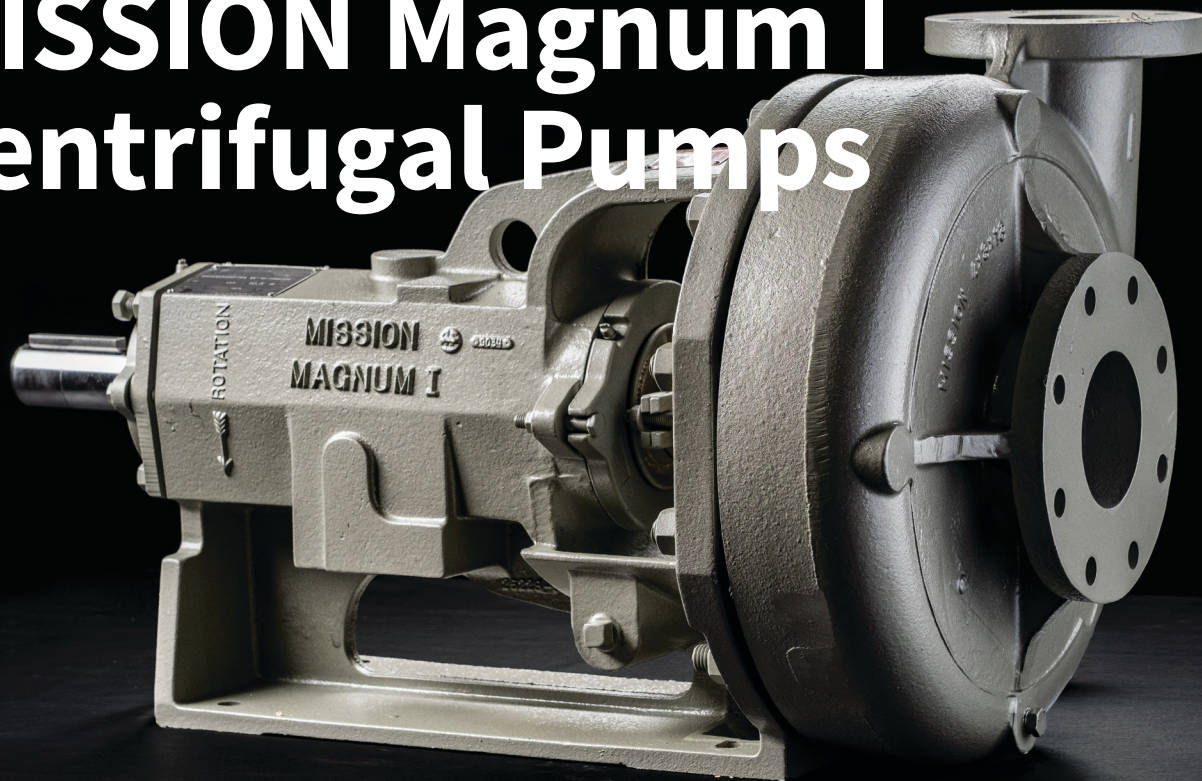


MISSION Magnum I Centrifugal Pumps



Our Magnum™ I Centrifugal Pumps have a longstanding history as reliable, heavy-duty slurry pumps. Magnum I centrifugal pumps have been world leaders in the drilling industry since their inception in the 1970s.

Featuring a concentric casing design coupled with wide vane impellers, Magnum I centrifugal pumps exhibit reduced wear and increased pump life. Extended pump life reduces maintenance costs, downtime, and service requirements. Concentric casings eliminate vibration, turbulence, and aeration caused by the cutwater point in conventional volute pumps. Turbulence and aeration generate eddies that cause excessive wear when handling abrasive fluids. Concentric casings also reduce the high bearing load and shaft deflection present in other designs, even at near shutoff flows.

The Magnum impeller design features wider vanes at the tip that decrease the velocity of the fluid exiting the impeller. This eliminates the abrasive jetting effect that is present with narrow impellers. The distance between the impeller tip and the casing is greater, resulting in an increased recirculation area. Lower velocity rates and increased recirculation areas allow the exiting fluid to blend with the recirculating fluid, reducing turbulence and wear. The entrance shape of the impeller vanes is more tangential to the circumference of the suction, creating a smoother flow pattern.

Features and benefits

- All pumps use the same power end, reducing cost and spare parts inventory
- Open impeller design that lowers axial thrust load and is equipped with an impeller retention bolt to ensure the pump is not damaged if run in reverse (Impeller retention bolt is not available on 3x2x13 models.)
- Extended life of the mechanical seal or packing and the stuffing box
- Lip seals and exclusion seal to retain lubricants and protect bearings from external contamination
- Fluid end parts available with Magnachrome corrosive and abrasive resistant material. Magnachrome impellers have a 400 Brinell hardness, and Magnachrome casings and stuffing boxes feature a 600 Brinell hardness
- Impeller, casing wear pad, and stuffing box contain Ductile Iron, ensuring even wear
- One piece casing
- Receded casing gasket
- Note: Oil lubrication for bearings is available upon request and recommended for pump speeds in excess of 2,400 RPM.