Bornemann pumps for marine and shipbuilding

Economic, reliable and competent pump solutions













Installing tomorrow's pump solutions today

Top efficiency by the pioneer in pump manufacturing

The success of Bornemann pumps in the marine and shipbuilding industry did not occur overnight, in fact, our company is a pioneer when it comes to screw pumps. Whether in new or refurbished ships, Bornemann pumps have always covered a broad range of applications, including loading and unloading tankers as well as providing reliable solutions in the machine room.

Bornemann's flagship product is its twin screw pump, which is available in various designs and performance characteristics to suit the individual application requirements.

Bornemann pump solutions can be found in almost all ships, particularly in supply ships used for the world's oil industry. If efficiency and reliability are a top priority, then the decision has to be Bornemann.



providing great efficiency and profitability. Bornemann pumps have been used in a broad range of applications for cargo handling, stripping and pumps are ideally suited for offshore applications and in platform supply

Bornemann is the market leader for twin screw and multiphase pumps and one of the highest performing manufacturers of progressive cavity

Why shipbuilders and the marine industry choose Bornemann

Marine operations require intelligent, powerful and, above all, reliable pump solutions. Bornemann offers true performance with total flexibility, because its twin screw pumps and systems can be used in all possible fields within the marine industry – an industry that requires a great range and variety of products to be pumped. For that reason, pump system knowledge and expertise are crucial. Only by being familiar with all marine industry processes can the ideal solution be ensured.

Flexibility and profitability are the deciding factors for your pump solution - Bornemann offers the shipbuilding industry both

This is where Bornemann twin screw pumps guarantee tried-and-tested product quality. When it comes to loading or unloading tankers, lubricating the main diesel engine, pumping out bilge water and many other applications, Bornemann offers the perfect solution in every situation.

In addition, customers are confident in Bornemann's in-depth expertise. For more than 75 years the company has provided pumps and pump systems for almost any application. All this comes with a global customer service that can only be expected from the pump pioneers themselves.

Bornemann twin screw pumps have proven their worth internatankers, transfer pumps for heavy-duty HFO and as lubricamain engine.

Bornemann progressive cavity pumps are used as sludge pumps, bilge pumps and pumps to feed oil extractors.







A heart that beats powerfully and reliably

Bornemann twin screw pumps are rotary positive displacement pumps; the gearwheels and roller bearings are externally mounted and never come in contact with the pumped media. Around 80 models are available, in various materials, sizes and forms, providing application-optimised solutions.

Bornemann pumps cover a wide performance range in capacity, pressure, temperature and viscosity. Virtually all types of liquids can be handled i.e. low viscosity liquids such as petrol, hydrocarbons, seawater, or high viscosity liquids such as bitumen, tar, glue, molasses and chemical products.

Bornemann twin screw pumps are double-flow and self priming. There is no metal-to-metal contact between the pump screws and the housing. As the pumping elements rotate, the intermeshing of the two screws along with the pump housing form chambers.

These chambers fill with the pumped fluid and transfer it from the suction side to the higher pressure discharge side of the pump.

The pump is designed to allow for reverse flow by simply changing the shaft direction. The suction becomes the discharge and vice versa, all without any modifications to the pump.

Technological competence and extensive flexibility

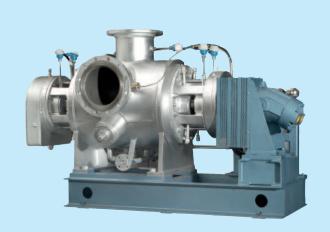
- ► Bornemann twin screw pumps are self priming
- ➤ Twin screw pumps are ideally suited for viscous liquids
- ▶ Broad product range of both, twin screw and progressive cavity pumps
- ► Compact design ensures space-saving set-up
- ► Functional principle ensures low-pulsation and low-noise operation
- ► Short-term dry run operation possible
- ► High suction lift up to 8,5 m (25 feet)
- ► Constant flow at varying pressures and volumes
- ➤ All essential components are produced by Bornemann
- ► Intensive research and development to increase efficiency and profitability







Cargo Pumps and Systems











Application: Cargo Pumps

Stripping Pumps Bitumen Pumps Ballast Pumps Booster Pumps

Design: Horizontal, vertical and submerged

Series: W, V, U, T

HC/VHC SLI

Capacity: Up to 2,800 m³/h

Advantages: Self priming and high suction performance (up to -0,8 bar)

- Installation on deck up to tank depth of 5,5 m possible no separate pump is required
- No separate stripping system with extra control devices is required
- ► High viscosity range possible
- ▶ Different delivery heads no booster pumps necessary
- Very low pulsation/noiseless operation

Engine Room Pumps

Twin Screw Pumps with Internal and External Bearings

Application: Main-Engine Lubeoil Pumps

HFO-Transfer Pumps

Design: Horizontal, vertical

and submerged

Series: W, V, U, T

Capacity: 80 to 800 m³/h

Advantages: Very low NPSH

Very low pulsation/noiseless operation

> Smooth oil conveyance

Constant flow at varying pressures and volumes

► High viscosity range possible

Progressive Cavity
Pumps

Application: Sludge Pumps, Bilge Pumps, Sewage Pumps

Design: Horizontal and vertical

Series: EU, EL, EH

Capacity: $0.5 \text{ to } 300 \text{ m}^3/\text{h}$

Advantages: Very low pulsation/noiseless operation

Rugged compact design

Pumping of solids



Unique solutions made by the specialist





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