



WASTECORP.
Pumps®

SLUDGE MASTER®
SEVERE DUTY PLUNGER PUMPS

HPE SERIES

PUMP MODELS

HPE 941 Simplex

HPE 942 Duplex

HPE 943 Triplex

HPE 944 Quadruplex

FEATURES

TRANSFER UP TO 378
GPM

160,000 PSI STRENGTH
SHAFTS

SPHERICAL SOLIDS:
1 3/4" (44.45 MM)

MAX PERCENT SOLIDS
@ 68F (20c) ambient temperature:

Industrial Sludge/Slurry: 30%
Dry Weight

Municipal Sludge/Slurry: 15%
Dry Weight

Sand/Clay mix suspended: 70%

Viscosity: 100,000 Centipoise

Specific Gravity: 2.2 to 2.4

SUCTION LIFTS:
Dry Prime: 22" Hg (25 feet)

AIR HANDLING:
All others – 25 cu. ft./min at
max pressure of 30 psi.

REPLACEABLE BRONZE
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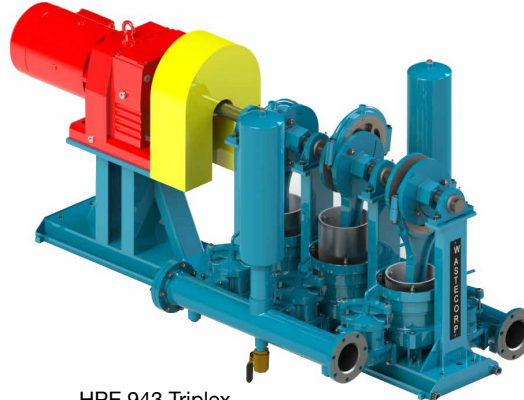
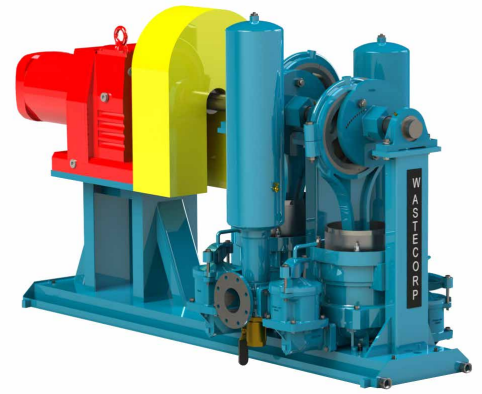
LOWER COST PARTS

LEAK RESISTANT DESIGN

HPE 941 Simplex



HPE 942 Duplex



HPE 943 Triplex



HPE 944 Quadruplex

**THICKENED SLUDGE. PRIMARY SEWAGE.
THE SLUDGE MASTER PUMPS IT ALL.**

The severe duty HPE Series is specified for municipal and industrial sewage, sludge, food processing waste and much more. This pump series is available with single ball valve or dual ball valve configurations for pumping higher percentages of solids.

With the HPE your facility can pump up to 378 GPM. Wastecorp also offers leak resistant packing systems, guided plunger assemblies for less component wear and pressure switches to help protect your pump.

General Specifications	Simplex HPE 941	Duplex HPE 942	Triplex HPE 943	Quadruplex HPE 944
Number of plungers	1	2	3	4
Plunger dia. (in)	9	9	9	9
Air chambers	(2) 9"x30"			
Flanged connections	4" ANSI 125 #	4" ANSI 125 #	6" ANSI 150 #	6" ANSI 150 #
Number of pin positions	11			
RPM Speeds	50			
Max. stroke length (in)	7.25			
Max. rec. suction lift (ft)	20			
Max. total head (ft)	240			
Max. capacity (GPM)	95	187	278	378
Eccentric dia. (in)	12			
Shaft tensile strength (PSI)	160,000			

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Pump Component	Standard Material	Optional Material
MAINSHAFT	A4140/4142 High-Strength Alloy Steel	
ECCENTRIC	ASTM A48, Class 35 Grey Iron	
LUBRICATION	Manual Sight Feed Oiler, 5 oz	a) Automatic ball-type oiler with needle valve (5 oz), b) Electric Solenoid Oiler, c) Mechanical Force Feed Lubricator
DRIVEN/DRIVE FLANGES	ASTM A48, Class 35 Grey Iron	
AIR CHAMBER	A53 Seamless Steel Pipe, Anodized/Galvanized with ¼" brass air release valve/petcock	304 or 316 Stainless Steel
SHEAR PIN	Fabricated Cold Rolled Steel	
CONNECTING ROD	ASTM A536 Grade 65-45-12 Ductile Iron	
ECCENTRIC BEARING LINER	Replaceable, Bronze SAE 660	
BUSHING, WRIST PIN	SAE 941 Oil-Lite Bronze	
WRIST PIN	A4140/4142 High-Strength Alloy Steel	
VALVE SEAT	ASTM A48, Class 35 Grey Iron	Bronze Alloy, 316 Stainless Steel
BALL VALVE	5-1/8" Urethane Rubber with Centralized Iron Core	
PUMP BODY	ASTM A536 Grade 65-45-12 Ductile Iron	
PLUNGER	ASTM A536 Grade 65-45-12 Ductile Iron	Coatings Available: a) Chrome Oxide, b) Aluminum Oxide, c) Tungsten Carbide, d) Hastelloy C, e) Stainless Steel
STUFFING BOX	ASTM A536 Grade 65-45-12 Ductile Iron	
GLAND	ASTM A48, Class 35 Grey Iron	
FLANGE CONNECTION	4" ANSI 125 lb (Simplex and Duplex Pumps) 6" ANSI 150 lb (Triplex and Quad Pumps)	
PACKING	½" sq. Kevlar Braided with Poly-urethane seal	a) Graphite Rings Only, b) Chevron Rings Only, c) Combo (Graphite/Chevron), d) Plunger Pac (Chevron, Teflon and Poly-urethane seal)
PUMP BASE	Fabricated heavy-duty steel channel and tube base plate and pedestals with drip gutters and 1" drain connections	Floor Base Frame
DRIVE ARRANGEMENT	Electric Constant Speed, Vertical Gear Reducer coupled to pump's mainshaft, Max. Output Speed: 50 RPM	

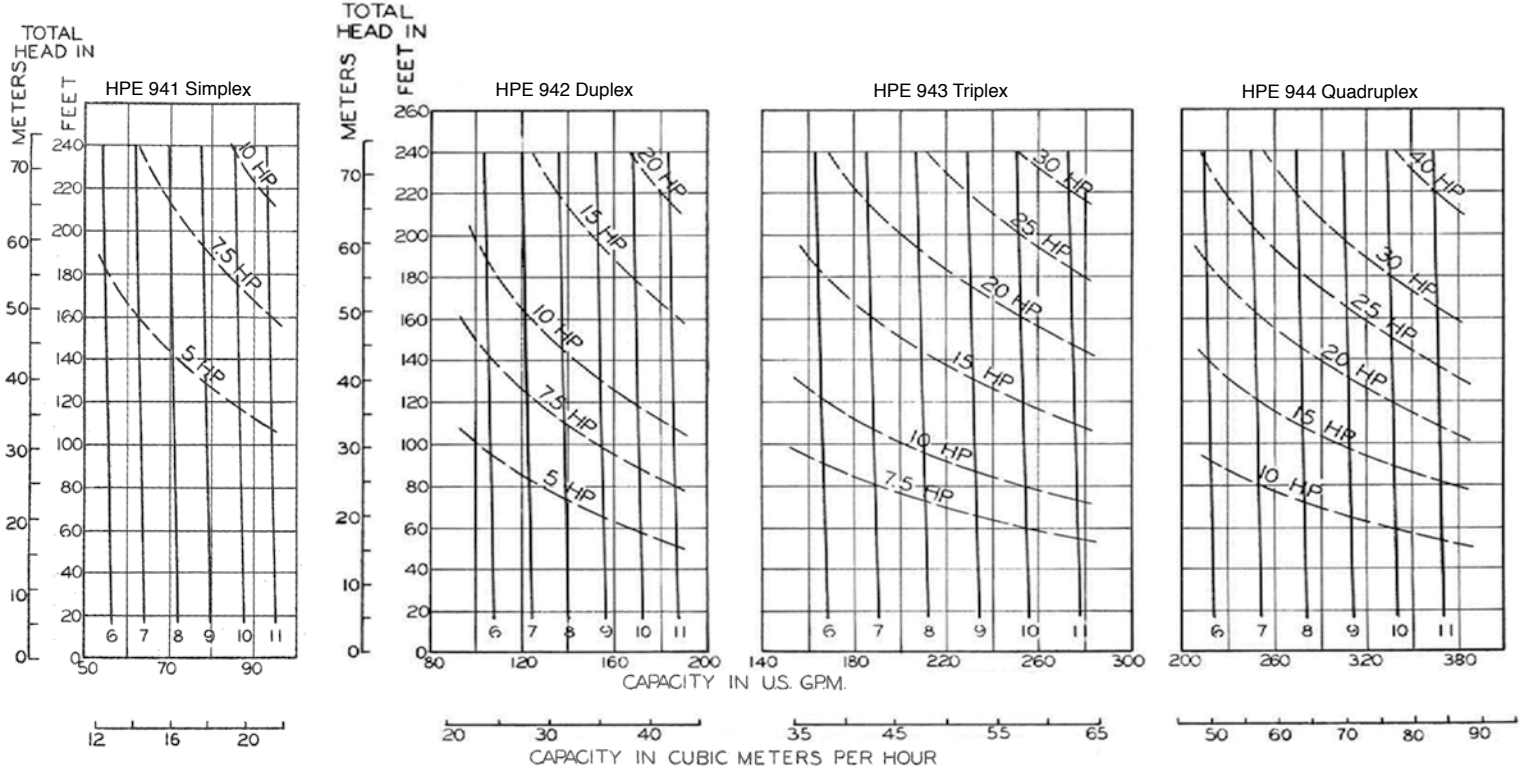
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SEVERE DUTY PLUNGER PUMPS

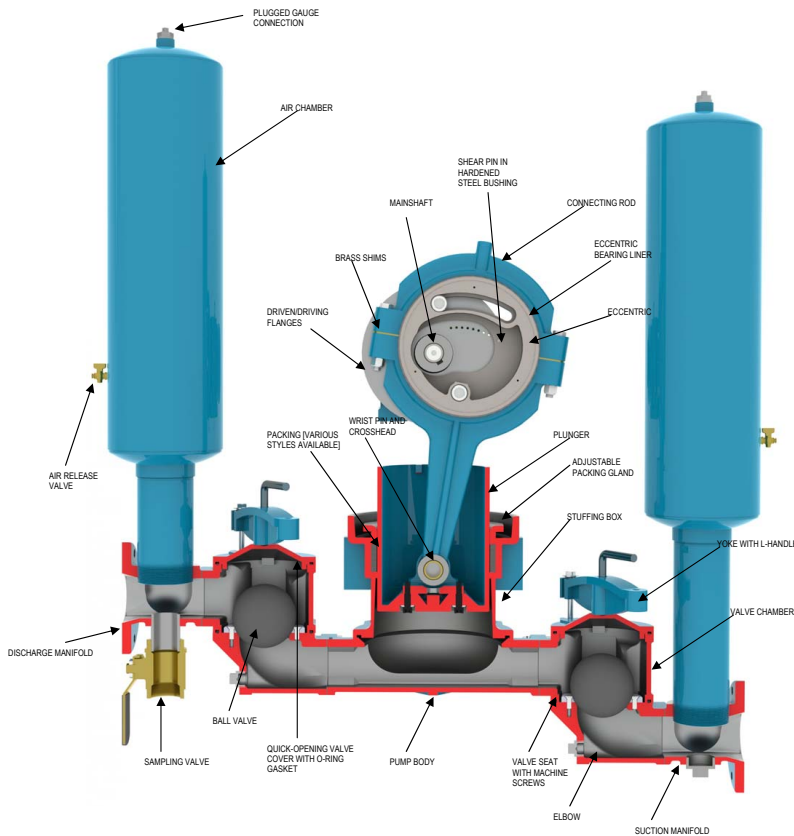
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PERFORMANCE CURVES



Cross Section Assembly



PIN POS.	STROKE LENGTH INCHES	STROKE LENGTH CM
6	4.125	10.5
7	4.750	12.1
8	5.375	13.7
9	6.000	15.2
10	6.625	16.8
11	7.250	18.4

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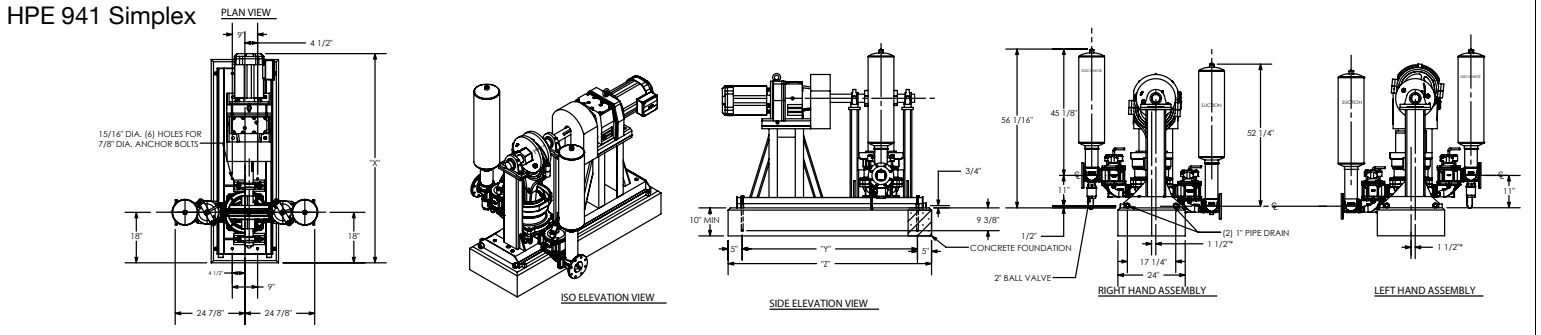
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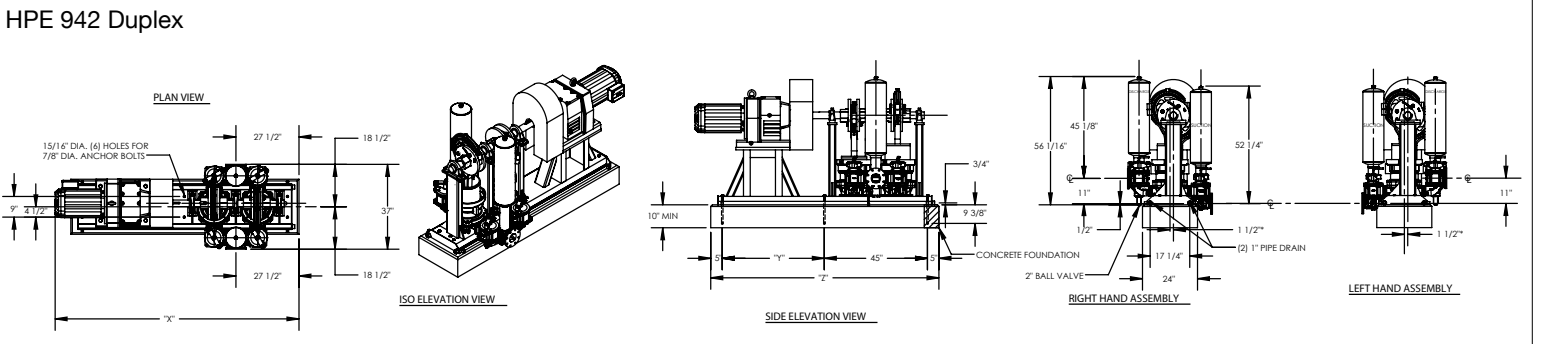


DIMENSIONAL DRAWINGS

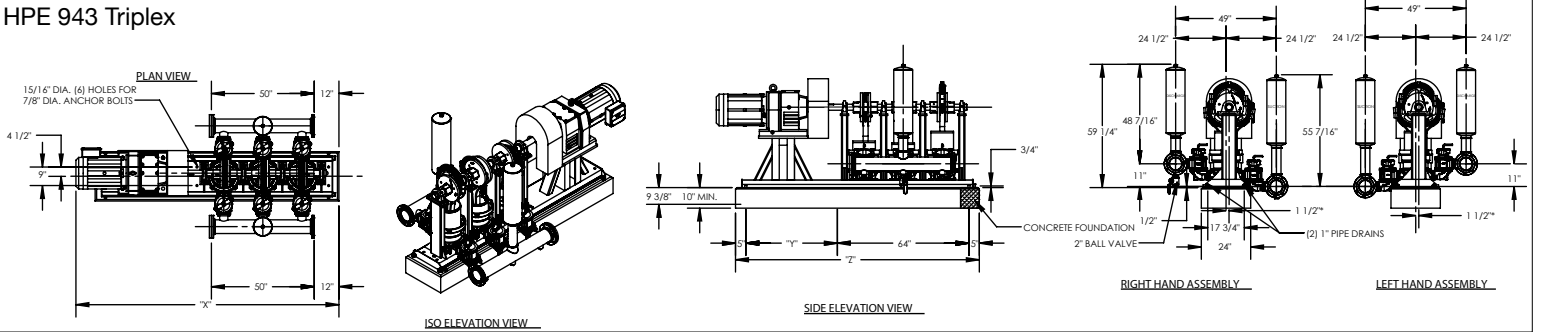
HPE 941 Simplex



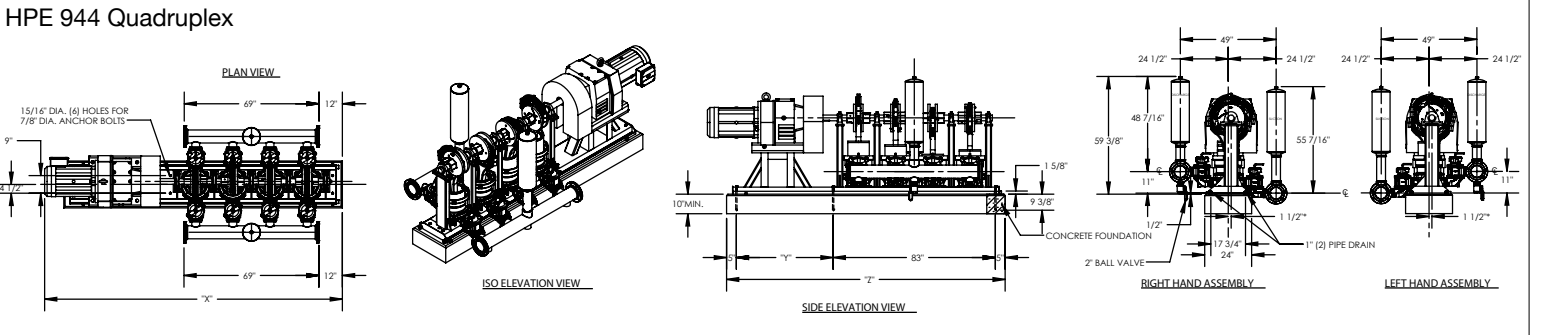
HPE 942 Duplex



HPE 943 Triplex



HPE 944 Quadruplex



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