New Pump Series for the Chemical Industry and Petrochemical Sector

Bornemann SLW is a new type series, specifically designed for various applications, e.g. Chemical Industry, General Industry, Oil & Gas, Tank Storage, Shipbuilding and Power Generation. With this launch, Bornemann is reacting to the growing demand for hermetically sealed pumps.

SLW – Operating Principle
Twin Screw Pumps conveying elements of SLW Series consist of two screws, forming a hermetically sealed chamber with the pump casing. Special characteristic of the pump is that the screws not only convey the product, but also transmit the torque. By the rotation of the screws, the product is conveyed from the suction side to the discharge side, along the screw axis. Standard arrangement shows the suction side on axial positioning, and topside discharge outlet.

Pump Characteristics
- Gearless
- Product lubricated inboard bearings
- Hermetic design with magnetic coupling (MAG-Drive)
- Shaft seal execution optional

Products
- Various low & high viscosity products
- Chemical & Petrochemical products
- Lube Oils, Crude Oils, Light and heavy fuels
- Heaviest refinery products
- Non-Newtonian fluids
- General clean and lubricating fluids in liquid phase

User Advantages - Made by Bornemann

Service
Simple and robust design, product lubricated, inboard bearings, very low noise emission.

Operating and maintenance expense
Operation with MAG-Drive. Less wear parts design leads to low-maintenance operation and high MTBF (mean time between failure) and end up in lowest LCC (life cycle cost).

Hermetic (MAG-Drive)
Critical media with harmful substances cannot enter the environment. Hazardous products are confining inside the pump. Use of magnetic coupling system eliminates the need of double acting mechanical seal and complex seal supply systems.

Installation/Footprint
Compact due to single-volute design. With MAG-Drive no additional supplies are needed.
Materials
- Wetted, pressurized metal parts GP240GH, 1.4408, EN-GJS-400
- Shafts, surface hardened 1.7139
- Heating jacket P235GH (optional)

Feed Screws
- Wear resistance hardening (650 HV)
- Reverse flow direction possible
- Low friction profile
- Gap optimized geometry

Suction & Discharge Connections
- DIN EN 1092
- ANSI B16.5

Seals
- Sealless Design (MAG-Drive)
- Single or double-acting mechanical seal with cartridge design
- Elastomers available pursuant to the media

Baseplate & Accessories
- Multiple Baseplate options
- Deliverable as Pump Package
- Options: - Temperature & Pressure Instrumentation
  - Heating Jacket
  - Internal Pressure Relief Valve

Performance Data
- Capacity: 10 – 800 m³/h
- Differential Pressure: max. 16 bar
- Temperature: max. 120°C
- Viscosity: 10 – 10,000 cSt
- Speed: up to 3,600 rpm

Known Bornemann Twin Screw Pump Features:
Self-priming, high suction lift (up to 8.5 m), low pulsation, constant flow at varying pressures, safe operation at high viscosities

Ask for the Pump Selection you require!

Contact:
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