

# Smart Marine

# We Represent The Best Innovative Technologies in The World

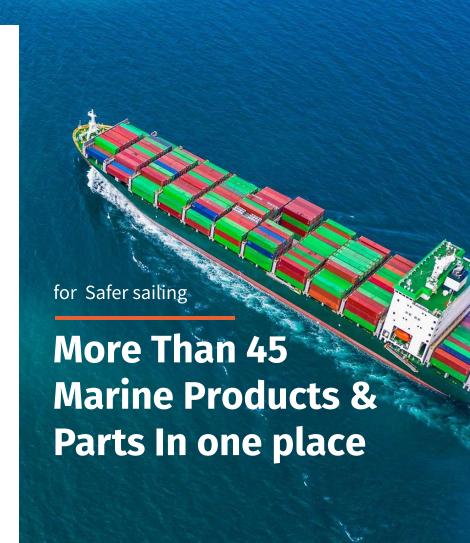


Marine Ancillaries : Heat exchangers, separators, and others

Learn more

Environment Solutions: BWTS, Scrubbers, Data Analysis

Learn more





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# Fosters Energy Solutions for Marine Industry

Our professional staff includes more than 15 years experience in flow equipment, thermal exchangers, separation, electrical and other technologies in marine industry. We have certified expert engineers in supplying high quality spares, products, energy audit, and service audit by leveraging our experience and our strong network of international manufacturers and service partners.

The increase in International Domestic trade has increased the demand on the emissions reduction and reliability of the marine industry. In Fosters Energy, we provide the consultations needed for the engine repairs, spare parts sourcing, decarbonization solutions for the marine industry.







### **Steam line and traps**

Complete range of steam traps and steam manifold equipped with universal connections trap stations. Customized condensate lift pumps







# **Exhaust Gas Cleaning System (EGCS):**

EGCS for DeSOx and DENOx related ancillaries for gas/water filtration using open loop or hybrid system



# Ballast Water Treatment System:

Ballast water treatment System, using electric chlorination method for all size of ships.







# Bildge Water Seprator:

Reduce the the ppm less than 5 to meet the class requirments







# Sewage treatment Unit:

Complete system to treat the sewage in the ship



# **MGO** cooling unit:

The unit is compact and used to cool the low sulphur fuel to increase its viscosity to match engines viscosity requirement







### **Box Cooler:**

Drawing Tablet Box Cooler is a U-tube bundle heat exchanger that exploits natural convection. Located inside a sea chest (with inlet & outlet grids) within the vessel's hull







### **Aluminium Cooler:**

Aluminium coolers are widely used for the cooling of oil, hydraulic fluids, water or compressed Air



# **Charge Air cooler:**

Charge air coolers for shipboard use, either for the main engine or for the diesel generators. Cooling the charged air increases the efficiency of internal combustion engine







### Fin Fan Air Cooler:

heat exchangers design and manufacture a wide range of HVAC Air coolers, such as water/evaporator coils and recirculation coolers







### **Cargo Condenser:**

Cargo condensers are installed in LPG or ammonia gas carriers to condense cargo that is vaporized from heat ingress into the tanks. Farad fabricates condensers of the shell and tube type.



# DX evaporator:

Refrigerant evaporators are part of every refrigeration system. The DX line of direct expansion refrigerant evaporators can handle hydrofluorocarbon and hydro chlorofluorocarbon refrigerant







# Plate Heat Exchanger Unit:

Supply complete gasketed plate heat exchanger for lube oil cooling and other applications.





# Tank Cleaning Heaters:

The cargo tanks in oil carriers require cleaning with hot water. This heater uses steam to raise the temperature of seawater to approximately 80 °C for effective cleaning.



# **Electric Heaters:**

Electric heaters are shell and tube heat exchangers that use electric power which is converted to heat





# Reverse Osmosis (RO) Water Generator:

Generate clean water using the RO for the ship clean water uses







# Fresh Water Generator:

The fresh water generator produces distilled water from seawater. It operates on the principle of vacuum distillation



#### **Mass flow rate**

For fuel load and fuel consumption measurements with the implementation of the monitoring reporting verification regulation MRV 2015/757 in the EU.







# All type of valves:

Supply all types of valves, gates, globes, butterfly, ball, etc. from the stock.







# Fire Arrestor and tank equipment:

Provide a vast range of Flame Arrestors, Valves (pressure relief, vents), and Tank Accessories (gauging and sampling equipment, floating suction unit, roof tank equipment)



# All type of filters:

Single, duplex, and self-cleaning automatic or basket filter with several housing sizes and combinations made from standard materials spheroidal iron castings ENGJS-500-7 (GGG 50







# All type of fittings:

Supply all type of fittings, bolts, and nuts







# All type of pipes:

We supply all pipes type with different sizes



### **Mooring Chains**

The stud link chains are supplied in a number of different material grades, with grade 2 and 3 being the most common for ships' equipment and buoy moorings, while other grades such as ORQ and R4 have applications within the offshore industry.





#### **Products We Offers**



# Marine Mooring Hooks:

We supply from anchor line LBNO hooks to pelican, ram, and quick release.











### **Marine Ropes:**

Supply marine ropes from stock that offers increased strength and resistance during critical activities, to give ship operators full confidence in performance.



### **Ship Anchors**

High-quality marine anchors including offshore anchors, bower anchors, and high-holding anchors such as the AC-14 anchor, pool N anchor, and the pool TW anchor.











# **Marine Wire Ropes:**

Rope Dia. ranging from 06mm up to 128mm, 90% of wire rope requirements for customers can be readily serviced from stock inventory of 2000+MT of wire ropes for different applications







From bulwark and deck-mounted chocks to fairleads and horn cleats, our team can help you.



### **Offshore Hoses**

All types of hoses including the floated hoses





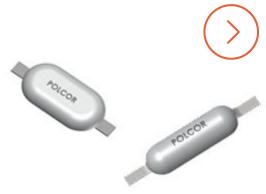




# **Antifouling Anodes:**

Antifouling spare electrodes (Copper-Aluminum, Copper-Iron) as per your requirements for any kind of Impressed Current Antifouling System you may have on board.





# Marine Sacrificial Anodes:

The chemical composition of aluminum anodes is based in the wellestablished Al-Zn-In. The Zinc alloy type is the well-established formulation based on US MIL – A – 18001K specification



# Centrifugal Pumps and motors:

Supply vertical and horizontal centrifugal pumps and motors for the different application on ships from stock







# **Moring Bollards**

We stock an intensive range of mooring bollards for Tee-head mooring bollards, Triton bollards, Twin horn bollards, Bean Y-type pillar bollards.









### **Marine Fenders:**

Supply of fixed and floating fenders to foam, naval, pneumatic, and multipurpose fenders, we invest in the latest innovations and technologies to provide various benefits.





# All type of Electrical cables:

The cables are tested in accordance with global standards (IEC 60331 - test of the continuity of insulation in case of fire, IEC 60332 - IEC 61034 IEC 60754







# **Customized Panels:**

Design, modify, and manufacture electrical panels for retrofitting and for new builds



#### **Services We Present**



#### **Boiler Service:**

Boiler body/pressure part repair—We are able to repair ALL types/brands of boilers incl. Alfa Laval/Aalborg, Kangrim, Mitsubishi, Osaka, Greens, Saacke, Miura, etc.







# **Emission Monitoring** and reporting:

Emission Monitoring & Reporting, Fuel Oil Consumption, Engine Performance Optimization, Voyage Operational Efficiency, and environmental Footprint Management according to IMO new approvals



### **Digital Transformation**

Utilizing the power of Artificial Intelligence and Machine Learning to provide a comprehensive, yet modular analysis decision making platform which contributes significantly on the growth and the profitability of the shipping companies while additionally helps on the control of the environmental footprint of the vessels





#### **Services We Present**



### **Swivel Service:**

Repair and maintenance services on fluid swivels for offshore and subsea applications in the oil and gas market.









# Overall Vessel equipment

Overhaul or upgrade services for Drum winches; Linear winches; Reel drive systems; Pipe tensioners; Cable tensioners; A-Frames; LARS (launch and recovery systems); Subsea trenchers; Quadrant handling systems.

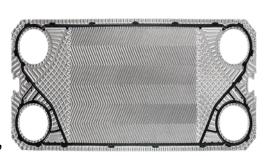


#### **Spare Parts We Present**



# Gasketed Plate Heat Exchanger:

Supply high quality plates and gaskets for Alfa Laval, GEA, Kelvion, APV, and other manufacturers







# High Speed Separators:

Supply high quality Westfalia/ GEA, Alfa Laval, Mitsubishi (MKK) spare parts



### **Pumps spares:**

Supply spare parts for IMO pumps and other centrifugal pumps







### **Spare Parts We Offer**



# **Moatti Filters:**

Supply high quality spare parts for Moatti Filters







# **Boll & Kirch filters:**

Supply high quality spare parts for Boll & Kirch filters



# **Boiler Spares:**

Supply boiler tubes, panel upgrades, and accessories



