

# Blackmer®

Expert  
Transfer Solutions  
for the **Toughest**  
Shipbuilding  
Applications

S SERIES  
Twin Screw Pumps



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**PSG**  
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# S Series Twin Screw Pumps deliver the Operational Capabilities demanded by Shipbuilders & Shippers



The builders of ships used to transport such commodities as crude oil, chemicals and bitumen around the world must design and construct vessels that reliably meet some of the strictest requirements for critical liquid-handling and transfer applications. In the shipping industry, downtime can be devastating for suppliers who must meet demanding delivery schedules, with any delays costing precious time and money, along with the threat of loss of reputation.

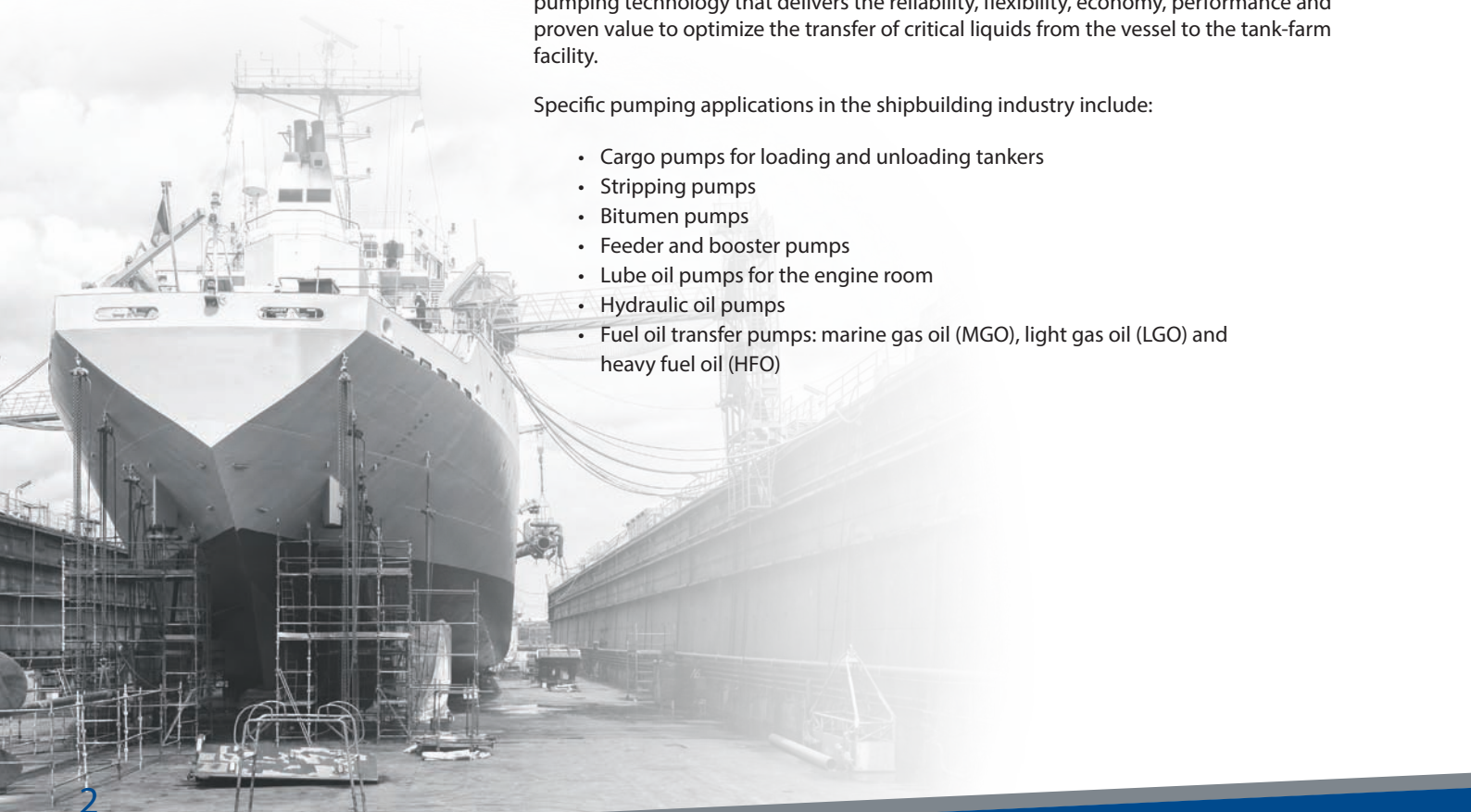
## Choosing the Right Pump is Critical

Cargo tankers are only able to perform their required duties if they are outfitted with the best equipment. Key components are the pumps that are used to unload the vessels, whether they are transporting crude oil, chemicals, caustics, bitumen or animal fats. Oftentimes this involves the high-flow, high-quantity unloading at seaports and docks of highly viscous liquids through pipeline networks that may travel more than 2 kilometers, or 1¼ miles, inland to a tank terminal.

In challenging applications like these, shipyard operators and tanker owners demand a pumping technology that delivers the reliability, flexibility, economy, performance and proven value to optimize the transfer of critical liquids from the vessel to the tank-farm facility.

Specific pumping applications in the shipbuilding industry include:

- Cargo pumps for loading and unloading tankers
- Stripping pumps
- Bitumen pumps
- Feeder and booster pumps
- Lube oil pumps for the engine room
- Hydraulic oil pumps
- Fuel oil transfer pumps: marine gas oil (MGO), light gas oil (LGO) and heavy fuel oil (HFO)





## The Solution to High-Volume Liquid-Transfer Demands

Recognizing the needs of the shipping industry, Blackmer® developed the S Series Screw Pump. Specifically, S Series Twin Screw models are ideal for the unique demands of ship unloading and product transfer to distant tank farms. Twin Screw pumps have a compact design composed of two sets of opposed screws that engage during operation to form a sealed cavity with the surrounding pump casing. The pumped liquid is moved axially as the screw shafts turn, allowing the liquid to be steadily and constantly conveyed to the center of the pump where the discharge port is located.

This method of operation guarantees that the liquids are transferred with high efficiency and nearly pulsation-free which are crucial considerations when transferring highly viscous liquids over great distances.

Blackmer offers its S Series Twin Screw Pumps in a With Timing Gear (WTG) configuration that has a double-suction design with no metal contact between the hydraulic components and automatic axial balancing. They are low noise and nearly pulsation-free with little fluid agitation or emulsified shear, making them ideal for use with corrosive and non-corrosive, low or high viscosity, and clean or abrasive liquids.



Series	Capacity		Diff. Pressure		Viscosity	Max. Temperature	
	m <sup>3</sup> /h	gpm	bar	psi	mm <sup>2</sup> /s (cSt)	°C	°F
2HM/2VM	2-2,500	10-11,000	up to 40	up to 580	0.5-200,000	120	248
2HR/2VR	2-2,500	10-11,000	up to 40.0	up to 580	0.5-200,000	350	662
2HE/2VE	2-2,500	10-11,000	up to 25.0	up to 360	20-3,000	100	212
2HH	10-1,000	50-4,400	up to 60.0	up to 870	1-10,000	120	248
2HC	35-750	150-3,300	up to 16.0	up to 230	1-10,000	120	248
2H	1-40	5-180	up to 16.0	up to 230	1-100,000	100	212

Acknowledging the strict manufacturing schedules under which shipbuilders operate, Blackmer offers the shortest delivery lead times in the industry for its S Series Twin Screw Pumps. Blackmer also operates a global after-sales service network for its S Series Pumps, giving it the ability to provide high-quality and timely service anywhere in the world.

### Versatile Technology for Reliable Operation

- Constant flow-rates despite varying conditions
- Self-priming and high suction lift
- Compact design for convenience
- Low-pulsation, low-noise
- Wide product range, especially viscous materials
- Can run dry for short periods





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