







## **The Company**

Macnor Marine was established in 2003, in Rio de Janeiro, together with a group of Norwegian equipment suppliers for the maritime and offshore markets.

We exclusively serve our brands in Brazil. The Norwegian culture is inside our culture as a principle in the company when it comes to product quality and solutions we offer to the market ice operate.

Sales, after-sales and service teams are trained annually at offices and factories in Norway to ensure a Norwegian quality experience in our deliveries.

Our premium solutions portfolio starts with Ship Projects and Design, a varied scope for propulsion, automation, deck equipments, safety, accommodation and others solutions for Newbuilding and retrofits.

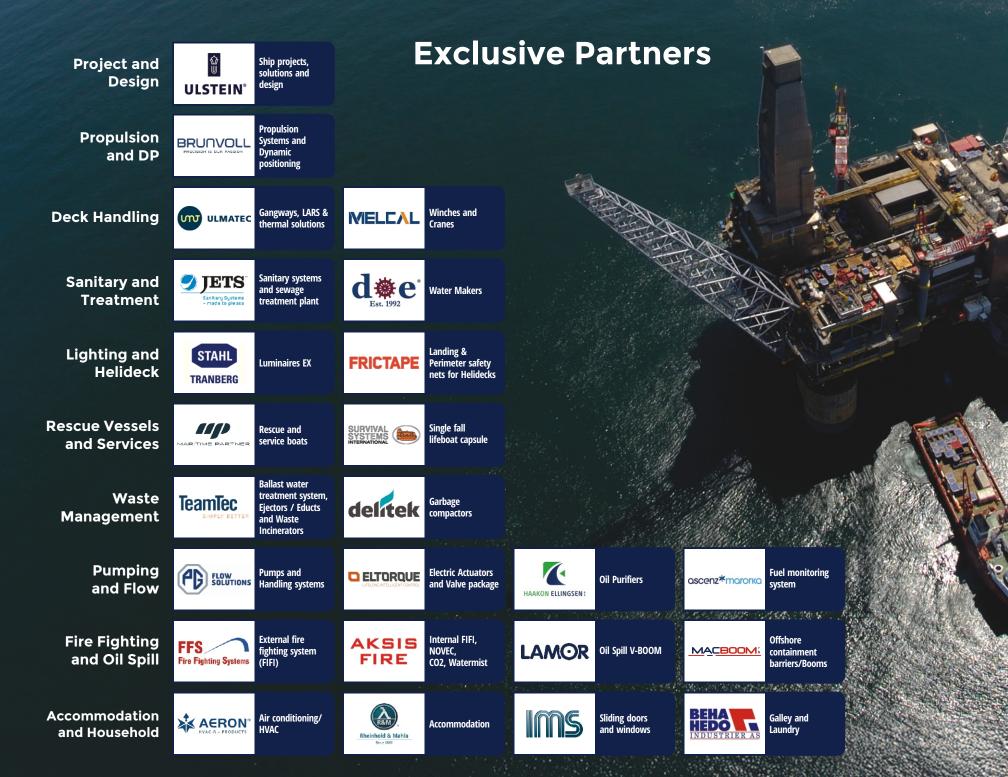
In recent years, we have focused our investments on our services and after-sales division. We have a team of specialists ready for going onboard wherever the ship or platform is located to solve your problem.

We use our service bases in Niterói, Itaboraí, Macaé and Porto Açu, for repairs and interventions on equipment, as well as a stock of spare parts.



#### **Main activities**

- ▶ Sales prospection and development (Exclusive brands and representatives)
- > Services (Team of engineers trained and certified to perform services on board or on site)
- ▶ Aftersales (Logistics, contracts and availability of parts and components supply)
- ▶ Engineering and Projects / Design of ships and specific systems
- ▶ Business Development / Consulting
- ▶ MRO (Maintenance, Repair, Operations), Sourcing, Procurement & Trading company





## **Equipment Division**

#### **PROPULSION**

- Main Propulsion (Azimuth and Shaft/Propeller)
- ➤ Thrusters (Tunnel, Retractable, Azimuthal)
- > Dynamic Positioning (DP) System
- ➤ Oil Purifiers

#### **DECK EQUIPMENT**

- > Cranes, Winches and Davits
- ► LARS, A-FRAMES e Gangways
- > FIFI fire fighting system
- Service Boats (Rescue, Towing, Diving and Patrol)
- Oil Spill Equipment (Combat and containment of oil spills at sea)
- > HPU, Compressors
- ➤ Sewage treatment plant and Water Makers

#### **FLOW SYSTEMS**

- Pumps for any type of fluid
- Multi-Application cargo system (wet-and-dry)
- Agitators
- ➤ Electric valves and actuators
- ► Ethanol cargo/transfer Pumps

# ELECTRICAL, LIGHTING AND HELIDECK SYSTEMS (EX)

- > Explosion-proof outdoor Lighting
- ➤ Navigation lights, searchlights and Helideck
- Electric Heaters
- Helideck Safety Nets: Landing and perimeter

#### **ACCOMMODATION**

- > Air conditioning and Refrigerator (HVAC-R)
- Sanitary System and Sewage Treatment Plant
- Internal fire fighting system (NOVEC/Watermist)
- ➤ Furniture (MDF, Marine Plywood, Steel)
- ➤ Galley, Pantry, Kitchen and Laundry
- ➤ Fireproof Windows and Doors
- ➤ Panels B15 / Rockwool, or honeycomb type, Floor, Doors, fire blankets, etc.

# MRO (Maintenance, Repair, Operations) / Multibrand

- Sourcing and Procurement solution for different equipment and materials
- > Specific demands outside our exclusive scope

# Projects, design & solutions

#### **PROJECTS & DESIGN**

We provide naval projects for several markets and segments Oil & Gas, Offshore Wind, Fishing, RoPax, Yacht/Cruise among others.

#### **PROJECT CONVERSIONS**

Conversions, upgrades and retrofits are smart alternatives for fitting a contract and optimizing the performance of your existing tonnage.

# ENERGY SOLUTIONS - LOW EMISSIONS

We are committed to the environment and sustainability.

We develop energy solutions and equipment aiming at the goal of "ZERO EMISSION" through battery banks, hybrid and electric propulsion, among others, applicable to new constructions and conversions.

#### **SCANNING AND CONDITION MONITORING**

Remote monitoring of the actual condition of equipment and components, with online support from the factory.



Norwegian Quality Experience in Brazil

## **Service division**

#### **Installation and Commissioning**

We offer Installation and carry out commissioning to ensure the operation and warranty of the equipment.

#### **Services and maintenance**

We have the solutions you need to keep your equipment in top shape and efficiency. We carry out inspections, preventive and corrective maintenance on board or in our service bases, as well as more complex interventions such as Overhauls and machining in our service bases.

#### 24/7

Our 24/7 customer service is operated by trained engineers with direct contact to 24/7 factory channels.

#### **Spare parts**

We have a stock of emergency spares in Brazil, and we have direct and unique access to stocks at the factories. When purchasing through us, we guarantee factory origin (OEM certificates). Our import and logistics team are available to guarantee the best cost benefit, agility and care in the "Door-to-Door" transport of our equipment, based on a study of the exchange and replacement flow, both for regular or emergency maintenance.

#### **Upgrade & Retrofit**

Our team of engineers together with the "project managers" of the factories, can develop customized solutions for Upgrades and Retrofits.

#### **Training**

Our team can develop operational training in various applications such as Refrigeration and Air conditioning, Oil Recovery, FIFI, among others.

#### **SPECIALTIES**

- ▶ General factory inspections
- Automation solutions / Software updates
- ➤ Scaling / Zero Pitch
- ▶ Overhauls on Thrusters, Gearboxes and Bombs
- ► Exchange of stamps
- ➤ Alignment
- Machining
- ► Compressor repairs and upgrades
- ► HVAC system repairs
- ► Cleaning of air conditioning ducts and hoods
- ► Annual and 5-Year Certifications of Rescue Boats and Davits
- Structural repairs to Rescue and Workboats
- ► Repairs and Upgrades to Containment Barriers (Oil Booms)
- ► Repairs to winches and spools





### **Oil Spill Package**

We supply all equipment for Oil recovery vessels (OSRV), including our brand, Macboom, Offshore containment barriers, a Norwegian project 100% manufactured in Brazil (RJ), developed by Macnor.

Our equipments package follows PETROBRAS specifications:

- ➤ Traditional Offshore Oil Boom with "J" formation operated by dedicated Workboat (Macboom)
- ➤ Offshore Oil Boom "V" type towed by the main vessel with paravane support (MOS Sweeper)
- ▶ Skimmer
- ➤ Work boat + Davit (approved/LSA)
- ➤ Fire Fighting (FIFI 1 and 2)
- ➤ Chemical Dispersant
- ➤ Drone (service or product)

Official Results from
Oil-On-Water trials (NOFO)
on Oil Recovery efficiency

MOS Sweeper (LAMOR) = 96,4%

Concorrente 1 (CB) = 70%

Concorrente 2 (OT) = 31,8%

Concorrente 3 (DB) = 9,4%

We offer specialized consultancy from existing ships to OSRV with inspections, design and actions for retrofit interventions through our engineering team, as well as training and operational courses for crew.



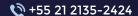






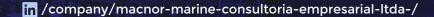
#### 24/7 SERVICES - EMERGENCY

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PRODUCTS AND SOLUTIONS



**SERVICES** 



MACBOOM/ OIL SPILL



MACNOR'S WEBSITE







Headquarter

Rio de Janeiro: Avenida Afonso de Arinos de Melo Franco, 222 - Salas 1905-1910, Barra da Tijuca - Rio de Janeiro/RJ | CEP 22631-455

**Service Bases** 

Niterói - Base 1: Rua José Figueiredo, 40 - Centro - Niterói/RJ | CEP 24030-055

Niterói - Base 2: Rua Professor Heitor Carrilho, 3 - Centro - Niterói/RJ | CEP 24030-230

Itaboraí: Avenida Vinte e Dois de Maio, 9000 RJ-116 Av. Teles, Itaboraí/RJ | CEP 24803-000

Porto Açu: Fazenda Saco D'Antas, Via 5 Projetada, S/N - Distrito Industrial - Porto Açu - São João da Barra/RJ | CEP 28200-000

www.macnor.com.br