Barge Pump
Vertical, Self-Priming Pump With Pollution Prevention Design

Flowserve pioneered barge stripping pumps in 1939. Today, Flowserve barge pumps remain the industry’s preeminent choice for performance and reliability.

Trusted, Proven Design

Specifically designed for transportation barges, the Flowserve Barge Pump continues to be the premier brand used on inland and coastal waterways. The Barge Pump is a vertical self-contained, self-priming unit designed for barge unloading and transfer operations. With the high-efficiency Barge Pump, stripping turnaround times are kept to a minimum. Furthermore, its innovative pollution prevention design inhibits costly oil and chemical spills.

Operating Parameters

• Flows to 1035 m³/h (5000 gpm)
• Pressures to 8.6 bar (125 psi)
• Discharge flanges to 250 mm (10 in)

Applications

• Petroleum distillates
• Seawater ballast
• Various chemicals

Self-priming Stripper Stage operates efficiently at extremely low submergence levels, and will maintain pumping performance during operations which induce large quantities of air ingestion.

Stator Case provides smooth fluid transition to pressure stages.

Bypass Line delivers make-up sealing liquid to the priming stage during stripping.

Enclosed Impellers provide pressure for offloading.

Access Ports allow full maintenance of the stuffing box without removing the driver.

Bleed Off Stuffing Box diverts product bypass back to the compartment via a sealed return line to prevent costly spills.

Multistage Design meets a wide range of capacity and head requirements.
Engineered to Prevent Pollution

Pollution-Preventing Discharge Head
The Barge Pump’s simple yet innovative design contains leakage from the mechanical seal or stuffing box within the discharge head. A sight gauge allows a visual check to determine if liquid is present in the discharge head without removing the seal chamber. The contained liquid can be easily drained back into the suction well via a manual valve on the drain line.

TubeSeal Pollution Prevention Option
TubeSeal is an alternative sealing method to a mechanical seal or packed box. A specially designed tube and plate, TubeSeal prevents liquid from reaching the atmosphere. A bypass port redirects liquid through the column case and back to the source. Both leakage and maintenance time/cost are reduced.

Pump Operation

Priming: Upon starting, the liquid in the suction well is pulled up into the pump, sealing the priming stage.

Normal Operation: During normal operation, the bypass line valve is closed. The complete unit is now handling full liquid flow.

Stripping: A small amount of sealing liquid slips past the priming stage, back into the suction well. Occasionally with long suction pipes or during prolonged periods of stripping, the sealing liquid must be replaced. This is usually done by opening the bypass line valve, permitting liquid to return from the discharge.

© 2015 Flowserve Corporation