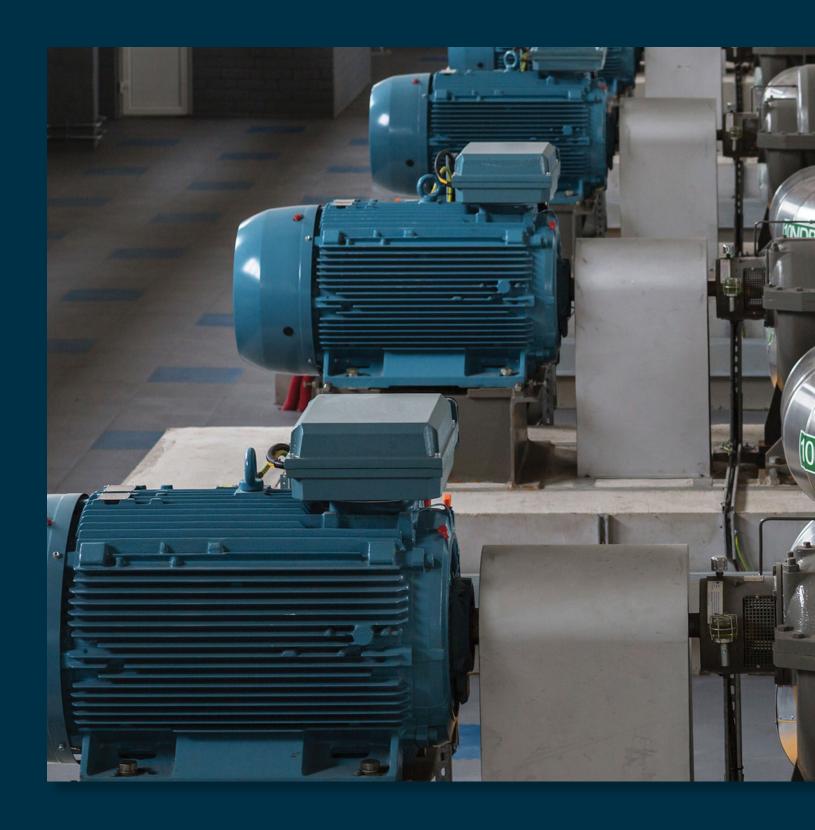


## **PUMPS**













### **Pump Field Services**

Industrial Service Solutions is available around-the-clock for your unplanned maintenance and emergency repairs. Whether its excessive vibration or operational issues, our highly skilled technicians have the know-how and independent capabilities to troubleshoot, diagnose, and yield solutions for all pump types, brands, and applications. With a fleet of service vehicles, including 53-foot mobile tooling trailers, we are fully equipped to machine, weld, fabricate, test, and repair equipment onsite.

- + 24/7 Emergency Service
- + Preventative Maintenance
- + Mechanical & Electrical Repairs
- + Machining & Part Fabrication
- + Onsite Flange Facing
- + Bearing & Seal Replacement
- + Packing Replacement

- + Installation & Rigging Service
- + Precision Laser Alignment
- + Start-up & Troubleshooting
- + Performance Testing
- + Vibration Analysis
- + Dynamic Balancing
- + Infrared Thermal Imaging

### Pump Repairs & Overhauls

When a pump issue cannot be addressed in the field, our repair shops across the United States are fully equipped and ready to service any industrial pump. Our experts have extensive OEM knowledge and often receive pumps our competitors do not or will not repair. We repair pumps to like-new condition, usually better than new, with tighter tolerances, and enhanced efficiency. Our technicians can recommend upgrades to prolong your pump's lifespan and our engineers can design a customized pump system if you need more capacity. Even if parts are unavailable, our machinists have the capability to manufacture custom parts on demand to keep your downtime to a minimum.

- + ANSI Pumps
- + Gear Pumps
- + In-line Pumps
- + Lobe Pumps
- + Mixers
- + Slurry Pumps
- Trash Pumps
- + Well Pumps

- + Axial Flow Pumps
- + Booster Pumps
- Diaphragm Pumps
- + Centrifugal Pumps
- + Grinder Pumps
- + Progressive Cavity
- + Split Case Pumps
- + Turbine Pumps

- + End Suction Pumps
- + Multi-Screw Pumps
- + Multi-Stage Pumps
- + Non-Metallic Pumps
- + Self-Priming Pumps
- + Sliding Vane Pumps
- + Submersible Pumps











## MP-3 ANSI Centrifugal Pumps

Equivalent to Flowserve Durco Mark III

#### **APPLICATIONS**

- + Acid Transfer
- + Brine
- + Chemical Processing
- + Petrochemical Processing
- + Corrosive Services
- + Food & Beverage Processing
- + Hydrocarbon Processing
- + Pharmaceuticals

G1 SIZES	1.5x1LF-4, 1.5x1-6, 3x1.5-6, 3x2-6, 1.5x1LF-8, 1.5x1-8, 3x1.5-8		
G2 SIZES	3x2-8, 4x3-8, 2x1LF-10, 2x1-10A, 3x1.5-10A, 3x2-10A, 4x3-10, 4x3-10H, 6x4-10, 6x4-10H, 3x1.5LF-13, 3x1.5-13, 3x2-13, 4x3-13, 4x3-13HH, 6x4-13A		
G3 SIZES	8x6-14A, 10x8-14, 6x4-16, 8x6-16A, 10x8-16, 10x8-16H, 10x8-17		
FLOW	to 7,000 GPM		
HEADS	to 730 FT		
PRESSURES	to 375 PSI		
TEMPERATURES	to 700°F		
STANDARDS	ISO-9001, ANSI B73.1		
CONFIGURATIONS	Standard, Low Flow, Recessed Impeller, Self-Priming		

#### **FEATURES**

- + Heavy-duty casing with integral foot and multi-ribbed discharge flange provides superior resistance to pipe loads and improves reliability
- + Precision cast reverse vane impeller is the only impeller design that offers repeatable pump performance throughout the life of the pump
- + Open impellers available
- + Seal chamber extends seal life and provides advanced self-flushing capability
- + Standard non-contacting labyrinth seals keep lubricant in and contaminants out
- + Heavy-duty radial and thrust bearings selected for long life and reliability
- + External micrometer impeller adjustment mechanism accurately sets impeller clearance in 20 seconds
- + Two-piece, ductile iron bearing housing is designed for safety, strength, interchangeability and retrofit capability
- + Back pull-out design allows removal of rotating element without removing casing, piping, or motor

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### MP-6913 ANSI Centrifugal Pumps

Equivalent to ITT Goulds 3196

#### **APPLICATIONS**

- + Air Separation & HVAC
- + Chemical & Petrochemical
- + Grain/Corn Processing
- + Power Generation
- + Pulp & Paper
- + Marine & Shipbuilding

SIZES	1x1.5-6, 1.5x3-6, 2x3-6, 3x4-7, 1x1.5-8, 1.5x3-8, 2x3-8, 3x4-8, 3x4-8G, 1x2-10, 1.5x3-10, 2x3-10, 3x4-10, 3x4-10H, 4x6-10, 4x6-10H, 1.5x3-13, 2x3-13, 3x4-13, 4x6-13, 6x8-13, 8x10x13, 6x8-15, 8x10-15G
FLOW	to 7,000 GPM
HEADS	to 730 FT
PRESSURES	to 375 PSI
TEMPERATURES	to 700°F
STANDARDS	ISO-9001, ANSI B73.1
CONFIGURATIONS	Standard, Low Flow, Recessed Impeller

#### **FEATURES**

- + Easier to automate than gate valves, often easier than rotary valves
- + Lower installation cost and higher performance than gate valves
- + Provides reliability and tight shut-off under many damaging process conditions
- + Can easily be adapted to comply with evolving emission regulations
- + Positive shaft retention prevents movement of the shaft past the compression plate
- + Flexible-lip polymeric seat assures positive shut-off, extending life cycle
- + Only the insert needs to be removed to replace the seat; the insert and seat are self-aligning
- + Low torque requirements allow the use of less costly actuators
- + Available in a broad range of materials for standard and special services including chlorine, oxygen, cryogenics, and vacuum.

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## MP-MAG-I Centrifugal Pumps

Equivalent to MISSION Magnum

#### **APPLICATIONS**

- + Ash or Coal Conveyors
- + Barite, Ferric Oxide, Mineral Oil
- + Base Drilling Muds
- + Cement
- + Crystalline Forms
- + Glass Fibers
- + Kaolin Clay
- + Lime Slurries
- + Mine De-Watering
- + Sugar Processing

SIZES	6x5-11, 8x6-11, 3x2-13, 4x3-13, 5x4-14, 6x5-14, 8x6-14, 10x8-14
FLOW	to 2,600 GPM
HEADS	to 550 FT

#### **FEATURES**

- + Up to 50% more capacity from the 8x6 pump
- Optimum pressure at low operating speeds
- + Thicker casing to extend life from wear and corrosion
- New impeller design to reduce loads and extend wearing life
- Larger and stronger shaft to reduce deflection
- + Replaceable shaft sleeve in packing wear area
- + Larger and longer life bearings
- + Replaceable stuffing box cover
- + Smoother, non-turbulent flow throughout casing

Dimensions
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### **MP-MAG-XP Centrifugal Pumps**

Equivalent to MISSION Magnum XP

#### **APPLICATIONS**

- + Blending
- Bottom Ash
- Copper, Bauxite, Quarry Slurries
- **Dredge Tailings**
- Fluid Supercharging
- Fly Ash
- Food Processing
- Lead & Zinc Ore & Tailings
- Nickel Shot
- Paper Pulp Processing
- Sand Slurry
- Sewage
- Slag
- Spent Liquor
- Waste Slurries

SIZES	14x12-22, 12x10-23, 8x6-18	
PRESSURES	from 3,000 to 7,500 GPM	
HEADS	from 75 to 410 FT	

- Versatile stuffing box
- One-piece casing
- Casing gasket receded for protection
- Back vanes reduce collection of solids at stuffing box
- Long-life, no-adjustment mechanical seal available for near zero leakage
- Replaceable shaft sleeve
- Lip seals for maximum bearing protection (labyrinth seals optional)
- Duplex angular contact bearings
- Thicker, stronger concentric casings
- Full pipe diameter entrance for minimum turbulence and maximum efficiency
- Single row roller bearings for increased bearing life
- Easily accessible front access drain
- Reduced high bearing loads





## MP-2500 Centrifugal Pumps

Equivalent to MISSION 2500 Supreme

#### **APPLICATIONS**

- + Ash or Coal Conveyors
- + Barite, Ferric Oxide, Mineral Oil
- + Base Drilling Muds
- + Cement
- + Crystalline Forms
- + Glass Fibers
- + Kaolin Clay
- + Lime Slurries
- + Mine De-Watering
- + Sugar Processing

SIZES	6x5-11, 8x6-11, 3x2-13, 4x3-13, 5x4-14, 6x5-14, 8x6-14, 10x8-14
FLOW	to 2,600 GPM
HEADS	to 550 FT

- Versatile stuffing box
- Thick, strong, concentric casing with replaceable casing wear pad
- + Casing gasket receded for protection
- Replaceable stuffing box cover with dual stuffing box bolts
- + Long-life, no-adjustment mechanical seal available for near zero leakage
- + Replaceable shaft sleeve
- + Solid frame base
- + Labyrinth seals for maximum bearing protection
- Duplex angular contact bearings
- Full pipe diameter entrance for minimum turbulence and maximum efficiency
- Wide semi-open impeller creates lower axial thrust for improved bearing life
- + All sizes feature the same power cord





## MP-MChr Centrifugal Pumps

Equivalent to MISSION Magnachrome

#### **APPLICATIONS**

- + Ash or Coal Conveyors
- + Barite, Ferric Oxide, Mineral Oil
- + Base Drilling Muds
- + Cement
- + Crystalline Forms
- + Glass Fibers
- + Kaolin Clay
- + Lime Slurries
- + Mine De-Watering
- + Sugar Processing

SIZES	6x5-11, 8x6-11, 3x2-13, 4x3-13, 5x4-14, 6x5-14, 8x6-14, 10x8-14
FLOW	to 2,600 GPM
HEADS	to 550 FT

- + High grade, heavy walled, solid construction offering superior performance over lined pumps and those using inserts
- + One power fame fits all sizes
- + Double row angular contact bearings to minimize axial thrust
- + Double row inboard bearings to minimize effects of radial load
- + Greater capacity and higher heads for extremely abrasive fluids



## MP-SandM Centrifugal Pumps

Equivalent to MISSION Sandmaster

#### **APPLICATIONS**

- + Air Separation & HVAC
- + Chemical & Petrochemical
- + Grain/Corn Processing
- + Power Generation
- + Pulp & Paper
- + Marine & Shipbuilding

SIZES	6x5-11, 8x6-11, 3x2-13, 4x3-13, 5x4-14, 6x5-14, 8x6-14, 10x8-14	
FLOW	to 2,600 GPM	
HEADS	to 550 FT	

#### **FEATURES**

- More compact design than MP-MAG-I
- Can be adapted for hydraulic motor drive
- Up to 50% more capacity from the 8x6 pump
- Optimum pressure at low operating speeds
- Thicker casing to extend life from wear and corrosion
- + New impeller design to reduce loads and extend wearing life
- Larger and stronger shaft to reduce deflection
- + Replaceable shaft sleeve in packing wear area
- Larger and longer life bearings
- Replaceable stuffing box cover
- · Smoother, non-turbulent flow throughout casing

Dimensions
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### **MP-LJC Vertical Turbine Pumps**

Equivalent to ITT Goulds VTP

#### **APPLICATIONS**

- Boiler Feed
- **Chemical Transfer**
- Condensate Service
- Cryogenics
- Injection Secondary Recovery
- + Light Hydrocarbons
- **LNG** Transfer
- Pipeline Booster
- **Product Transfer**
- Refinery Blending
- Water Services

MODEL	CAPACITY M³/H		HEAD	М	STAGE I	STRING QTY MM	RPM	kW	EFF	DIA MM
		44	40	32	10					
		52.5	44	35	11					
		53	48	38	12					
		58	52	41.5	13					
	6.51012	61.5	56	44.5	14					
		66	60	48	15					
		70	64	51	16					
		74.5	68	54	17					
100MPLJC10-4		79	72	57.5	18	8	2940	5.5	62	92
		83.5	76	60.5	19					
		88	80	64	20					
		92	84	67	21					
		96.5	88	70	22					
		102	92	73.5	23					
		105.5	96	76.5	24					
		110	100	80	25					
		115	104	83	26					
		56	54	40	6					
		65	63	47	7					
		74.5	72	54	8			5.5		
	8	84	80	61	9					
		93	89	67.5	10					
150MPLJC10-9	10	102.5	98	61.5	11	12	2940		62	138
		112	108	81	12					
	16	121	117	87.5	13			7.5		
		130	126	94.5	14					
		139.5	135	101	15					
		149	144	108	16			11		

#### **FEATURES**

- + Fabricated discharge head and flanged column
- Flanged bowl construction and 416SS shafting
- + In-line suction and discharge simplifies installation
- Optional suction in can for site piping flexibility
- + Inherent design features allow efficient operation at any NPSH available
- Alloy construction with external flush of critical wear areas available for corrosive/abrasive services
- + Built-in alignment and simple piping for less costly installation and ease of maintenance/reduced downtime

**Dimensions** Page 188





## MPP High Efficiency Slurry Pumps

Equivalent to Weir Warman AH

#### **APPLICATIONS**

- + Cooling & Heating Systems
- + Desalination Plants
- + Fire Protection
- + Irrigation & Drainage
- + Long Distance Water Supply
- + Marine & Offshore Engineering
- + Power Stations
- + Pressure Boosting
- + Water Transport
- + Water Utilities

SIZES	TBD
FLOW	TBD
HEADS	TBD
PRESSURES	TBD
TEMPERATURES	from -40°F to 250°F
HORSEPOWER	to 1,500 HP
STANDARDS	ISO-9001, ISO-9002

- + Single case construction without shaft seal provides easy installation and maintenance
- + Pump casing, cover, and impeller are made of 28% chrome (ASTM A532) cast iron to ensure wear resistance
- + Single volute design for low constant radial loads and a tapered fitting between the case and cover for easy assembly and disassembly
- + Open or closed impeller with twisted vanes for high efficiency and good flow conditions to ensure even wear
- + Heavy shaft and no shaft seal for severe operating conditions
- + Pump and motor can be directly coupled or connected with belts



## MP-DS Double Suction Split Case Pumps

Equivalent to ITT Goulds 3420

#### **APPLICATIONS**

- + Cooling & Heating Systems
- + Desalination Plants
- + Fire Protection
- + Irrigation & Drainage
- + Long Distance Water Supply
- + Marine & Offshore Engineering
- + Power Stations
- + Pressure Boosting
- + Water Transport
- Water Utilities

SIZES	14 to 48 IN
FLOW	to 79,260 GPM (higher rates available)
HEADS	to 1,800 FT
PRESSURES	to 1,015 PSI
TEMPERATURES	to 175°F
STANDARDS	API 610, ANSI B731

- + Horizontal or vertical installation with double entry radial impeller
- + Mating flanges to DIN, ISO, BS, or ANSI
- + High operating reliability and excellent efficiencies keep operating
- + Service friendly design to the world's highest standards on quality, safety, reliability, and durability
- + Low maintenance costs and high availability
- + Sustainable pump design with low life cycle costs





## MP-ANSI Double Suction Split Case Pumps

Equivalent to ITT Goulds 3410

#### **APPLICATIONS**

- + Cooling & Heating Systems
- + Desalination Plants
- + Fire Protection
- + Irrigation & Drainage
- + Long Distance Water Supply
- + Marine & Offshore Engineering
- + Power Stations
- + Pressure Boosting
- + Water Transport
- + Water Utilities

SIZES	3 to 14 IN
FLOW	to 12,680 GPM (higher rates available)
HEADS	to 690 FT
PRESSURES	to 360 PSI
TEMPERATURES	to 285°F
STANDARDS	API 610, ANSI B73.1

- + Horizontal or vertical installation with double entry radial impeller
- + Mating flanges to DIN, ISO, BS, or ANSI
- + High operating reliability and excellent efficiencies keep operating costs down
- + Service friendly design to the world's highest standards on quality, safety, reliability, and durability
- + Low maintenance costs and high availability
- + Sustainable pump design with low life cycle costs



## MP-DSP Double Suction Split Case Pumps

**Equivalent to ITT Goulds 3415** 

#### **APPLICATIONS**

- + Cooling & Heating Systems
- + Desalination Plants
- + Fire Protection
- + Irrigation & Drainage
- + Long Distance Water Supply
- + Marine & Offshore Engineering
- + Power Stations
- + Pressure Boosting
- + Water Transport
- + Water Utilities

SIZES	14 to 28 IN
FLOW	to 44,000 GPM (higher rates available)
HEADS	to 790 FT
PRESSURES	to 360 PSI
TEMPERATURES	to 285°F
STANDARDS	API 610, ANSI B73:1

- + Horizontal or vertical installation with double entry radial impeller
- + Mating flanges to DIN, ISO, BS, or ANSI
- + High operating reliability and excellent efficiencies keep operating costs down
- + Service friendly design to the world's highest standards on quality, safety, reliability, and durability
- + Low maintenance costs and high availability
- + Sustainable pump design with low life cycle costs



# SH Series Submersible HD Pumps

Equivalent to Tsurumi HS Series

		<b>NI</b> I	AT.	
/\	UL	<b>71</b>	/\	NS
			$\neg$	113

- + General Purpose
- Civil Engineering & Construction Works
- + Mines, Quarries, Coal Ore,& Slurries
- + Sewage Treatment Plants

#### **FEATURES**

- + Capacity up to 372m<sup>3</sup>/h
- + Head up to 295'
- + 30 HP to 60 HP
- + Class F Insulation
- + IP68 Protection Class
- + 65' Cable Length (optional)
- + 40°C Ambient Temperature
- + 98' Max Water Depth

MODEL 50/60Hz	OUTLET	PO	WER	CURR	CAF	CAPACITY		MAX CAPACITY		MAX HEAD	IMPELLER PASSAGE
	ММ	НР	kW	Α	M³/H	M³/MIN	M	M <sup>3</sup> /H	M³/MIN	M	ММ
SH422	100	30	22	41.5	66	1.1	60	130/138	2.17/2.3	68	6
SH430	100	40	30	54	72	1.2	70/75	170/144	2.83/2.4	78/82	6
SH622	150	30	22	41.5	120	2.0	37/40	200/210	3.33/3.5	50/52	15
SH630	150	40	30	54	140	2.33	45/48	220/216	3.67/3.6	58/64	15
SH637	150	50	37	66	60	1.0	80	220	3.67	83	6
SH645	150	60	45	80	84	1.4	80	220	3.67	90	6
SH837	200	50	37	66	216	3.6	35	330	5.5	48	20
SH845	200	60	45	80	270	4.5	35	372	6.2	53	20

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## **KBZ Series Submersible Drainage Pumps**

#### **APPLICATIONS**

- + General Purpose
- Civil Engineering
- + Mines, Quarries, Coal Ore, & Slurries
- + Sewage Treatment Plants

#### **FEATURES**

- + Capacity up to 160m<sup>3</sup>/h
- + Head up to 187'
- 2 HP to 20 HP
- Class F Insulation
- IP68 Protection Class
- 26' Cable Length (optional)
- 40°C Ambient Temperature
- + 82' Max Water Depth

MODEL 50Hz	OUTLET	POWER		CURR 380V	CAPACITY		HEAD	MAX CAPACITY		MAX HEAD	IMPELLER PASSAGE
	ММ	НР	kW	Α	M³/H	M³/MIN	M	M³/H	M³/MIN	М	ММ
KBZ21.5	50	2	1.5	3.5	15	0.25	16.5	27	0.45	23	8.5
KBZ31.5	80	2	1.5	3.5	30	0.5	9	45	0.75	15	8.5
KBZ22.2	50	3	2.2	5.1	18	0.3	20	31	0.52	28	8.5
KBZ32.2	80	3	2.2	5.1	30	0.6	13	47	0.78	20.5	8.5
KBZ23.7	50	5	3.7	8	12	0.2	30	50	0.83	33	8.5
KBZ33.7	80	5	3.7	8	30	0.5	22	55	0.92	31	8.5
KBZ43.7	100	5	3.7	8	60	1	11.5	96	1.6	18.5	8.5
KBZ35.5	80	7.5	5.5	11.6	36	0.6	25	69	1.15	38	8.5
KBZ45.5	100	7.5	5.5	11.6	60	1	16	102	1.7	24.4	8.5
KBZ47.5	100	10	7.5	15.4	48	0.8	30	80	1.33	41	11.5
KBZ67.5	150	10	7.5	15.4	90	1.6	15	127	2.12	31	19.5
KBZ411	100	15	11	22.5	60	1	35	84	1.4	48.5	11.5

MODEL 60Hz	OUTLET	POWER		CURR 400V		ACITY	HEΔD		MAX PACITY	MAX HEAD	IMPELLER PASSAGE
	MM	НР	kW	Α	M³/H	M³/MIN	M	M³/H	M³/MIN	M	ММ
KBZ21.5	50	2	1.5	3.5	15	0.25	15	27	0.45	22	8.5
KBZ31.5	80	2	1.5	3.5	30	0.5	8	40	0.67	14.5	8.5
KBZ22.2	50	3	2.2	5.0	18	0.3	20	33	0.55	26	8.5
KBZ32.2	80	3	2.2	5.0	36	0.6	11	55	0.92	19	8.5
KBZ23.7	50	5	3.7	7.7	12	0.2	30	33	0.55	34	8.5
KBZ33.7	80	5	3.7	7.7	30	0.5	20	55	0.92	29	8.5
KBZ43.7	100	5	3.7	7.7	60	1	11.5	90	1.5	18.5	8.5
KBZ35.5	80	7.5	5.5	11.4	36	0.6	25	75	1.25	34	8.5
KBZ45.5	100	7.5	5.5	11.4	60	1	16	105	1.75	23	8.5
KBZ47.5	100	10	7.5	15	48	0.8	30	84	1.4	40	11.5
KBZ67.5	150	10	7.5	15	90	1.6	15	124.8	2.08	31	19.5
KBZ411	100	15	11	22	60	1	35	84	1.4	48.5	11.5

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