of them are transversally integrated in all **SYM Naval** activities and projects. WORLDWIDE TECHNICAL ASSISTANCE AND REPAIR FOR MERCHANT SHIPS AND CRUISES, EITHER IN WET DOCKING OR VIA RIDING SQUADS.





PROJECT MANAGEMENT An experienced professional team to attend vessels in any sea or harbor. Own bases in the Mediterranean and the Caribbean.



DIGITAL PROTOTYPE

Engineering and workshop pull together for the production of a digital vessel prototype, speeding up the decision-making and the construction.



HARBOUR TUGS

Full adaptability to the needs and requirements from the ship-owner.

SYM Naval offers a complete range of harbour

tugs up to 70 tons of bollard pull, thus position-

ing itself in the most efficient tug segment on the market. The result is vessels fully adapted to the operational needs of the shipowner and to the

In all the tugboats built we have involved the owner from the beginning of the design. **SYM Naval** builds its tugs under the supervision of a Classification Society, thereby ensuring the highest standards for their safety and quality.

SYM Naval work centers, with its own shipyard in Vilanova i la Geltrú (*Barcelona*) and a workshop in the Dominican Republic, together with a team of naval engineers and experts in the naval sector,

allow us to tackle the challenges imposed by our

clients of this type of vessels.

demands of the harbour authority.





SYM Naval harbour tugboats have the following main features:

Construction ranges

TOTAL LENGTH	Up to 35 m
POWER	UP TO 5,500 HP
PROPULSION	Conventional, VOITH-SCHNEIDER, Azimutal
BOLLARD PULL	Up to 70 tons

We work with a team and service suppliers that are properly evaluated and screened, who ensure the level of quality contractually required and compliance with the delivery terms agreed with the ship-owner.



MANEUVERABILITY. At the lowest cost due to a suitable design.



CUSTOMIZATION. Criteria and participation of the shipowner.



RELIABILITY. High-quality materials and components.



ECONOMY. The best value in the market.



BUQUE MARPOL DE APOYO PORTUARIO TM-083-23

SYM Naval also specializes in the design and construction of hydrocarbon waste collection and supply vessels (*MARPOL I*).

Attending the shipowner's operational requirements, the requirements of the Port Authority's specifications, flag regulations and class rules, the vessel designed would be the one with greatest load and versatility. Thus, the certification of the units delivered extends to MARPOL I, IV, V and VI.

SYM Naval is qualified to design and build MARPOL II category vessels at the request of the shipowner.

In our design process we prioritize the shipowner's needs, analyzing and sharing the impact on the cost of construction and maintenance of the different possible service scopes.

For example, the **TM-083-23 vessel** with a Lpp of 23.96 m., a tonnage of 149.9 GT and a draft restriction at 2.43 m., is certified to comply with Flash Point <60°C and has a double hull. This vessel, already delivered, has been a technical and technological challenge that **SYM Naval** has been able

to take on thanks to the high professional level of its team of engineers and production technicians.

SYM Naval has its own team for the design and installation of the electrical, electronic, hydraulic and pneumatic system, offering to the shipowner solutions according to their operating standards, safety criteria and maintenance plans.

SYM Naval produces the digital ship integrating all the systems in a digital model.

Through the digital model the shipowner decides, proposes, modifies and finally accepts the ship to be built, the physical vessel.

Thanks to this digitization process, the deviations between what is expected and what is produced are reduced, production downtime is limited and the contracted quality standard is guaranteed.

But the digital vessel is also a powerful tool for agile and optimal management of the ship's maintenance throughout its life cycle.

SYM Naval thus positions itself at the forefront of the shipyard 4.0.

VESSEL'S OWN DESIGN WITH TOTAL ADAPTATION TO THE OPERATIONAL NEEDS OF THE SHIP-OWNER. BUILT INTEGRALLY IN OUR SHIPYARD IN VILANOVA I LA GELTRÚ (BARCELONA).



Marpol vessel (ranges)

LENGTH	Up to 50 m	
POWER	From 700 to 3,000 HP	
LOAD	Up to 800 m ³	
MARPOL WASTE with flash point >60°C and <60°C		





MANEUVERABILITY. At the lowest cost due to a suitable design.



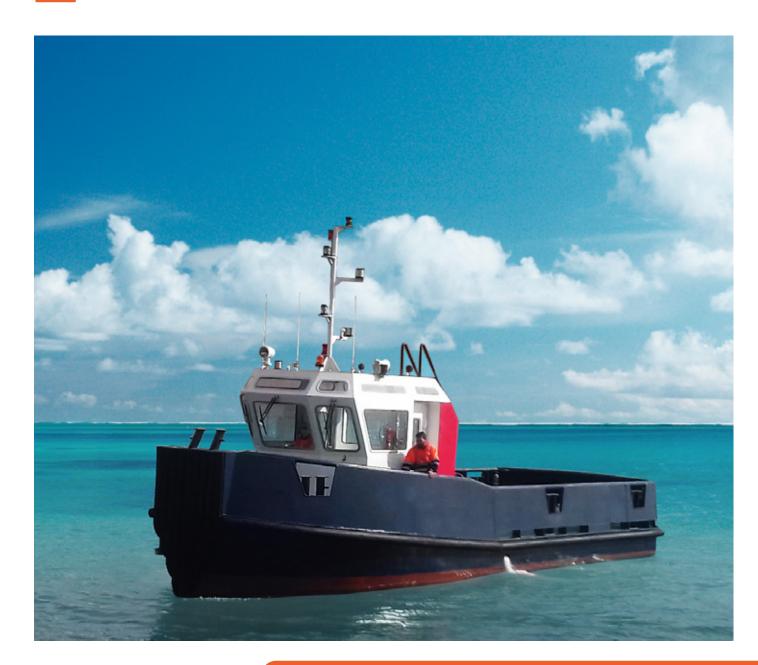


ECONOMY. The best value in the market.

CUSTOMIZATION.

in





MULTIPURPOSE Harbour vessel

The **SYM Naval** multipurpose harbour vessel TM-036-080 is a vessel fully adapted to the operational needs of shipowners and the demands of international port authorities. With a length of 12 meters and a pulling force of up to 8.5 tons, **SYM Naval**'s multipurpose vessels are capable of carrying out the most demanding port tasks.





MOORING BOAT Port support vessel

SYM Naval's TM-024-02 mooring boat is a vessel fully adapted to the operational needs of shipowners and to the demands of international port authorities.



PORT SUPPORT VESSEL Multipurpose support vessel

Anchor supplies, emergency trailers, spillage collection, hydrocarbon waste reception and crew changes are possible in a single **Port Support Vessel.**

Less than 24 m. of freeboard length, less than 1,000 HP of power, up to 150 tons of deck cargo and up to 200 m³ of liquid cargo, MARPOL flash point less than 60° .



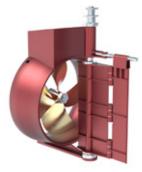


SYM Naval collaborates with public organizations and private companies in the development and definition of different types of boats and vessels for specific surface and submarine activities.



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Propulsion system.



Maneuver propeller.



EQUIPMENT AND SERVICES Work add-ons

SYM Naval selects and proposes the most appropriate equipment for each type of vessel and application, taking into account its reliability, technical service in the area of navigation, warranty response and maintenance cost.

SYM Naval works with the manufacturers of the essential equipment to agree on the acceptance of the installation, in order to extend the warranty to the installed equipment.

By having our own electrical, electronic, hydraulic and pneumatic equipment, the design of the main panel, auxiliary panels, desk panels and automation level is carried out in coordination with the shipowner.



Control panel



Towing hook.



Cargo manifold.

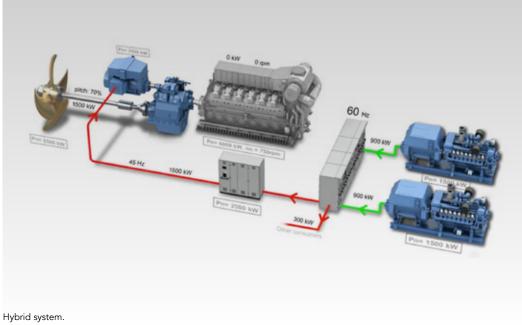
SYM NAVAL DOES NOT EXCLUSIVELY REPRESENT ANY MANUFACTURER. FOR THIS REASON IT IS INDEPENDENT DURING THE EQUIPMENT SELECTION PROCESS.



Azimuth thrusters.



VOITH system.





SYM Naval offers low-emission and zero- emission solutions.

From traditional MDO propulsion with fixed pitch propeller, electric propulsion with **diesel power** source, LNG, LPG or Hydrogen Fuel Cell.

SYM Naval is qualified and at the forefront of the installation of any of the above solutions as long as they are suitable for the type of vessel built.

Experts in the installation of different types of transmission:

- Azimuth thruster
- VOITH system
- Jet Propulsion system

R&D&I PROGRAMS IN THE FIELD OF EMISSIONS REDUCTION.



Machine room.

Machine room.



Machine room.



CUSTOM PROJECTS

Personalization of unique projects.

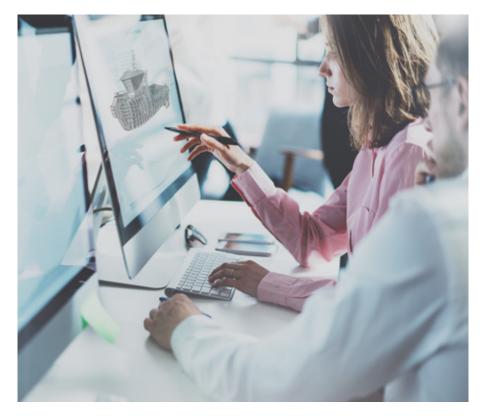
SYM Naval is characterized by its ability to build customized boats and vessels, without technological limits, with the flexibility to integrate improvements during the construction processes to meet the needs of the shipowner or client, and also to meet the most **demanding of quality standards**.

The **shipyard** addresses its offer to the specifications demanded by the client, faithfully respecting the established delivery times, which has forged an excellent reputation and good name within the sector, thus counting on the loyalty and trust of leading ship-owners in the domestic and international markets.

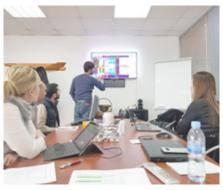
The staff is made up of **highly qualified professionals**, who are fully integrated and identify with the shipyard's work philosophy.

Vilanova i la Geltrú shipyard

WHARFAGE	272 m.
COVERED AREA	2.000 m ²
EXTERIOR ESPLANADE	10.000 m ²







Ship building and conversion based on quality technical solutions



A **technical office** capable of managing major naval engineering challenges with the highest quality, from the project's start to finish.



Steel shipbuilding and aluminum. We design and build ships in a personalized way. IACS classified boats.



Sailing, in port and in dry dock. Maintenance and repair service for ships in dry dock. Worldwide coverage via riding squads.



Analysis of technical and commercial **needs** of each client for the construction of personalized boats. More than 200 satisfied customers.



Sailing, in port and in dry dock. Technical service specialized in cruises. The satisfaction of our clients is a testament to the level of seriousness and commitment we take on in all our projects.



We have ISO 14001 certification, a guarantee of our clear commitment to the environment, which in turn obligates us to uphold the highest environmental standards in all your our operations and facilities.



SYM Naval has ISO 14001 certification, a guarantee of our clear commitment to the environment, which in turn obligates it to uphold the highest environmental standards.



SYM Naval is certified in ISO 45001 for Occupational Health and Safety Management Systems (OH&S), which guarantees that its work is done safely, preventing accidents and occupational health problems.



SYM Naval has ISO 9001 certification, guaranteeing that its processes meet the highest standards in Shipbuilding, Conversion and Repair.



SYM Naval contributes to carrying out maintenance, reforestation, cleaning and protection actions by defining specific action plans with the responsible authorities.

In preparing this catalog, attempts have been made to ensure that its content is correct and up-to-date. The information in this document has been made using prototypes or pre-series vessels. Within the policy of continuous improvement of its products, Ship & Yard Technical Management, S.L. reserves, at all times, the right to make modifications to the specifications or to the vessels presented in this catalog. If you would like the latest and most detailed information, you can request it from the commercial department of Ship & Yard Technical Management, S.L. Ship & Yard Technical Management, S.L. all rights reserved. Reproduction, in any form or by any method, of all or part of this publication is prohibited without the written authorization of Ship & Yard Technical Management, S.L.



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