FLOWSERVE

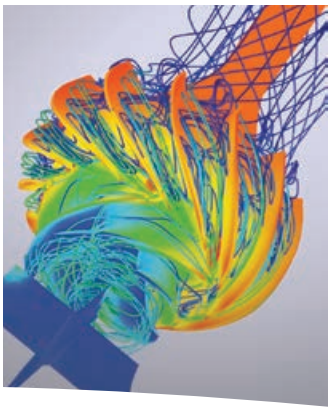
MPT

Self-Priming, Solids-Handling Pump



Experience In Motion






Pump Supplier to the World

Flowserve is the driving force in the global industrial pump marketplace. No other pump company in the world has the depth or breadth of expertise in the successful application of pre-engineered, engineered and special purpose pumps and systems.

Life Cycle Cost Solutions

Flowserve provides pumping solutions that permit customers to reduce total life cycle costs and improve productivity, profitability and pumping system reliability.

Market Focused Customer Support

Product and industry specialists develop effective proposals and solutions directed toward market and customer preferences. They offer technical advice and assistance throughout each stage of the product life cycle, beginning with the inquiry.

Broad Product Lines

Flowserve offers a wide range of complementary pump types, from pre-engineered process pumps, to highly engineered and special purpose pumps and systems. Pumps are built to recognized global standards and customer specifications.

Pump designs include:
- Single-stage process
- Between bearings single-stage
- Between bearings multistage
- Vertical
- Submersible motor
- Positive displacement
- Nuclear
- Specialty

Product Brands of Distinction

ACEC™ Centrifugal Pumps

Aldrich™ Pumps

Byron Jackson® Pumps

Calder™ Energy Recovery Devices

Cameron™ Pumps

Durco® Process Pumps

Flowserve® Pumps

IDP® Pumps

INNOMAG® Sealless Pumps

Lawrence Pumps®

Niigata Worthington™ Pumps

Pacific® Pumps

Pleuger® Pumps

Scienco™ Pumps

Sier-Bath® Rotary Pumps

TKL™ Pumps

United Centrifugal® Pumps

Western Land Roller™ Irrigation Pumps

Wilson-Snyder® Pumps

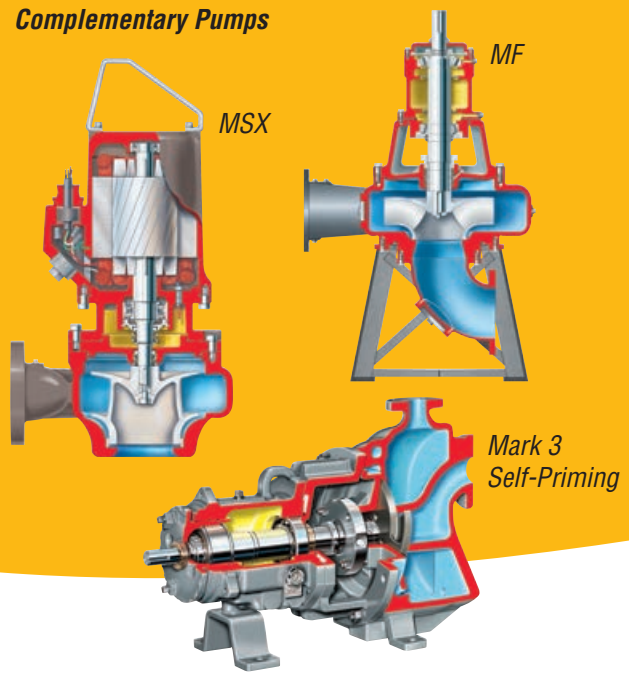
Worthington® Pumps

Worthington Simpson™ Pumps

MPT
Self-Priming, Solids-Handling Pump



Complementary Pumps



Versatile and Reliable

The Flowserve MPT is a proven self-priming, solids-handling pump. The result of a long and successful association with leaders in the construction and waste water industries, the MPT's simple design provides reliable, peak performance while offering versatility, ease of maintenance and low cost of ownership.

Advantages Over Submersible Pumps

- Dry mounting
- Higher temperature capability
- No sludge build-up on the motor
- Duty flexibility by changing pulley sizes
- Belt drive protection
- Blockages more easily removed
- Ease of maintenance

Applications

- Construction
- Utilities
- Slurries
- Industrial waste
- Dirty water
- Drainage
- Dewatering
- Sewage
- Cannery waste
- Scale pits
- Sludge
- Effluent
- Bilge pumping
- Mining
- Pulp and paper
- Food processing
- Automotive
- Wineries

Complementary Pump Designs

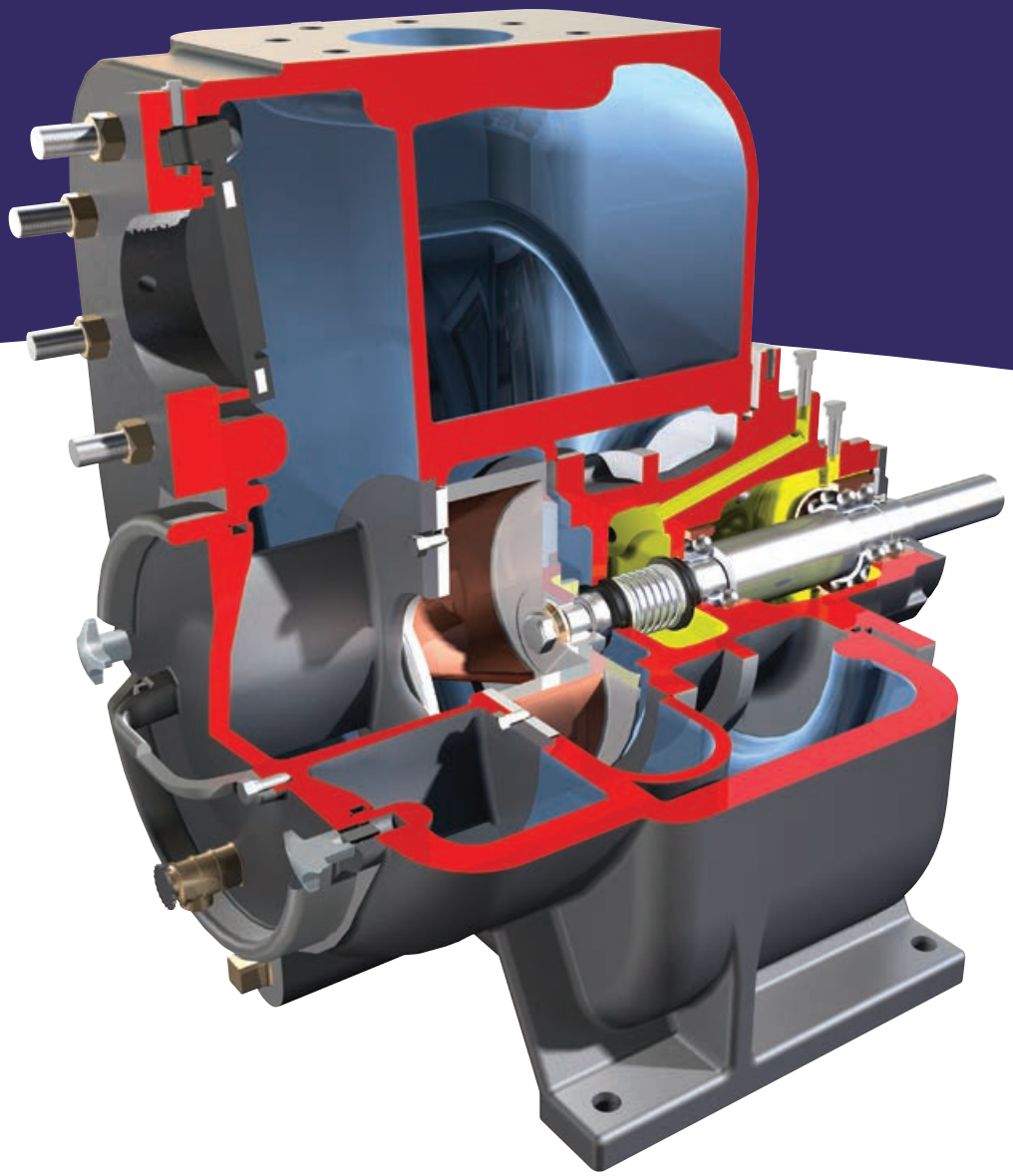
Flowserve also offers these pump designs:

- Durco Mark 3™ self-priming pump
- Durco Mark 3 ISO self-priming pump
- MSX solids-handling, submersible pump
- MF and MN end-suction, solids-handling pumps

Benefits of the MPT

- Ease of maintenance
  - Back pull-out design
  - Belt drive protection
  - Quick-disconnect clean-out
  - Quick, external impeller adjustment
  - Abrasion-resistant mechanical seal
  - No special tools required
  - Dual sight glasses
  - Normal maintenance can be performed without disconnecting piping
- Versatility
  - High-temperature capability
  - Duty flexibility by changing drive pulley sizes
  - Portability
  - Dimensionally interchangeable with major competitors
- Heavy-duty reliability
  - Generous wear allowance
  - Oversized shaft
  - Oversized bearings
  - Solid one-piece flap valve
  - Run-dry capability
  - Oil lubricated double mechanical seal
  - Hard-faced mechanical seals
- Low total cost of ownership
  - Replaceable wear plate
  - Reversible wear plate
  - Reduced maintenance
  - Externally adjustable clearances without shims

MPT Self-Priming, Solids-Handling Pump



The Flowserve MPT self-priming, solids-handling pump is engineered for reliability, low cost and long life in demanding services containing solids in suspension. Able to pass solids up to 75 mm (3 in), the MPT deftly handles dirty, gritty water as well as free-flowing slurries, sewage, sewage sludge and many trade effluents.

Operating Parameters

- Flows to 600 m^3/h (2650 US gpm)
- Heads to 35 m (115 ft)
- Temperatures to 75°C (165°F)
- Working pressures to 5 bar (72 psi)
- Sizes 50 to 200 mm (2 to 8 in)
- Solids to 75 mm (3 in) diameter

Two-Vane, Semi-Open, Solids-Handling Impeller has integral back pump-out vanes and is fully balanced. Impeller is threaded to shaft and spigotted for positive location.

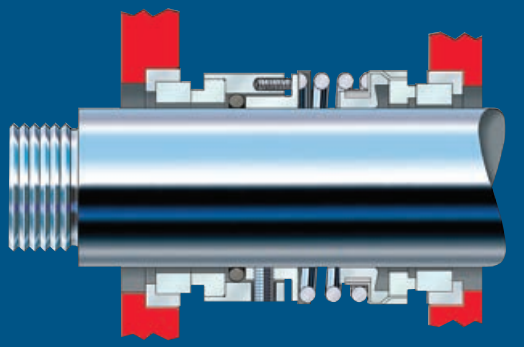
External Impeller Adjustment via four adjustable bushings allows clearances to be accurately reset, thereby restoring performance.

Abrasion-Resistant Mechanical Seal prevents contaminants from entering the seal chamber. Large oil-filled chamber for long seal life.

Quick-Disconnect Cover Plate is fitted with a pressure relief valve to facilitate start-up. Quick removal exposes reversible wear plate and permits removal of blockages.

Heavy-Duty Volute Casing designed for rugged long life service.

Double Mechanical Seal



Quick Disconnect Cover Plate



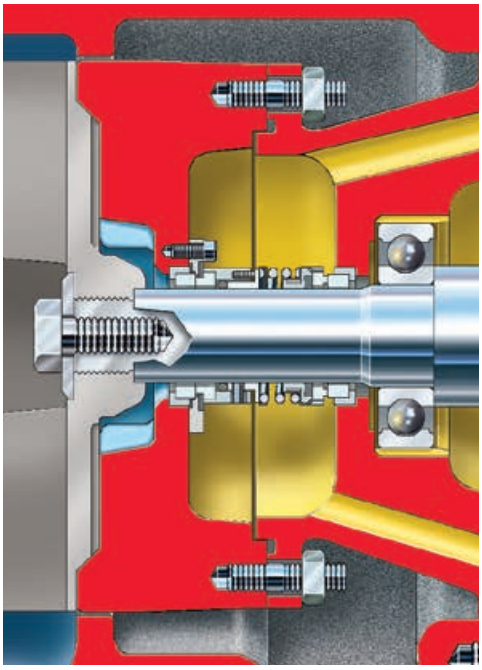


Abrasion-Resistant, Double Mechanical Seal

The MPT comes standard with an abrasion-resistant double mechanical seal in an oil chamber. A hard-faced balanced rotary unit prevents liquid and grit from entering the seal chamber. Oil cools and lubricates the seal faces.

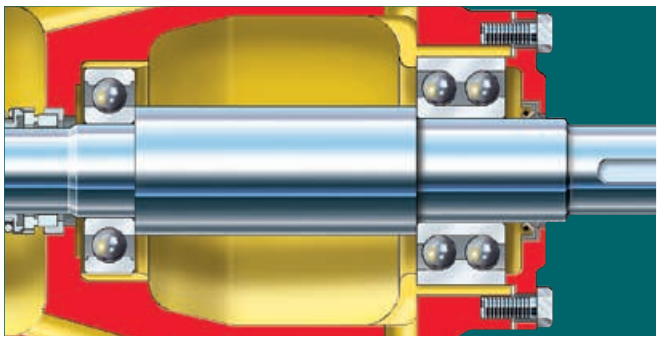
Replaceable Seal Housing

The MPT employs a replaceable seal housing to facilitate maintenance without disturbing the piping. As part of the back pull-out design, the seal housing is positively located, sealed and fastened to the bearing housing.



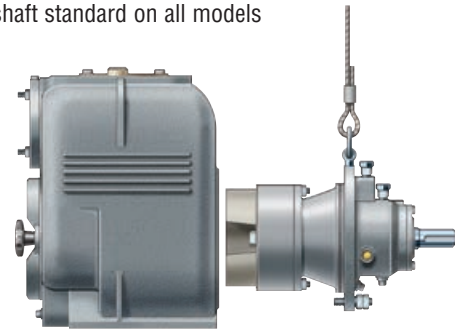
Bearings

Bearings are oil-lubricated, heavy-duty single row deep groove and angular contact double row type for radial and thrust loads, respectively. A lip seal protects bearings from dust, dirt and water. The bearing housing is equipped with eyebolt, oil breather cap and sight glasses.



Additional Features

- Replaceable and reversible wear plate
- Extra large diameter shaft
- Solid one-piece flap valve
- Back pull-out design
- 17-4PH SS shaft standard on all models







Materials

The MPT is readily available from stock in the standard materials of construction. (See table below.) The pump also can be supplied in special materials, including stainless steel.

The choice of materials includes: ● Standard Material ● Optional Material	Casing	Impeller	Shaft	Wear Plate
Grey Cast Iron (CL 30)	●			●
Ductile Iron (A395)		●		
Stainless Steel			●	
CD4M		●		●

Trailer Mounting

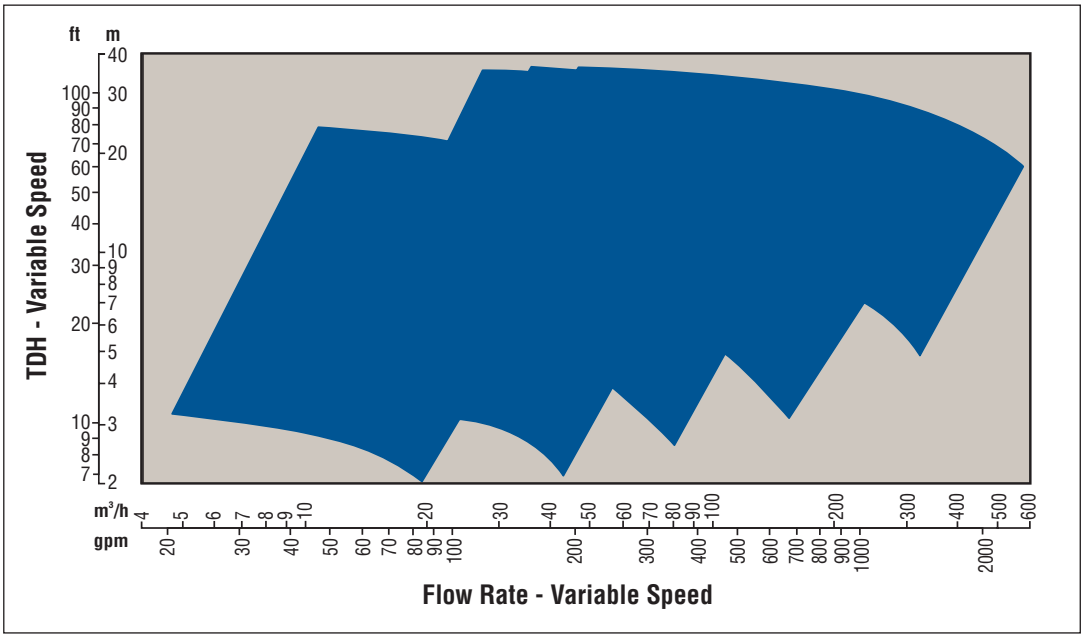
The MPT is easily mounted to a trailer to enable mobile pumping capability at the plant site. This is especially useful for construction site and utility dewatering.

Drive Options

Though typically belt driven, the following drive methods also are available with the MPT:

- AC motor, direct drive
- Gas engine, direct drive
- Diesel engine, direct drive

MPT Range Chart



Global Service and Technical Support







Life Cycle Cost Solutions

Typically, 90% of the total life cycle cost (LCC) of a pumping system is accumulated after the equipment is purchased and installed. Flowserve has developed a comprehensive suite of solutions aimed at providing customers with unprecedented value and cost savings throughout the life span of the pumping system. These solutions account for every facet of life cycle cost, including:

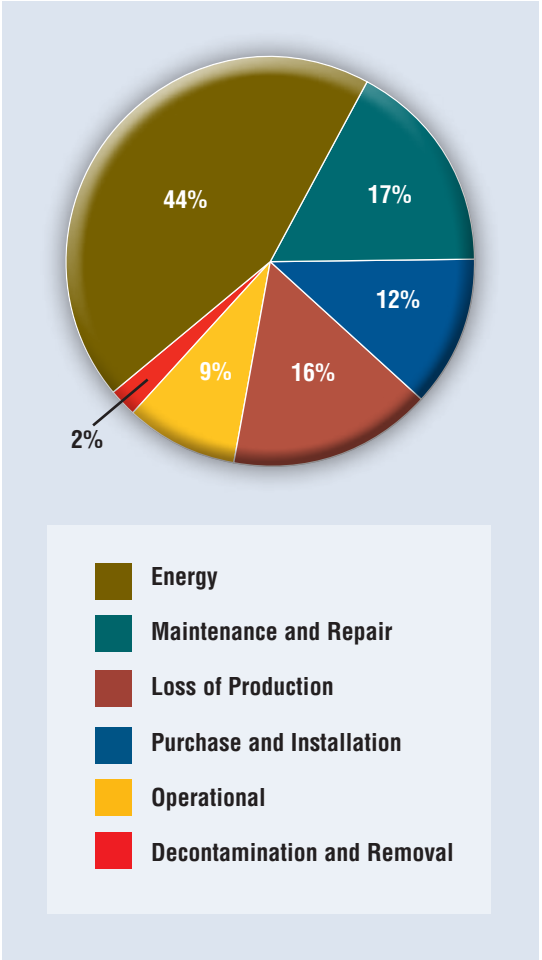
Capital Expenses
- Initial purchase
- Installation

Operating Expenses
- Energy consumption
- Maintenance
- Production losses
- Environmental
- Inventory
- Operating
- Removal

Innovative Life Cycle Cost Solutions

- New Pump Selection
- Turnkey Engineering and Field Service
- Energy Management
- Pump Availability
- Proactive Maintenance
- Inventory Management

Typical Pump Life Cycle Costs[1]



[1] While exact values may differ, these percentages are consistent with those published by leading pump manufacturers and end users, as well as industry associations and government agencies worldwide.

FLOWSERVE



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