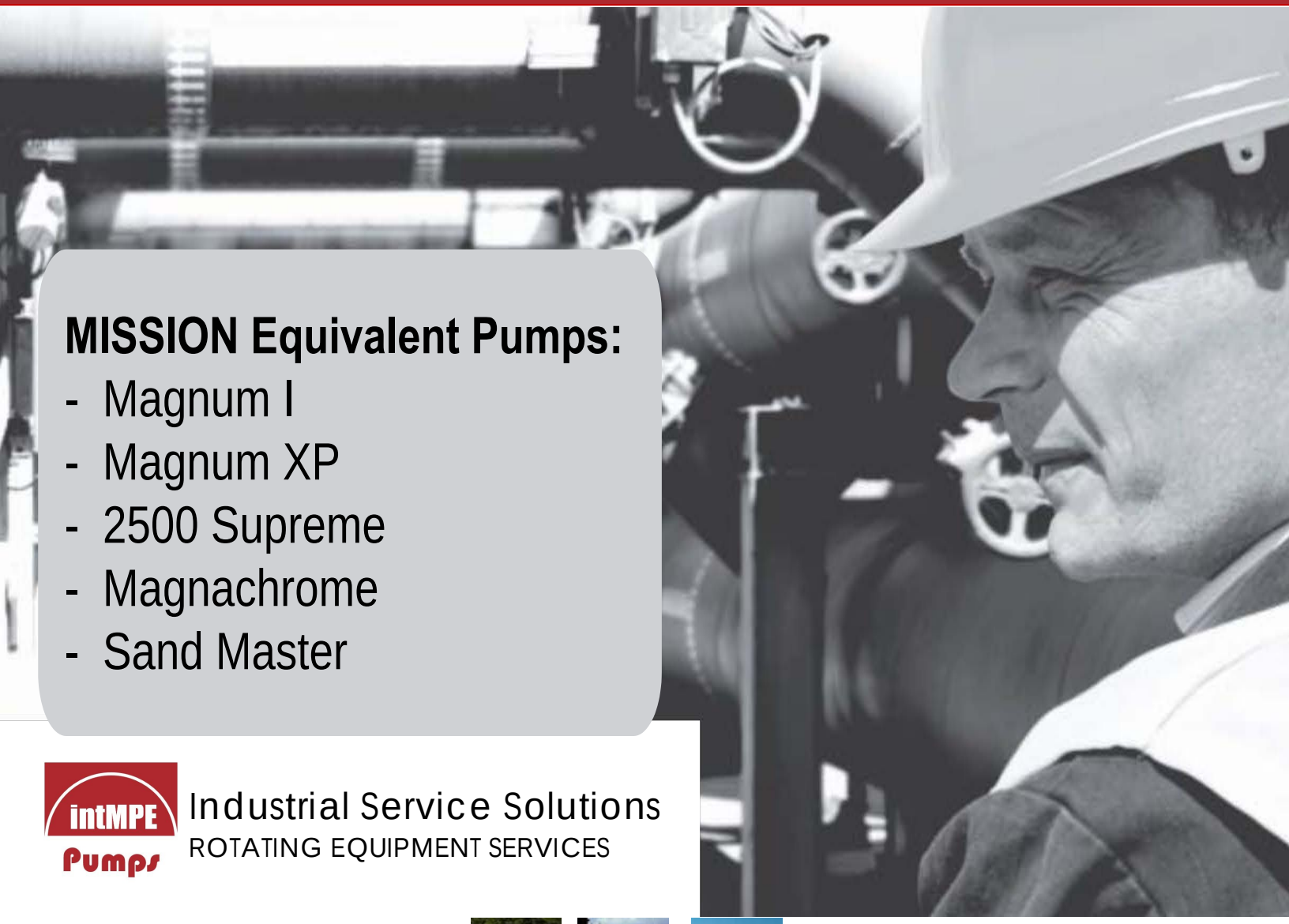
APPLICATION DRIVEN ENGINEERED SOLUTIONS

Mineral Processing Centrifugal "MP" Pumps



MISSION Equivalent Pumps:

- Magnum I
- Magnum XP
- 2500 Supreme
- Magnachrome
- Sand Master

intMPE Pumps

Industrial Service Solutions
ROTATING EQUIPMENT SERVICES

*All manufacturers' names, numbers, symbols and descriptions are used for reference purposes only and it is not implied that any pump or parts for them is a product of any of these manufactures.

MISSION Magnum I Equivalent Pumps Parts List

General Introduction

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intMPE Pumps

International Mineral Processing Equipment

APPLICATION DRIVEN
ENGINEERED SOLUTIONS

intMPE offers a complete line of centrifugal sand pumps to suit for all kinds of drilling sand pump application. Size ranges from 3x2x13, 4x3x13, 5x4x14, 6x5x11,6x5x14, 8x6x11,8x6x14, 10x8x14, 12x10x23 to 14x12x22b. Bare pumps, matching motors are available from 7.5KW to 90KW, with rotation 800, 1000, 1150,1450, 1750 to 3500 RPM at 50Hz or 60Hz.

The model 10x8x14 and 8x6x14 centrifugal magnum pump used on solid control system over 3000 meter-long drilling rigs, with big viscosity and heavy specific gravity drilling fluid. 8x6x11 centrifugal mud solid control feeding pump applies to under 3000 meter-long drilling rigs, and it also can be used to supply mud to triplex mud pump as a filling pump. 6×5×11 centrifugal pump applies to truck-mounted drilling rigs or pocket drilling rigs. 4x3x13 drilling centrifugal pump is usually used as measuring pump or replenishment pump. 3x2x13 model pump is usually used as clean water pump.

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* intMPE sand pumps and spares are only interchangeable with Mission Magnum pumps and spares.
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Your Satisfaction
Our Biggest Compliment

MP-MAG-I

Specifications:

- Sizes from 3x2x13 to 10x8x14
- Flow rates from a few gallons per minute up to 2,600 GPM Head pressure up to 550 feet
- Best utilized for applications requiring up to 200 HP

Typical Configurations:

3x2x13,
6x5x14,
4x3x13,
8x6x11,
5x4x14,
8x6x14,
6x5x11,
10x8x14

The MPMAG- I MODEL has been engineered for the toughest jobs in drilling, production, well-servicing, and industrial applications. The revolutionary design of the MPMAG- I MODEL provides supreme-duty performance in all types of fluid pumping operations. Although it offers greater capacity and higher heads, the MPMAG- I MODEL remains the competitive pump of choice for aggressive applications.
The MPMAG- I MODEL I is more powerful, more durable, and easier to maintain than any conventional pump in use today.
The MPMAG- I MODEL has an open impeller design that contains wide-tipped vanes and a more tangential circumference of the suction allowing the pump to create a smoother flow pattern when handling abrasive fluids.MPMAG- I MODEL is available in hard iron, stainless steel, and aluminum bronze fluid ends. The pumps can be unitized with electric motors, diesel engines, and hydraulic motors (horizontal, vertical, or close-coupled configuration). Also available, Horizontal and Vertical Close Coupled Magnum.

Design Features:

- Up to 50% more capacity from the 8 x 6 pump
- Optimum pressure at low operating speeds
- Thicker casing to extend life from wear and corrosion
- New impeller design to reduce loads and extend earing life
- Larger, stronger shaft to reduce deflection
- Replaceable shaft sleeve in packing wear area
- Larger, long-life bearings
- Replaceable stuffing box cover
- Smoother, non-turbulent flow throughout casing

MISSION Magnum I Equivalent Pumps Parts List

intMPE Pumps

MP-MAG-I

Magnum Parts List

Item	Qty	Catalog Number	Part #	Description	Material
1*	1	See Below	See Below	Casing	Hard Iron
1A	1	10399-46-1	648403012	Gasket, Casing	Vellumoid
1B	12	3932-61	648402014	Nut, Casing	Stl
1C	12	3862-76	648401115	Stud, Casing	Stl
1D	1	8505-04-01	86485503	Plug, Casing Drain	Stl
1E	1	8505-04-01	646400507	Plug, Flush Line	Iron
2*	1	See Below	See Below	Impeller	Hard Iron
2A	1	19110-72	648405082	Seal, Impeller	Viton
2B	1		7300239	Washer, Impeller	Stl
2C	1		7415648	Bolt, Impeller Lock	Stl
3*#	1	22223-01-30	641116157	Stuffing box, Mech. Seal	Hard Iron
3*&	1	20614-01-30	643365042	Stuffing Box, Packed	Hard Iron
3A	2	3861-117	648401016	Bolt, Stuffing box	Stl
3B&	1	19368-01	601499403	Grease Fitting	Stl
4	1	20622A	641103338	Gland Assy., Packing	Bronze
5A#	1	22451-1	648414308	Seal, Mechanical	Tungsten Carbide
5A~	1	25014-04M-B	661007005	Packing, Shaft	Graphite/Acrylic
6	2	B3701A	601102494	Bolt Assy, Gland	Stl
7	1	20612-02-33	646490557	Shaft	AISI 4140
7A#	1	20943-21	641102182	Sleeve, Shaft (M.S. Pump)	416SS
7A&	1	20613-21G-7A	641102181	Sleeve, Shaft (Pack Pump)	416SS/Ceramic
7B	1	4372-5-21	601212392	Key, Shaft	416ss
7C	1	23444-01-72	648415156	Seal, Shaft Sleeve	Viton
8	1	22210-1A	641116108	Deflector Assembly	Bronze
9	1	20618-12-1	644302499	Frame, Grease Lubricated	Cast Iron
9A!	1	8505-05	601474737	Plug, Oil Drain	Iron
9B!	1	18471	648403608	Plug, Oil Fill	Iron
9C	1	8505-05	601474737	Plug, Frame Drain	Iron
9D	1	8267-01	601473689	Breather	Stl
9E	1	8478-3	601174584	Oiler Assembly	
9F!	1	A 662014131	662014131	Dip Stick	Stl
9G	3	2538-1H		Bolt, Casing Jack	Stl
10A	1	20626	644303109	Cover, Inboard Bearing	Iron
10B	1	20625	648408706	Gasket, I.B. Brg. Cover	Vegetable Fiber
10C	1	20619-01	648408300	Oil Seal, I.B. Brg. Cover	Buna-n
10D	2	3861-1	601407505	Bolt, I.B. Brg. Cover	Stl

Item	Qty	Catalog Number	Part #	Description	Material
10E	2	3932-2	601408560	Nut, I.B. Brg. Cover	Stl
10F	1	20620-01	648408409	Exclusion Seal, I.B. Brg. Cvr.	Buna-n
10G	1	21641-01	661010033	Grease Fitting	Stl
10H	1		648411908	Grease Fitting	Stl
11	1	N/A	661009010	Bearing, Inboard	Vendor
12	1	20624-01-01	644308504	Housing, O.B. Bearing	Iron
12A	1	7496-253	648402295	Seal, O.B. Brg Housing	Buna-n
12B	4	3861-138	648401057	Bolts, O.B. Brg. Housing	Stl
12C	2	3932-62	658404702	Nut, O.B. Brg. Housing Jam	Stl
13	1	20617-01-01	641103296	Cover, O.B. Bearing	Iron
13A	1			Grease Zerk, O.B. Brg. Cvr.	Stl
13B	1	7496-26	072200017	O-ring, O.B. Bearing Cover	Buna-n
13C	1	20619-02	648408359	Oil Seal, O.B. Brg. Cover	Buna-n
13D	2	3861-139	648401081	Bolt, O.B. Brg. Cover	Stl
14	2	N/A	648408201	Bearing, O.B. (2 Req'd)	Vendor
14A	1	6124-4	648402105	Lockwasher, O.B. Bearing	Stl
14B	1	6123-4	648402055	Lucknut, O.B. Bearing	Stl
Casings - Includes Studs, Nuts and Gasket					
1*	1	19203-01-30A	641101753	Casing, 3x2x13	Hard Iron
1*	1	19205-01-30A	641101902	Casing, 4x3x13	Hard Iron
1*	1	19222-01-30A	641102058	Casing, 5x4x14	Hard Iron
1*	1	19122-01-30A	641101456	Casing, 6x5x11	Hard Iron
1*	1	19123-01-30A	641101605	Casing, 6x5x14	Hard Iron
1*	1	19763-01-30A	641102157	Casing, 8x6x11	Hard Iron
1*	1	19117-01-30A	641101308	Casing, 8x6x14	Hard Iron
1*	1	20937-01-30A	641102322	Casing, 10x8x14	Hard Iron
Impellers					
2*	1	19204-XX-30	Varies	Impeller, 3x2x13	Hard Iron
2*	1	19206-XX-30	Varies	Impeller, 4x3x13	Hard Iron
2*	1	19224-XX-30	Varies	Impeller, 5x4x14	Hard Iron
2*	1	19121-XX-30	Varies	Impeller, 6x5x11	Hard Iron
2*	1	19121-XX-30	Varies	Impeller, 6x5x14	Hard Iron
2*	1	19121-XX-30	Varies	Impeller, 8x6x11	Hard Iron
2*	1	19116-A0-30	Varies	Impeller, 8x6x14	Hard Iron
2*	1	21867-XX-30	Varies	Impeller, 10x8x14	Hard Iron

XX - Impeller Code - First X equals diameter of impeller in inches minus 4. Therefore 10" = 6, 9"= 5,8"=4, etc… 14" use letter A.
Second X equals fractional data in 1/8's. Therefore 1/8" = 1, 1/4" = 2, 1/2" = 4, etc…Thus a 10.5" impeller is coded as 64, a 12" impeller is coded as 80, a 13.25' impeller is coded as 92 etc.

Notes:

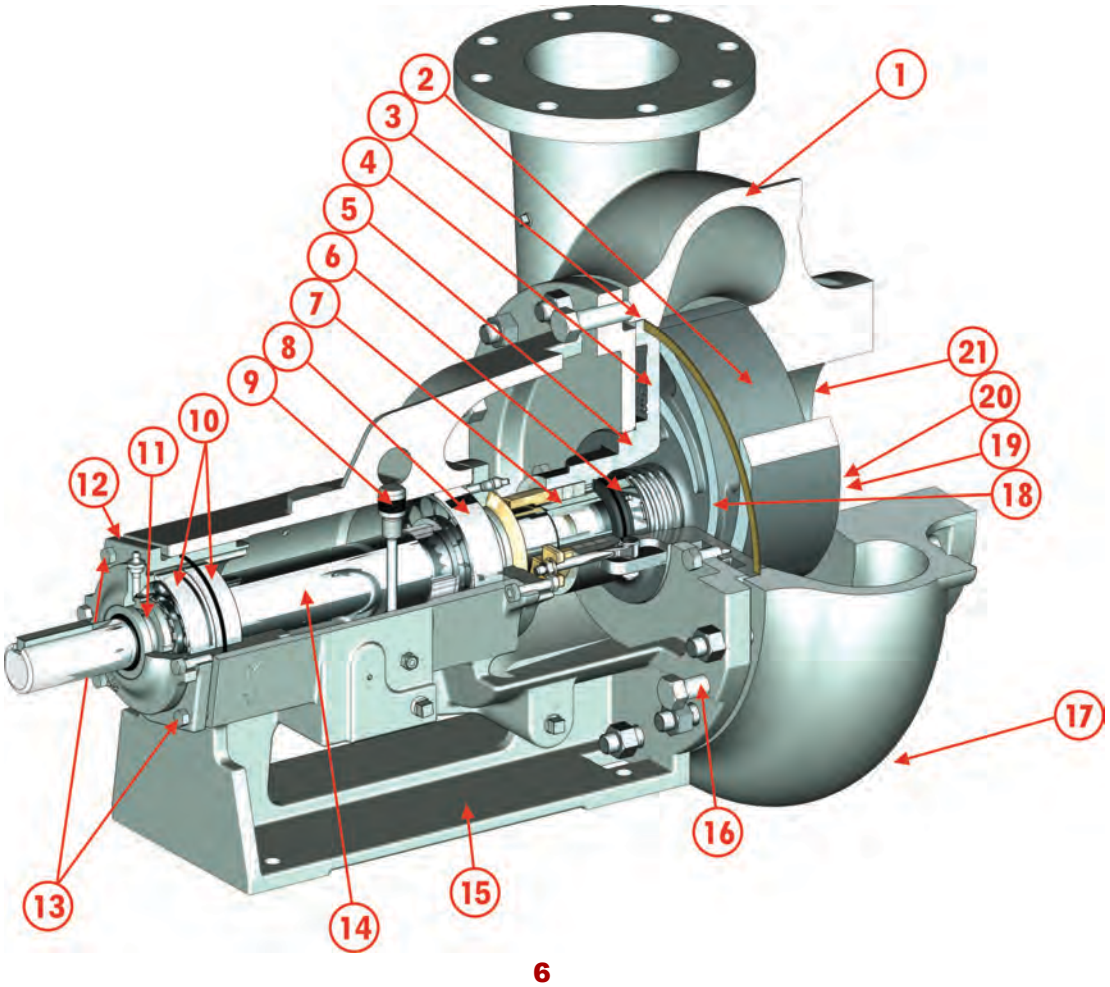
* - Casings, Impellers and Stuffing Boxes are also available as Stainless Steel, Aluminum Bronze or Magnachrome - See local dealer for Part Numbers.
# - Used for pumps equipped with mechanical seal only.
& - Used for pumps equipped with packing only.
! - Used for oil lubricated pumps only.
~ - Packing available in various materials - standard material shown

intMPE Pumps

MP-MAG-I

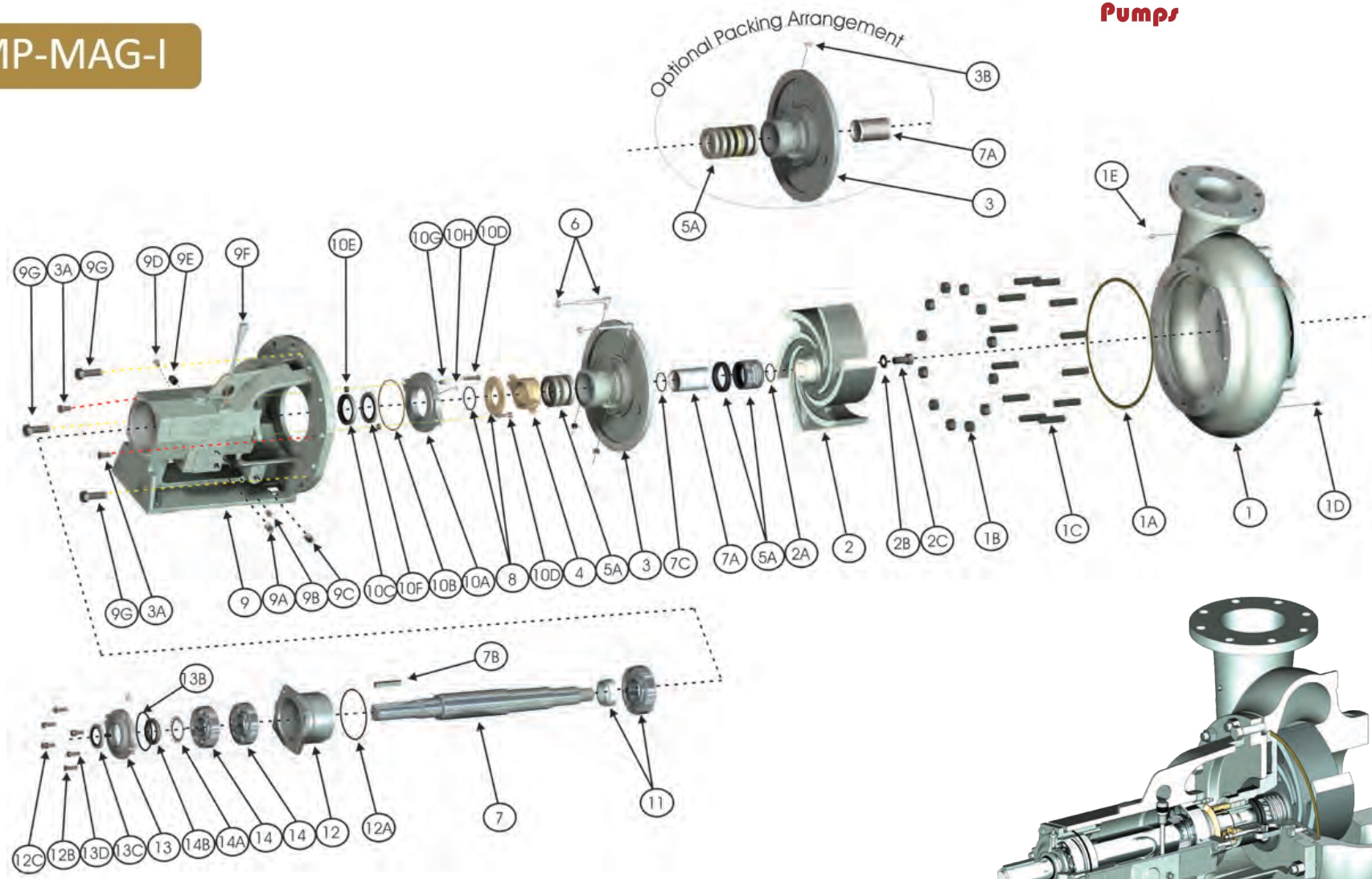
Magnum Features

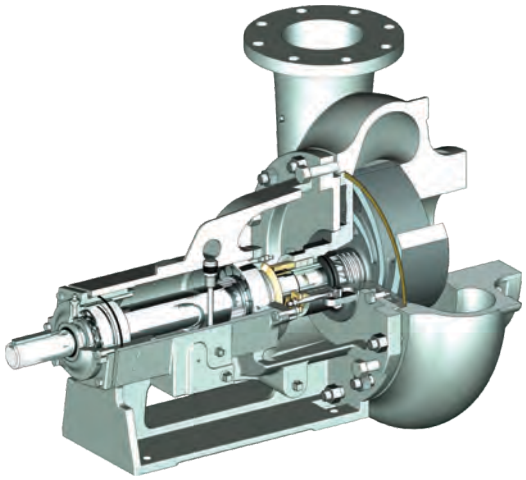
1 Thick, strong concentric casing provides extended life over conventional volute designs. The concentric design minimizes turbulence and abrasive wear.
2 Wide open-vane impeller increases flow and creates lower axial thrust for improved bearing life.
3 Casing gasket recessed for protection.
4 Replaceable stuffing-box cover with dual stuffing box bolts
5 Optional stuffing boxes available for single and double mechanical seal applications and can be configured for flush lines.
6 Long-life no-adjustment mechanical seal available for near zero leakage.
7 Replaceable shaft sleeve prevents shaft wear.
8 Single row roller bearings for increased bearing life.
9 Oil lubrication for bearings available upon request and recommended for pump speeds in excess of 2400 RPM.
10 Duplex angular contact bearings eliminate shaft end play and increases bearing and seal life.
11 Lip and exclusion seals for bearing protection
12 Optional flanged bearing housing available for hydraulic drive
13 External adjustment of impeller clearance extends pump performance life.
14 Large heavy-duty shaft reduces deflection for longer life of packing and mechanical seals.
15 Solid base offering rigidity and strength
16 Casing jack bolts simplify casing removal
17 Easily accessible front access drain, when requested.
18 Back vanes reduce collection of solids at stuffing box and reduce box pressure.
19 Smooth impeller eye for minimum turbulence and higher efficiency.
20 Anti-loosening impeller lock bolt to eliminate pump damage in case of improper motor hook-up.
21 Full pipe diameter entrance for minimum turbulence and maximum efficiency.



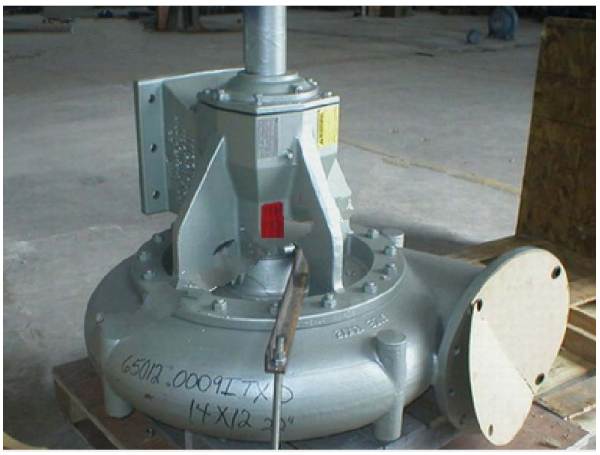
intMPE Pumps

MP-MAG-I





MP-MAG XP



Specifications:
Size 14x12x22 and 12x10x23
Flow rates 3000-7500gpm
Head 75-410feets
Materails Hard iron, High chrome etc.

The MPMAG XP MODEL Pump is ideally suited for pumping high volumes of heavy slurries that are abrasive, corrosive, or just plain tough to pump. The MAGNUM XP 14x12x22 and 12x10x23 blender pump can deliver flow rates from 3000 - 7500 gpm at 75 - 410 feet of head at low speeds.

The compact overall dimensions of the MPMAG XP MODEL pump make it an excellent choice for high volume mobile and stationary applications where a small footprint is critical.

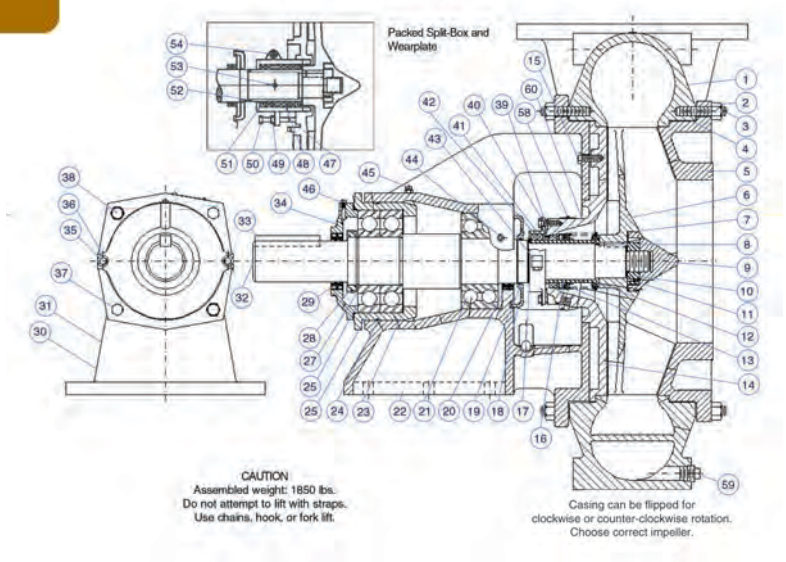
The MPMAG XP MODEL pump is designed for continuous operation with minimal maintenance. The low stuffing box pressure can increase seal life approximately 50%. The extra-heavy shaft is designed for minimum deflection. This feature also extends seal life. A unique casing flow divider cuts the radial load in half, doubling bearing life. The heavy-duty bearings are permanently lubricated to minimize maintenance.

Design Features:
- 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

Typical Configurations: 8x6-18, 12x10-23, 14x12-22. intMPE Group offers MPMAG XP MODEL 12x10x23 and 14x12x22 models are very popular on oil and gas fracking operation as blender pump.

intMPE Pumps

MP-MAG XP



Magnum XP Parts List

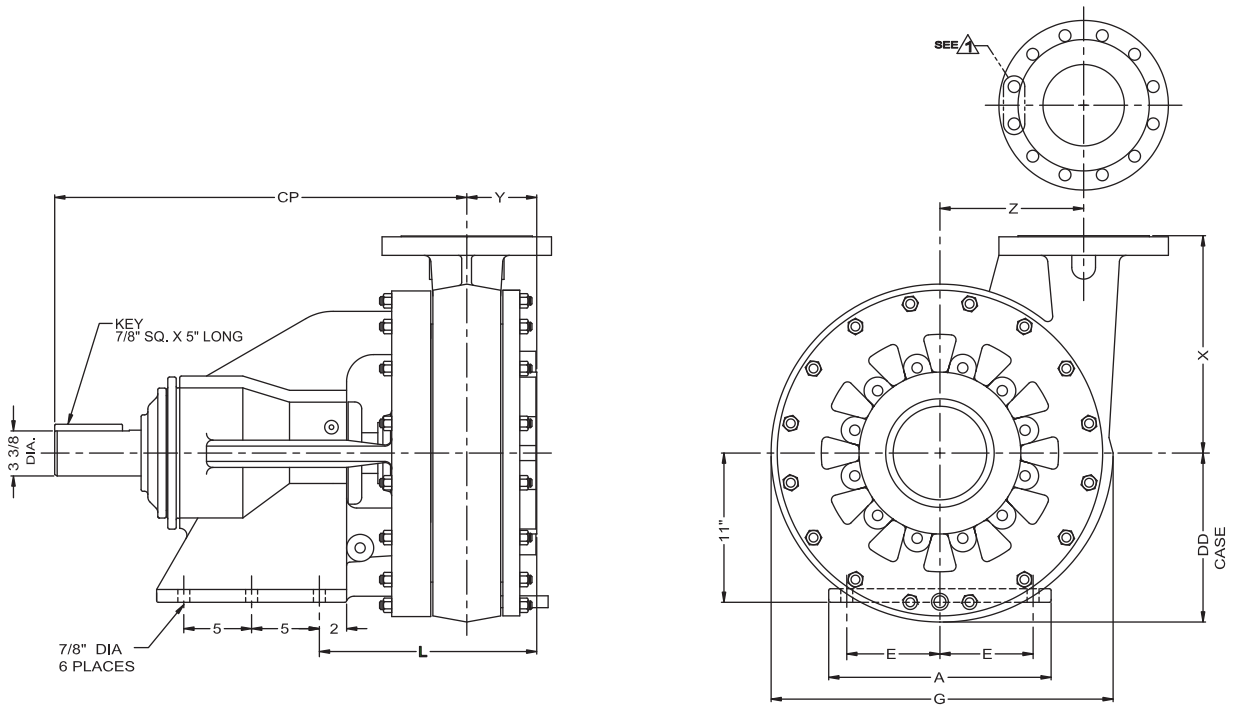
Item #	Description	Qty.	Catalog Number	Part Number
1	Casing, 14X12X22	1	24022-01-30A	651120206
	Casing, 12x10x23		25008-01-30A	662001001
	Casing, 8x6x18		25289-02-30A	662002089
2	Nut, Casing	32	3932-61	648402014
3	Stud, Casing (14 X 12 and 12 X 10)	32	3862-86	658403308
	Stud, Casing (8 X 6)	16	3862-90	601208285
	Stud, Casing (8 X 6)	16	3862-92	648401118
4	Gasket, Casing (14x12x22)	2	10399-55-01	658410501
	Gasket, Casing (12x10x23)		25012-01-01	661010001
	Gasket, Casing (8x6x18)		25012-02-05	662010032
5	Cover, Front (14x12x22)	1	24021-01-30	654310309
	Cover, Front (12x10x23)		25009-01-30	662014003
	Cover, Front (8x6x18)		25291-02-30	662014129
6	Impeller, 14x12 Clockwise Rot. 22"	1	24024-X0-HS	662005003
	Impeller, 12x10 Clockwise Rot. 23"		25010-Y0-30	662005002
	Impeller, 8x6 Clockwise Rot. 18"		25292-T0-30	662005018
7	Seal, Impeller Nose	1	7496-158	658408109
8	Key, Impeller	1	4372-29-21	658405006
9	Nose, Impeller (Hex Design)	1	24025-04-25L	652309601
	Nose, Impeller (Two Flat Design)		24025-01-25L	652309600
	Nose, Impeller (2 Flat Ion Nitride)		24025-03-25L	662014054
10	Screw, Set	1	14430-19	658411400
11	Jam Nut	1	24026-25L	658414255
12	Seal, Impeller	1	7496-153	658408059
13	Mechanical Seal (Crane Type)	1	24036	658416102
14	Stuffing Box, Mech. Seal (14 X 12)	1	24027-01-30	653322305
	Stuffing Box, Mech. Seal (12 X 10)		24027-02-30	662014002
	Stuffing Box, Mech. Seal (8 X 6)		25290-02-30	662014128
15	Bolt, Stuffing Box	2	3861-117	648401016
16	Sleeve, Shaft	1	24029-21BZ	656422201
17	Seal, Sleeve	1	7496-234	658408505
18	Slinger	1	24030-01-13	654311604
19	Seal, Slinger	1	7496-238P	658408554
20	Oil Seal, Inboard Bearing	2	20619-03	658413604
21	Bearing, Inboard	1	20615-2	658413000
22	Frame 14 X 12	1	24031-01-01	654312008
	Frame 12 X 10		24031-02-01	662014001
	Frame 8 X 6		25293-02-01	662014130
23	Housing, Bearing	1	24032-01-01	654313006
24	Seal, Bearing Housing	1	7496-272	658408901

Item #	Description	Qty.	Catalog Number	Part Number
25	Bearing, Outboard (14 X 12)	1	20616-2	658413307
	Bearing, Outboard(12 X 10 and 8 X 6)	2	20616-3	661009001
26	Seal, Bearing Cover	1	7496-267	658408802
27	Lock Washer	1	6124-6	658407002
28	Lock Nut, Bearing	1	6123-6	658406509
29	Oil Seal, Bearing Cover	2	20619-04	658413638
30	Drive Screws	6	12530	601482417
31	Nameplate	1	23017	601501505
32	Shaft	1	24028-33	656420007
33	Key, Coupling	1	4372-30-21	658405055
34	Cover, Bearing	1	24033-01-01	654314004
35	Bolts, Bearing Cover	2	3861-139	648401081
36	Washer, Bearing Cover	2	3936-19-L8	648402030
37	Nuts, Bearing Housing	2	3932-62	626402702
38	Bolt, Bearing Housing	4	3861-138	648401057
39	Washer, Flat	2	3936-19-L8	648402030
40	Bolt, Packing Gland	2	3861-165	601408289
41	Gland, Packing Half	2	24034-01-13	654315100
42	Packing Set	1	8264-344-K	658409503
43	Screw, Cap	2	3909-04-87	658404207
44	Plug, Grease	1	8505-1	601474695
45	Breather	1	8267-1	601473689
46	Plug, Fitting	1	19368	661010020
58	Plug, Pipe	2	8505-02-01	658409859
59	Plug, Pipe	1	8505-06-01	658410006
60	Tag, Mechanical Seal	1	22566	603445727
	Packed Split-Box and Wearplate			
47	Wearplate, Split Box	1	24023-01-XX	654310507
48	Packing Set	1	8264-345-K	658409552
49	Nut and Washer Assembly	2	22216-02	658413935
50	Bolt, Split-Box	2	3861-168	1/2-13x4 lg Gr 5
51	Stuffing Box, Split	2	24037-01-87	654317007
52	Latern Ring Half	2	24039-13	658418207
53	Fitting, Grease	1	19368-01	601499403
54	Screw, Cap	2	3909-13-87	658404405
	Auxiliary Tools			
55	Tool, Impeller Nose and Nut	1	24040	658420203
	Tool, Impeller Nose (HEX)		Standard Hex Socket	
56	Tool, Impeller Removal	1	24041	658420252
57	Tool, Shaft Holder	1	24042	658420302

intMPE Pumps

MP-MAG XP

Magnum XP Dimensions[1]



		PIPE FLANGES * SUCTION PIPE		PIPE FLANGES * DISCHARGE PIPE										
PUMP SIZE	Wt. Lbs.	SIZE	DRILLING	SIZE	DRILLING	A	E	G	L	X	Y	Z	CP	DD
8 x 6 XP	1,200	8	12 HOLES 7/8" -9UNC-2B 13" B.C.	6	12 HOLES 7/8" DIA. 10-5/8" B.C.	16-13/32	6-7/8	25-1/4	16-1/32	16	5-5/32	10-19/32	30-13/32	12-7/16
12 x 10 XP	1,950	12	12 HOLES 3/4" -10UNC-2B 17" B.C.	10	12 HOLES 1" DIA. 14-1/4" B.C.	16-13/32	6-7/8	33-5/8	18-11/16	22	6-15/16	13-1/2	31-1/2	16-13/16
14 x 12 XP	1,850	14	12 HOLES 1" -8UNC-2B 18-3/4" B.C.	12	⚠1	16-13/32	6-7/8	37-3/4	18-3/8	19-7/16	6-5/8	14-9/16	31-3/16	18-13/16

* THE ABOVE DRILLING IS ANSI STANDARD 150 SERIES FLAT FACE EXCEPT THE 8 X 6 XP IS ANSI 250# (300 SERIES) RAISED FACE. ALL DISCHARGE FLANGE HOLES ARE THRU CLEARANCE HOLES EXCEPT AS NOTED.

⚠1 THE DISCHARGE FLANGE DRILLING FOR THE 14 X 12 XP HAS 12 HOLES, 10 HOLES THRU 1" DIA. & 2 HOLES TAPPED 7/8 -9UNC-2B AS SHOWN, ON A 17" DIA. B.C.

[1]NOTE: Dimensions are for reference only. Certified drawings should be requested for construction purposes.

MP-2500

Specifications:
- Sizes from 3x2x13 to 10x8x14
- Flow rates from a few gallons per minute up to 2,600 GPM
- Head pressure up to 550 feet
- Best utilized for applications requiring up to 200 HP

intMPE MP2500 Model has a semi-open impeller design that contains wide-tipped vanes and a more tangential circumference of the suction allowing the pump to create a smoother flow pattern when handling abrasive fluids. The MP2500 Model is available in hard iron, supreme hard iron, and aluminum bronze fluid ends. The pumps can be unitized with electric motors, diesel engines, and hydraulic motors (horizontal, vertical, or close-coupled configuration).

Design Features:
- 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 end

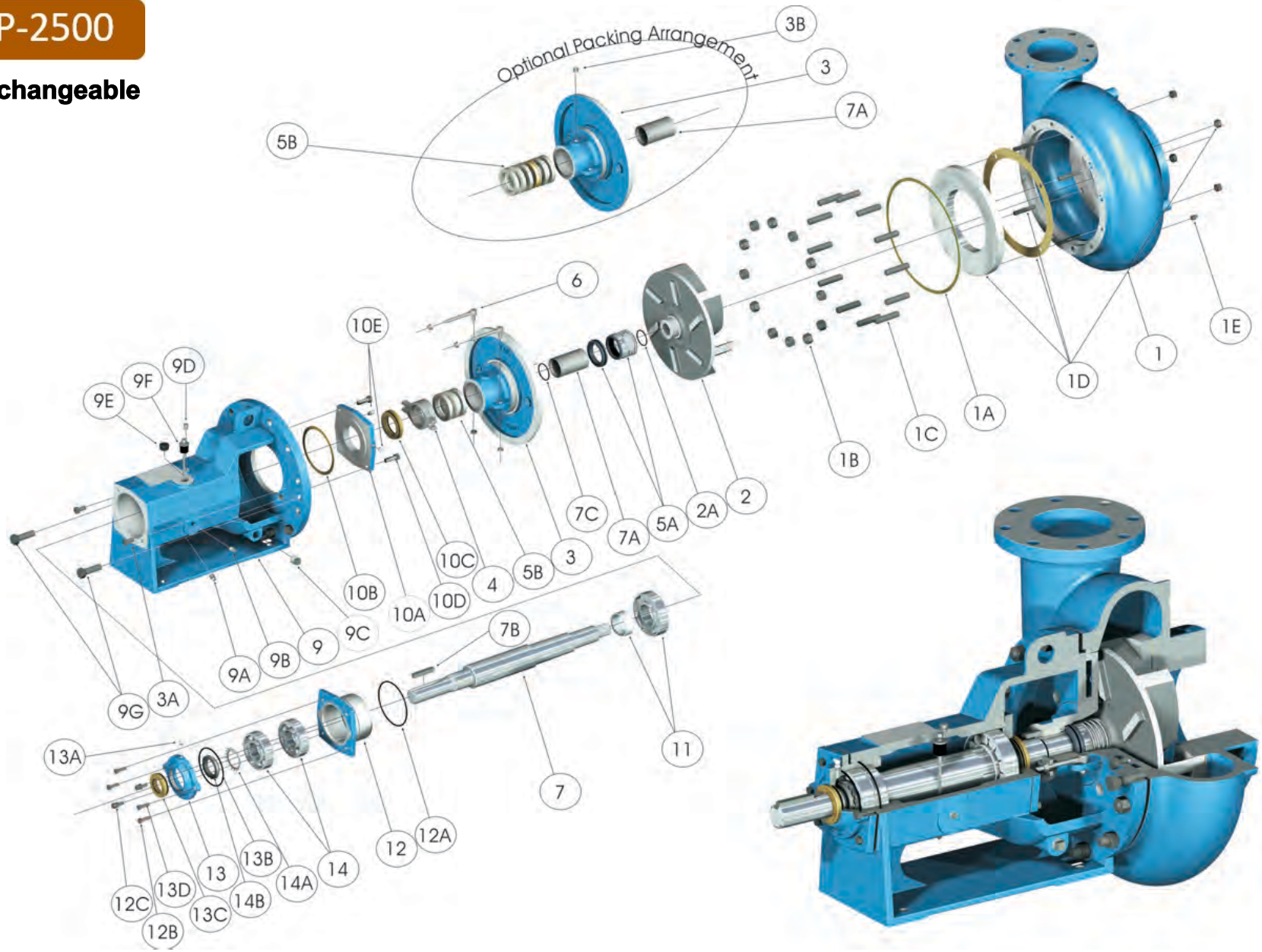
Specifications size include: 3x2-13, 4x3-13, 5x4-14, 6x5-11, 6x5-14, 8x6-11, 8x6-14, 10x8x14

MISSION 2500 Supreme Equivalent Pumps Assembly Drawing

intMPE Pumps

MP-2500

100% Interchangeable



intMPE Pumps

MP-2500

2500 Supreme Parts List

Item	Qty	Catalog Number	Part #	Description	Material
1*	1	See Below	See Below	Casing, Includes 1 thru 1E	Hard Iron
1A	1	10399-46-1	648403012	Gasket, Casing	Vellumoid
1B	12	3932-61	3932-61H	Nut, Casing	Stainless Steel
1C	12	H2507-3	648401115	Stud, Casing	Stl
1D*	1	See Below	See Below	Wear Pad, Includes stds, nuts, & gskt	
1E	1	8505-2H	601474703	Plug, Casing Drain	Stl
2*	1	See Below	See Below	Impeller	Hard Iron
2A	1	H19110-72	648405082	Seal, Impeller	Viton
3*#	1	H22223-01-30	22223H	Stuffing box, Mech. Seal	Ductile Hard Iron
3*&	1	H20614-01-30	20614H	Stuffing Box, Packed	Ductile Hard Iron
3A	2	H3861-117	3861-138	Bolt, Stuffing box	Stl
3B&	1	19368-1H	19368-1H	Grease Fitting	Stl
4	2	H20622A	20622H	Gland Assy., Packing	Stainless Steel
5A#	1	H22451-1A	22451K	Seal, Mechanical	Tungsten Carbide
5B~	1	8264-24-0B	648402600	Packing, Shaft	
6	2	20629	601102494	BOLT,GLAND	Stl
7	1	H20612-02-33	646490557	Shaft	AISI 4140
7A#	1	H20613-21A	646492505	Sleeve, Shaft (M.S. Pump)	416SS
7A&	1	H20613-21G-7A	646490656	Sleeve, Shaft (Pack Pump)	416SS/Ceramic
7B	1	H4372-5-21	601212392	Key, Shaft	416ss
7C	1	23444-01-72	648415156	Seal, Shaft Sleeve	Viton
8	1	22210-1A	641116108	Deflector Assembly	Bronze
9	1	H17444	17444H	Frame, Grease Lubricated	Cast Iron
9A!	1	H8505-1	8505-1	Plug, Oil Drain	Iron
9B!	1	8505-2H	601474703	Plug, Oil	Iron
9C	1		601474737	Plug, Frame Drain	Iron
9D	1	H8267-1	601473689	Breather	Stl
9E	1	H2565-1	2565-1H	Plug, Oil Fill	Plastic
9F!	1	H2539-3	2539-3H	Dip Stick	Stl
9G	2	H2538-1	2538-1H	Bolt, Casing Jack	Stl
10A	1	H17950	17950H	Cover, Inboard Bearing	Iron
10B	1	H20625	648408706	Gasket, I.B. Brg. Cover	Vegetable Fiber
10C	1	H2564-4	2564-4H	Labyrinth Seal, IB Brg Cvr	Buna-n
10D	2	H3861-1	3861-1H	Bolt, I.B. Brg. Cover	Stl
10E	1		661010033	Grease Fitting	Stl
11	1	N/A	661009010	Bearing, Inboard	Vendor

Item	Qty	Catalog Number	Part #	Description	Material
12A	1	H7496-253	648402295	Seal, O.B. Brg Housing	Buna-n
12B	4	H3861-138	3861-138	Bolts, O.B. Brg. Housing	Stl
12C	2	H3932-62	658404702	Nut, O.B. Brg. Housing Jam	Stl
13	1	H20617A	20617H	Cover, O.B. Bearing	Ductile Iron
13A	1		661010020	Grease Zerk, O.B. Brg. Cvr.	Stl
13B	1	H7496-26	072200017	O-ring, O.B. Bearing Cover	Buna-n
13C	1	H2564-3	2564-3H	Labyrinth Seal, O.B. Brg. Cvr.	Buna-n
13D	2	H3861-139	3861-139-4	Bolt, O.B. Brg. Cover	Stainless Steel
14	2	H20616-1S	648408201	Bearing, O.B. (2 Req'd)	Vendor
14A	1	H6124-4	648402105	Lockwasher, O.B. Bearing	Stl
14B	1	H6123-4	648402055	Lucknut, O.B. Bearing	Stl
Casings - Includes Studs, Nuts and& Gasket					
1*	1	H19203-01-30A	19203AH	Casing, 3x2x13	Hard Iron
1*	1	H19205-01-30A	19205AH	Casing, 4x3x13,w/ wear pad	Hard Iron
1*	1	H19222-01-30A	19222AH	Casing, 5x4x14,w/ wear pad	Hard Iron
1*	1	H19122-01-30A	19122AH	Casing, 6x5x11,w/ wear pad	Hard Iron
1*	1	H19123-01-30A	19123AH	Casing, 6x5x14,w/ wear pad	Hard Iron
1*	1	H19763-01-30A	19763AH	Casing, 8x6x11,w/ wear pad	Hard Iron
1*	1	H19117-01-30A	19117AH	Casing, 8x6x14,w/ wear pad	Hard Iron
1*	1	H20937-01-30A	20937AH	Casing, 10x8x14,w/ wear pad	Hard Iron
Impellers and Casing Wear Pads					
2*	1	H19204-XX-30	Varies	Impeller, 3x2x13 Open	Ductile Hard Iror
2*	1	H19206-XX-30	Varies	Impeller, 4x3x13 Open	Ductile Hard Iror
2*	1	H2523-XX-30	Varies	Impeller, 5x4x14 Semi Open	Ductile Hard Iror
2*	1	H2524-XX-30	Varies	Impeller, 6x5x11 Semi Open	Ductile Hard Iror
2*	1	H2524-XX-30	Varies	Impeller, 6x5x14 Semi Open	Ductile Hard Iror
2*	1	H2524-XX-30	Varies	Impeller, 8x6x11 Semi Open	Ductile Hard Iror
2*	1	H2525-A0-30	Varies	Impeller, 8x6x14 Semi Open	Ductile Hard Iror
2*	1	H2526-XX-30	Varies	Impeller, 10x8x14 Semi Oper	Ductile Hard Iror
1E	1	H2501-01-30A	2501-37AH	Wear Pad, 4X3X13 Casing	Ductile Hard Iror
1E	1	H2502-01-30A	2502-37AH	Wear Pad, 5X4X14 Casing	Ductile Hard Iror
1E	1	H2503-01-30A	2503-37AH	Wear Pad, 6X5X11 Casing	Ductile Hard Iror
1E	1	H2504-01-30A	2504-37AH	Wear Pad, 6X5X14 Casing	Ductile Hard Iror
1E	1	H2505-01-30A	2505-37AH	Wear Pad, 8X6X11 Casing	Ductile Hard Iror
1E	1	H2506-01-30A	2506-37AH	Wear Pad, 8X6X14 Casing	Ductile Hard Iror
1E	1	H2527-01-30A	2527-37AH	Wear Pad, 10X8X14 Casing	Ductile Hard Iror

XX - Imp. Code - First X equals diameter of impeller in inches minus 4. Therefore 10" = 6, 9"= 5, 8"=4, etc…14" use letter A. Second X equals frational data in 1/8's. Therefore 1/8" = 1, 1/4" = 2, 1/2" = 4, etc…Thus a 10.5" impeller is coded as 64

Notes:

* - Casings, Imp. & Stuff Boxes are available as Supreme Hard or Aluminum Bronze

- Used for pumps equipped with mechanical seal only.

& - Used for pumps equipped with packing only.

! - Used for oil lubricated pumps only.

~ - Packing available in various materials - standard material shown

intMPE Pumps

MP-2500

2500 Supreme Features

1 Thick, strong concentric casing with replaceable casing wear pad provides extended life over conventional volute designs. The concentric design minimizes turbulence and abrasive wear. The wear pad allows the casing to be repaired at a lower cost than replacing the entire casing.

2 Wide semi open impeller creates lower axial thrust for improved bearing life. The semi open design reduces the concentration of solids behind the impeller extending the life of the mechanical seal or packing and stuffing box.

3 Casing gasket recessed for protection.

4 Replaceable stuffing-box cover with dual stuffing box bolts

5 Optional stuffing-boxes available for single and double mechanical seal applications and can be configured for flush lines.

6 Long-life no-adjustment mechanical seal available for near zero leakage.

7 Replaceable shaft sleeve prevents shaft wear.

8 Single row roller bearings for increased bearing life.

9 Oil lubrication for bearings available upon request and recommended for pump speeds in excess of 2400 RPM.

10 Duplex angular contact bearings eliminate shaft end play and increases bearing and seal life.

11 Labyrinth seals for maximum bearing protection are standard. Lip seals are recommended for oil-lubricated pumps.

12 Optional flanged bearing housing available for hydraulic drive.

13 External adjustment of impeller clearance extends pump performance life.

14 Large heavy-duty shaft reduces deflection for longer life of packing and mechanical seals

15 Solid base offering rigidity and strength

16 Casing jack bolts simplify casing removal

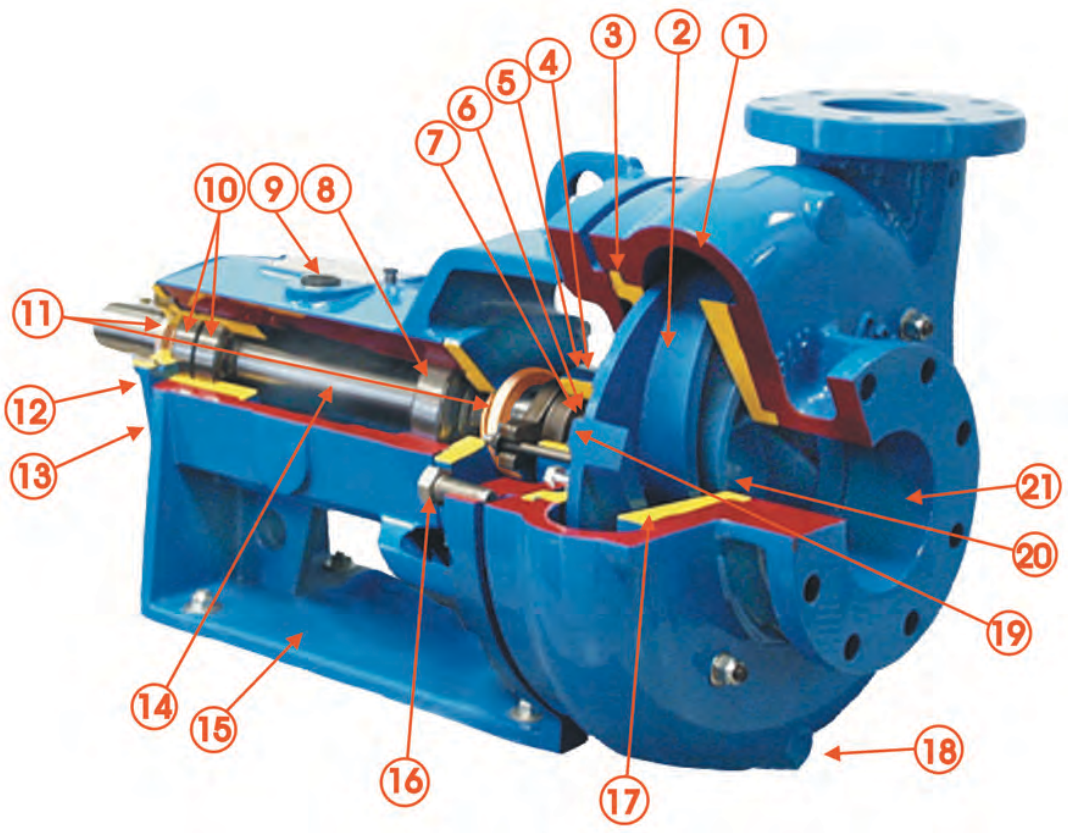
17 Replaceable casing wear pad.

18 Easy accessible front access drain.

19 Back vanes reduce collection of solids at stuffing box and reduce box pressure.

20 Smooth impeller eye for minimum turbulence and higher efficiency.

21 Full pipe diameter entrance for minimum turbulence and maximum efficiency.

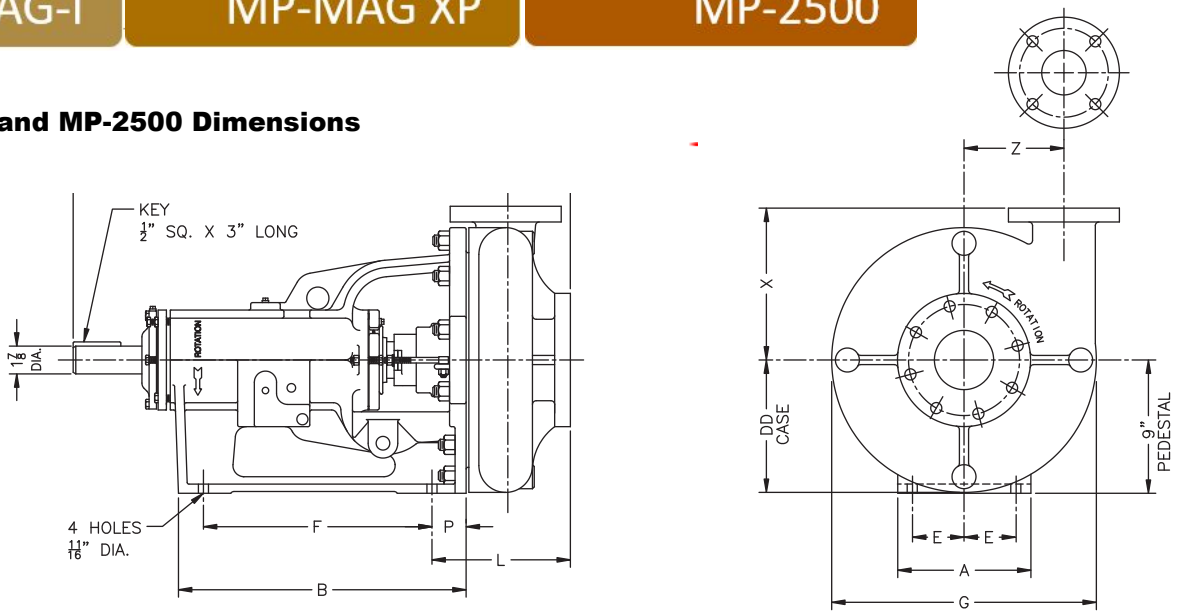


Dimensional Data MAGNUM and 2500 Supreme Equivalent

intMPE Pumps

MP-MAG-I | MP-MAG XP | MP-2500

MP-MAG and MP-2500 Dimensions

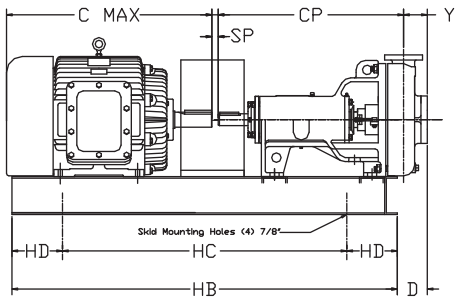


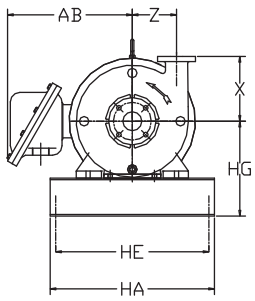
PUMP SIZE	Wt. Lbs.	PIPE FLANGES * SUCTION PIPE SIZE	DRILLING	PIPE FLANGES * DISCHARGE PIPE SIZE	DRILLING	A	B	E	F	G	L	P	X	Y	Z	CP	DD
3 x 2 x 13	440	3	4 HOLES 3/4"DIA 6" B.C.	2	4 HOLES 3/4"DIA 4-3/4" B.C.	9	19-5/8	3-1/2	15-7/16	17-7/8	8-3/4	2-5/16	10-1/4	3-3/4	7	29-1/4	9
4 x 3 x 13	436	4	8 HOLES 3/4"DIA 7-1/2" B.C.	3	4 HOLES 3/4"DIA 6" B.C.	9	19-5/8	3-1/2	15-7/16	17-7/8	9-3/8	2-5/16	10-1/4	4-1/4	6-3/4	29-3/8	9
5 x 4 x 14	485	5	8 HOLES 7/8"DIA 8-1/2" B.C.	4	8 HOLES 3/4"DIA 7-1/2" B.C.	9	19-5/8	3-1/2	15-7/16	19	10-3/4	2-5/16	11	5	6-1/8	30	9-11/16
6 x 5 x 11	507	6	8 HOLES 7/8"DIA 9-1/2" B.C.	5	8 HOLES 7/8"DIA 8-1/2" B.C.	9	19-5/8	3-1/2	15-7/16	17-7/8	12-1/16	2-5/16	11	5-3/4	6	30-5/8	9
6 x 5 x 14	550	6	8 HOLES 7/8"DIA 9-1/2" B.C.	5	8 HOLES 7/8"DIA 8-1/2" B.C.	9	19-5/8	3-1/2	15-7/16	21	12-1/16	2-5/16	11	5-3/4	6	30-5/8	10-1/2
8 x 6 x 11	583	8	8 HOLES 7/8"DIA 11-3/4" B.C.	6	8 HOLES 7/8"DIA 9-1/2" B.C.	9	19-5/8	3-1/2	15-7/16	20	13-1/4	2-5/16	14	6-1/4	8-3/8	31-1/4	10
8 x 6 x 14	616	8	8 HOLES 7/8"DIA 11-3/4" B.C.	6	8 HOLES 7/8"DIA 9-1/2" B.C.	9	19-5/8	3-1/2	15-7/16	23-9/16	13-1/4	2-5/16	14	6-1/4	8-3/8	31-1/4	12
10 x 8 x 14	810	10	12 HOLES 1"DIA 14-1/4" B.C.	8	8 HOLES 7/8"DIA 11-3/4" B.C.	9	19-5/8	3-1/2	15-7/16	22-3/8	13-11/16	2-5/16	14-3/16	6-11/16	8	31-1/4	11-3/16

* THE ABOVE DRILLING IS ANSI STANDARD 125 lb. CAST IRON OR ANSI SERIES 150 STEEL FLAT FACE. ALL FLANGE HOLES ARE THRU CLEARANCE HOLES.

MP-MAG and MP-2500 OB Skid Unitization Dimensions

Pump Size	Dimensions are in inches CP	X	Y	Z	D
3X2X13	29-1/4	10-1/4	3-3/4	7	5-1/2
4X3X13	29-3/8	10-1/4	4-1/4	6-3/4	6-1/8
5X4X14	30	11	5	6-1/8	7-1/2
6X5X11	30-5/8	11	5-3/4	6	8-3/4
6X5X14	30-5/8	11	5-3/4	6	8-3/4
8X6X11	31-1/4	14	6-1/4	8-3/8	10
8X6X14	31-1/4	14	6-1/4	8-3/8	10
10X8X14	31-1/4	14-3/16	6-11/16	8	10.5





Motor Frames	BASE	Dimensions are in inches HA	HB	HC	HD	HE	HG	C	SP*	AB**
182T-215T	OB-7	19	49-1/2	33-1/2	8	17-1/4	15	19	1	10.25
254T-286T	OB-1	19	55	39	8	17-1/4	15	27-1/2	1	13.25
324T-365T	OB-2	26	61	45	8	24-1/4	15	33-1/2	1	18.8
404T-405T	OB-3	26	66	50	8	24-1/4	16	38-1/2	1	20.5
444T-445T	OB-4	30	72	56	8	28-1/4	17	44-1/2	1	26.25

* Unless spacer coupling is utilized.

** Approximate maximum to outside of conduit box

Tolerences ± 1/8"

[1]NOTE: Dimensions are for reference only. Certified drawings should be requested for construction purposes.

MP-MChr

Specifications:
Sizes from 3x2x13 to 10x8x14
Flow rates from a few gallons per minute up to 2,600 GPM
Head pressure up to 550 feet
Best utilized for applications requiring up to 200 HP.

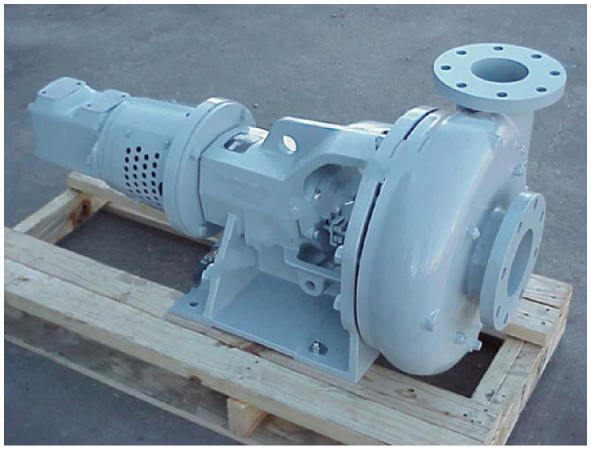
Typical Configurations:
3x2x13,
6x5x14,
4x3x13,
8x6x11,
5x4x14,
8x6x14,
6x5x11,
10x8x14

The intMPE MPMCHR Model centrifugal pump is built to deliver superior fluid handling performance in a variety of applications. It's performance incorporates the power, durability and ease of maintenance of the field proven MPMCHR Modelwith a new high strength material in critical component areas.
A chromium alloyed iron provides greater wear resistance and higher strength in the casing, stuffing box, and impeller. This new alloy gives the casing a hardness of 600 HB, and the impeller and stuffing box a hardness of 450 HB.

This process gives the critical components in the MPMCHR Model a more uniform structure; and a 30% carbide content versus hard iron with its soft graphite flakes. The components of the MPMCHR Model have a wear resistance of more than 9 times that of cast iron and more than 6 times that of hard iron

Design Features:
• High grade, heavy-walled, solid construction offering superior performance over lined pumps and those using inserts
• One power frame 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



Specifications:
- Sizes from 3x2x13 to 10x8x14
- Flow rates from a few gallons per minute up to 2,600 GPM
- Head pressure up to 550 feet
- Best utilized for applications requiring up to 200 HP.

The compact and adaptable intMPE MPSandMaster Model centrifugal pump includes virtually all of the features of the MAGNUM I. In addition, the MPSandMaster Model is more compact in design and can be adapted for hydraulic motor drive. This added feature makes the MPSandMaster Model ideal for use in applications such as oilfield frac trucks as well as blending and pump charging service. MPSandMaster Model's variable speed hydraulic drive make this an excellent pump for water well drilling applications.

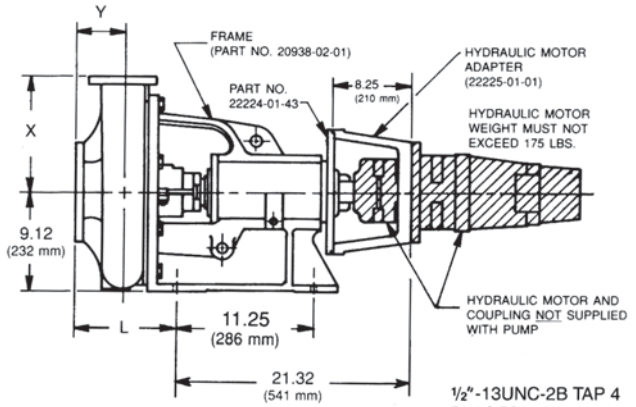
When space is at a premium and prime mover options are limited, the SANDMASTER is the pump of choice.

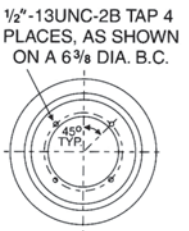
Typical Applications:
Cement Charge Pump
Blender Other Mobile uses
Waterwell Drilling

Typical Configurations: 3x2x13, 6x5x14, 4x3x13, 8x6x11, 5x4x14, 8x6x14, 6x5x11, 10x8x14

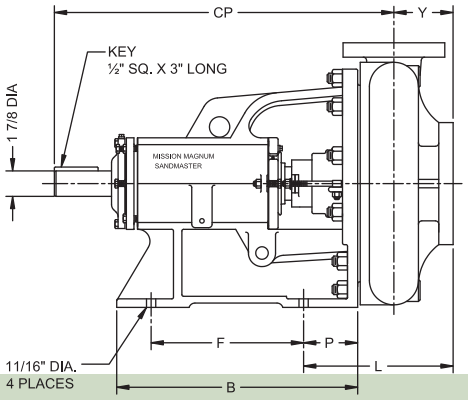
Dimensional Data MISSION Sandmaster Equivalent Pumps

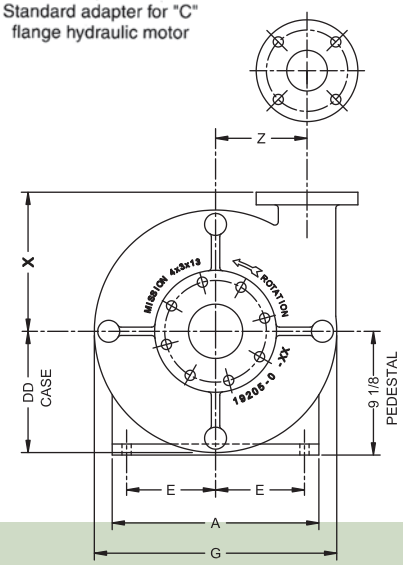
MP-SandM





Standard adapter for "C" flange hydraulic motor





		PIPE FLANGES * SUCTION PIPE		PIPE FLANGES * DISCHARGE PIPE													
PUMP SIZE	Wt. Lbs.	SIZE	DRILLING	SIZE	DRILLING	A	B	E	F	G	L	P	X	Y	Z	CP	DD
3 x 2 x 13	475	3	4 HOLES 3/4" DIA. 6" B.C.	2	4 HOLES 3/4" DIA. 4-3/4" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	17-7/8	10-7/16	4	10-1/4	3-3/4	7	25-1/16	8-15/16
4 x 3 x 13	491	4	8 HOLES 3/4" DIA. 7-1/2" B.C.	3	4 HOLES 3/4" DIA. 6" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	17-7/8	11-1/16	4	10-1/4	4-1/4	6-3/4	25-1/8	8-15/16
5 x 4 x 14	520	5	8 HOLES 7/8" DIA. 8-1/2" B.C.	4	8 HOLES 3/4" DIA. 7-1/2" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	19	12-7/16	4	11	5	6-1/8	25-13/16	9-1/2"
6 x 5 x 11	550	6	8 HOLES 7/8" DIA. 9-1/2" B.C.	5	8 HOLES 7/8" DIA. 8-1/2" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	17-7/8	13-3/4	4	11	5-3/4	6	26-3/8	8-15/16
6 x 5 x 14	609	6	8 HOLES 7/8" DIA. 9-1/2" B.C.	5	8 HOLES 7/8" DIA. 8-1/2" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	21	13-3/4	4	11	5-3/4	6	26-3/8	10-1/2"
8 x 6 x 11	659	8	8 HOLES 7/8" DIA. 11-3/4" B.C.	6	8 HOLES 7/8" DIA. 9-1/2" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	20	14-15/16	4	14	6-1/4	8-3/8	27-1/16	10
8 x 6 x 14	701	8	8 HOLES 7/8" DIA. 11-3/4" B.C.	6	8 HOLES 7/8" DIA. 9-1/2" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	23-9/16	14-15/16	4	14	6-1/4	8-3/8	27-1/16	11-13/16
10 x 8 x 14	705	10	12 HOLES 1" DIA. 14-1/4" B.C.	8	8 HOLES 7/8" DIA. 11-3/4" B.C.	15-1/4	17-3/4	6-9/16	11-1/4	22-3/8	15-3/8	4	14-3/16	6-11/16	8	27-1/16	11-3/16

* THE ABOVE DRILLING IS ANSI STANDARD 125 lb. CAST IRON OR ANSI SERIES 150 STEEL FLAT FACE. ALL FLANGE HOLES ARE THRU CLEARANCE HOLES.

[1]NOTE: Dimensions are for reference only. Certified drawings should be requested for construction purposes.

intMPE
Pumps