

MSH MHH

Axially Split Multistage Pump



Axially Split Multistage Pump

Design Features

Applications

- High Pressure RO Feed
- Water Transmission
- Raw Water Transfer

Technical Data

- Capacity : 400 to 3,000 m³/h / 1,760 to 13,200 USgpm
- Total Head : up to 800 m / 80 bar / 2,600 ft

Liquids

- Seawater
- Potable Water
- Raw Water
- Brackish Water

Materials

- Super Duplex Stainless Steel
- Duplex Stainless Steel
- Stainless Steel
- Carbon Steel + Stainless Steel Rotating Element
- Ductile Iron + Stainless Steel Rotating Element

Impellers

- Closed
- Single / Double Entry

Shaft Seals

- Gland Packing
- Mechanical Seal

Bearings

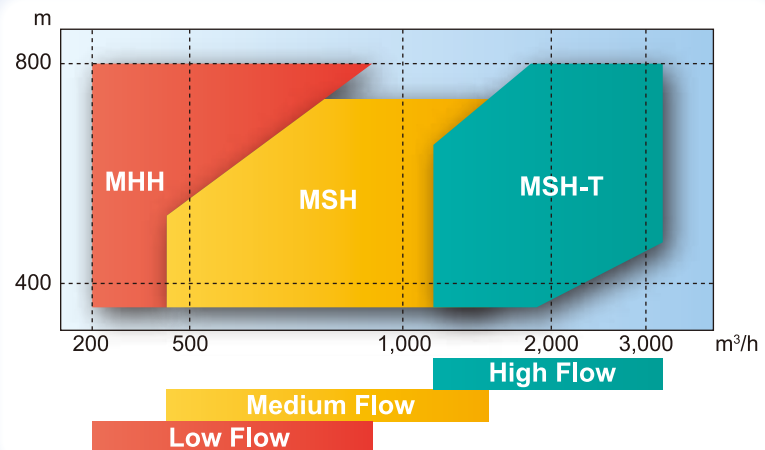
- Radial - Antifriction
 - Sleeve
- Thrust - Antifriction
 - Tilting Pad

Drives

- Electric Motor
- Electric Motor + Pelton Turbine

Performance Range

- Optimum Suction Performance
 - Low NPSH_{req.}
- Easy Maintenance
- Reduce Energy Cost
- Long Bearing Life
- Low Licy Cycle Cost



Water Transfer Pump for Salaf Pump Station (Saudi Arabia)
 Pump type: MHH300/4, Delivery year: 2010
 Duty: 1,116m³/h at 615m, Power: 2,840kW



RO 1st Pass High Pressure Pump for Victorian Desalination (Australia)
 Pump type: MSH300/2, Delivery year: 2010
 Duty: 887m³/h at 544m, Power: 2,000kW



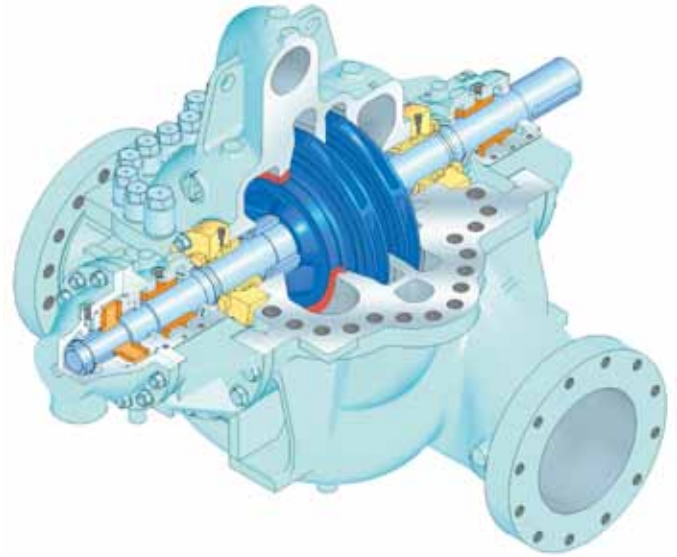
Water Transfer Pump for Shuquaiq II Abha Pump Station (Saudi Arabia)
 Pump type: MSH300/2T, Delivery year: 2009
 Duty: 2,325m³/h at 722m, Power: 6,150kW

Reliable Design



MHH Low Flow

MHH is three or more stages axially split casing pump. Diffuser guides flow from impeller discharge to the next impeller suction eye. Thrust forces are compensated by a hydraulic balancing device.



MSH Medium Flow

MSH is two stages, axially split casing double volute pump. Impellers are installed back to back in order to reduce axial thrust force. Impeller and volute design are matched to provide optimum efficiency.

MSH-T High Flow

MSH-T has twin suction branches to provide optimum suction performance. The flows are fed into a double entry second stage. This compact back to back arrangement balances axial hydraulic thrust and provides optimum efficiency for high flow operation.

Replaceable Wear Rings

- Provide replaceable wear rings for impeller and casing
- Designed to optimize hydraulic efficiency

Bearings and Lubrication

- Focused and self-lubricated hydrodynamic bearings are available
- The heavy duty thrust bearing absorbs the residual thrust of the hydraulically balanced rotor
- Designed for long bearing life with assured lubrication
- Antifriction bearings are available for smaller capacity pump

Axial Split Casing

- Double volute type minimizing the radial forces
- Suction and discharge nozzles in lower half
- Complete rotor can be inspected and refurbished without disturbing the main pipe work and driver

Heavy Duty Shaft Design

- High stiff design
- Minimum shaft deflection

Shaft Sealing

- Both mechanical seal and packed gland are available
- The mechanical seal is generally of cartridge type

Twin-Suction Branches

- Provide optimum suction performance

Self Balance Impellers Arrangement

- Two-single suction impellers back to back arrangement
- Principal axial thrusts are hydraulically balanced
- Provide high efficiency and low NPSH requirement

