

# TRILLIUM WSP™ SELF-PRIMER PUMPS

**THE TOUGHEST TRASH  
PUMP IN THE MARKET FOR  
SOLID-LADEN FLUIDS.**

- Reliable BUZZSAW™ cutting wear plate
- Non-clog open impeller handles large solids
- Made in the USA - cast, built and tested
- Dimensionally equivalent with major brands
- External impeller adjustment





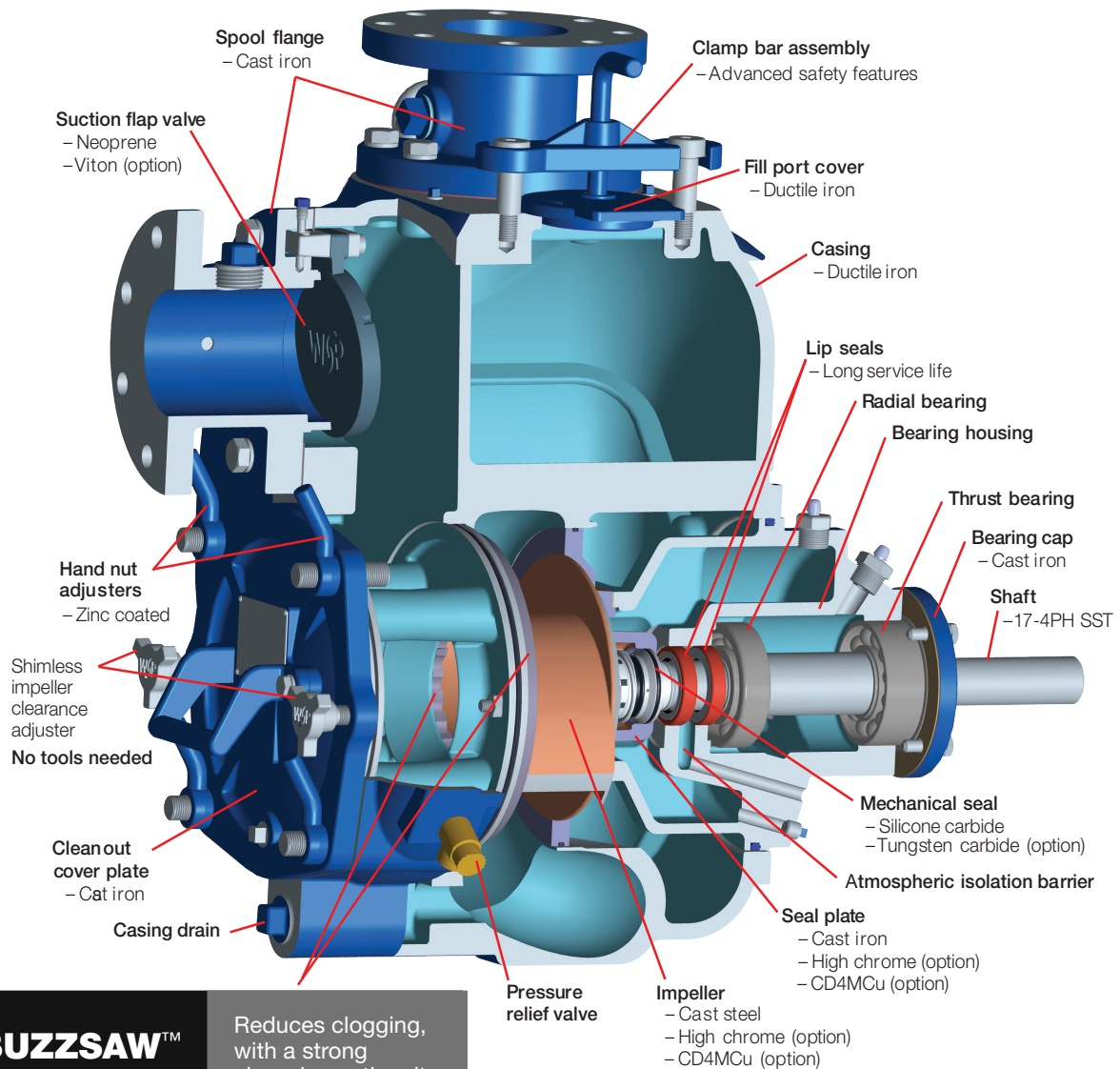
# TRILLIUM WSP™ SELF-PRIMER PUMPS



The Trillium Flow Technologies™ WSP™ self-primer pump is a rugged and dependable self-priming trash pump that allows for a shim-less, tool-less impeller adjustment and ease of suction flap valve replacement.

To extend the operational life of WSP™ pumps, Trillium used the most durable materials with the highest wear and corrosion resistance. Trillium WSP™ self-primer pumps and parts are directly interchangeable with GRESCO®, Pioneer®, and Gorman-Rupp® pumps, offering flexibility in your applications.

## PARTS CONSTRUCTION



**BUZZSAW™  
WEAR PLATE**







Reduces clogging, with a strong chopping action, it increases uptime.

## SPECIFICATIONS

Size	2, 3, 4, 6, 8, 10 inch with high head variations
High head	3, 4, 6 inch
Temperature range	0°C - 83°C
Capacity head	31 - 64 m
Flow	51 - 727 m³/hr
Solid passage	20 - 75 mm



## ADVANTAGES

	<b>BUZZSAW™ WEAR PLATE</b>	<ul style="list-style-type: none"> <li>– With an aggressive saw tooth-shaped profile, it shears stringy materials as they pass through the pump, preventing clogs.</li> <li>– Helps prevent the WSP™ self-primer pump from running in a state of partial clog.</li> <li>– Allows the pump to run at higher overall efficiencies while lowering maintenance costs, extending valuable runtime.</li> </ul>
	<b>FILL PORT COVER FOR INCREASED SAFETY</b>	<ul style="list-style-type: none"> <li>– The recessed bolt-locking construction and anti-rotation design of the clamp bar assembly prevent accidental breaches of the fill port cover, protecting the operator from scalding burns.</li> </ul>
	<b>LONGER BEARING LIFE</b>	<ul style="list-style-type: none"> <li>– Bearings designed to withstand high loads, including thrusts, while providing long life</li> <li>– Mounted in removable housing for easy replacement</li> </ul>
	<b>INNOVATIVE SEALING OPTION</b>	<ul style="list-style-type: none"> <li>– Large-diameter expeller seal design prevents leaks and protects against high inlet pressures</li> <li>– Optional remote-adjusting and patented D-gland seal for parallel adjustment of sealing</li> </ul>
	<b>LOW-COST MAINTENANCE</b>	<ul style="list-style-type: none"> <li>– WSP™ self-primer pump design allows for a shim-less, tool-less impeller adjustment and ease of suction flap valve replacement</li> <li>– Two-vane, semi-open, solids-handling impeller passes up to 3" (75 mm) diameter solids without clogging and breaking down</li> </ul>
	<b>UNMATCHED QUALITY</b>	<ul style="list-style-type: none"> <li>– Made in the USA</li> <li>– High-quality ductile iron construction</li> <li>– ASTM A536 casing, Standard cast steel impeller</li> </ul>

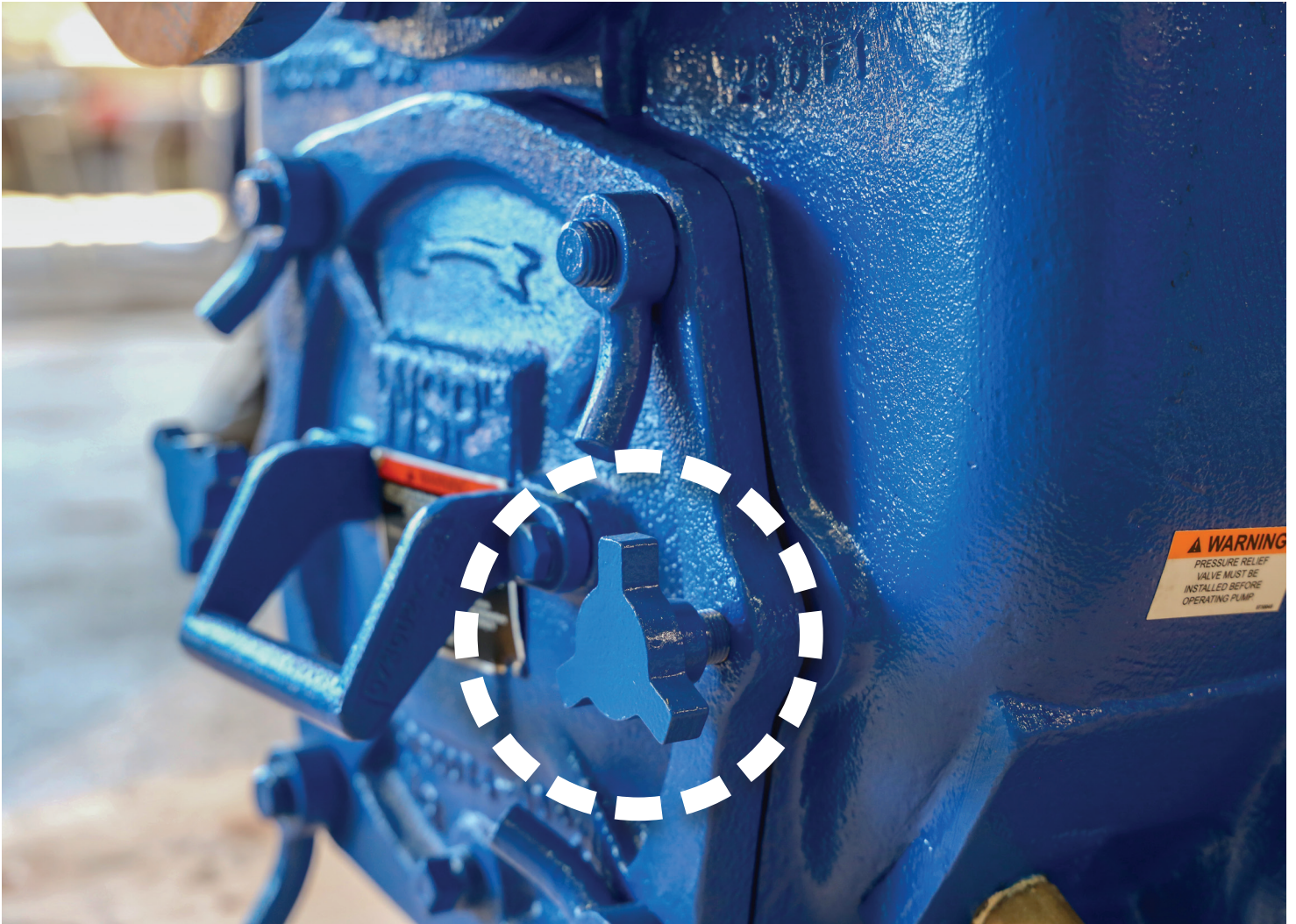
## APPLICATIONS

- Municipal and industrial wastewater
- Automotive
- Metal machining
- Beef, pork, poultry processing
- Production/manufacturing

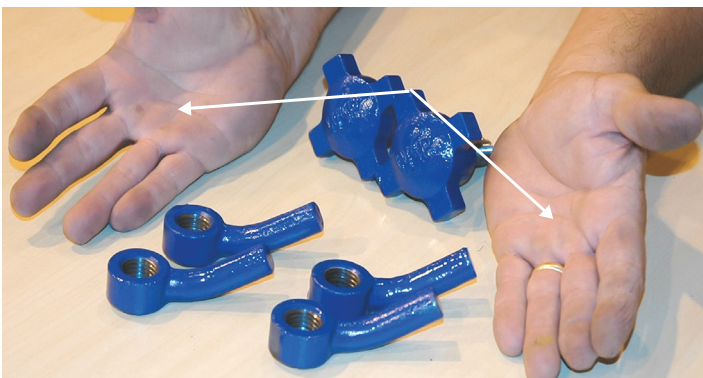
- Pulp and paper
- Dewatering
- Tanker truck unloading
- Mining and minerals
- Drilling mud recovery



# WSP™: SHIM-LESS, TOOL-LESS CLEARANCE ADJUSTMENT



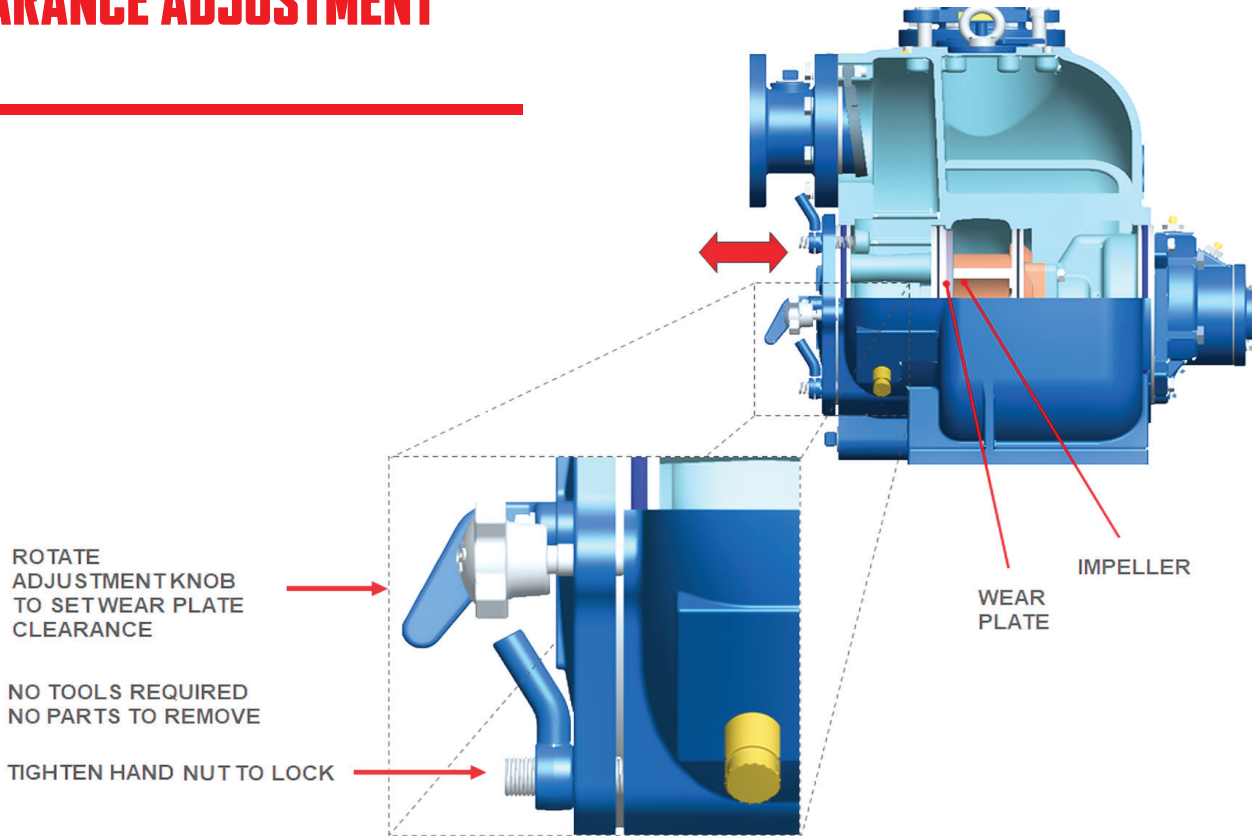
- No need to remove any parts.
- Only tools needed for complete adjustment.



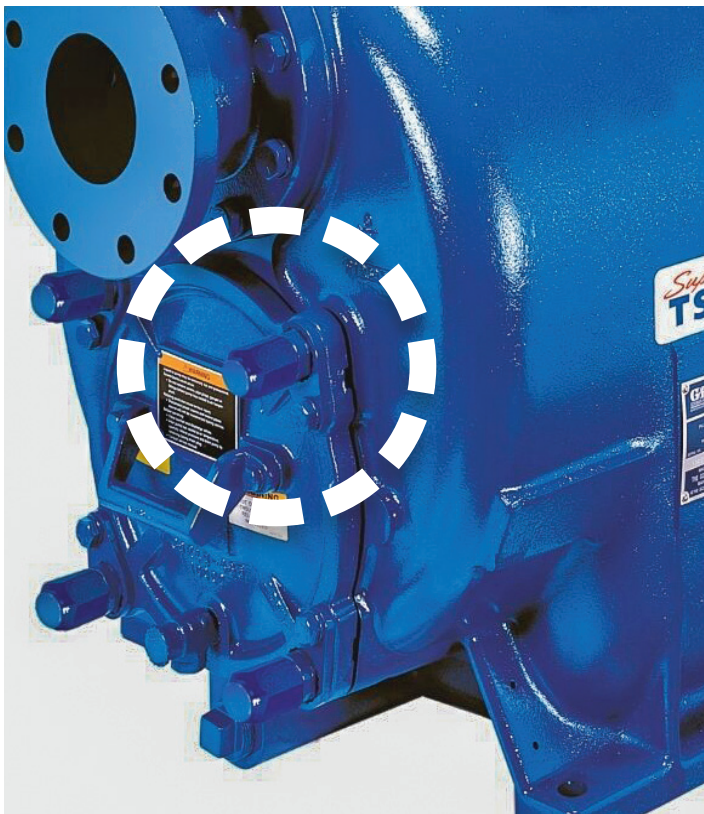
## WSP PROCEDURE:

1. Loosen 4 hand bolt
  2. Back off adjustment knobs
  3. Tighten 2 hand nuts until impeller scrubs wear plate
  4. Bottom out adjustment knobs
  5. Loosen hand nuts
  6. Tighten both adjustment knobs 1/3 turn each
  7. Tighten hand nut
- Done!

# WSP™: SHIM-LESS, TOOL-LESS CLEARANCE ADJUSTMENT



# COMPETITOR: COMPLEX SHIMLESS AND CLEARANCE ADJUSTMENT



## COMPETITOR REQUIRES:

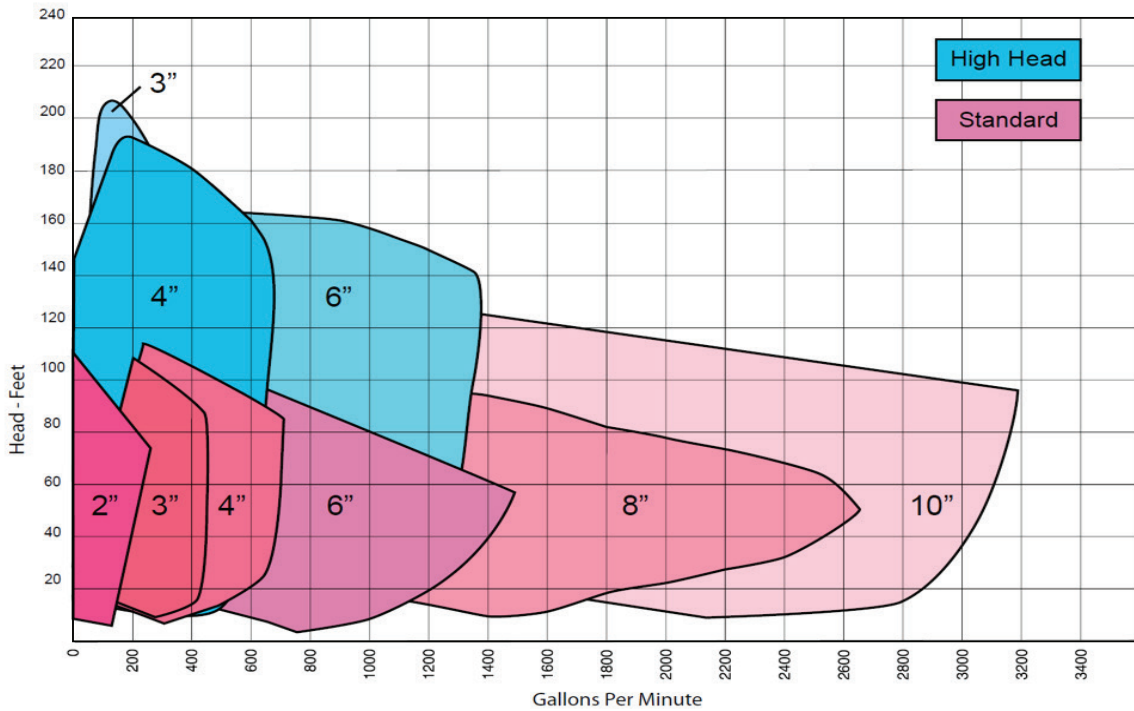
- Special locking collar
- Special adjusting screw
- Hex nut & lock washer to lock collar in place
- Tools to tighten screws
- 16 pieces must be removed to perform adjustment

## COMPETITOR REQUIRES 20 TOOLS AND 20 PARTS TO REMOVE AND LOSE:





## PUMP SIZES:



## WSP™ SELF-PRIMER CAPABILITIES

### SOLID HANDLING SELF-PRIMER PUMPS:



Size	Flow	Heads	Repriming Lift	Solids Size
2 in (50 mm)	to 225 GPM (51 m <sup>3</sup> /hr)	to 103 ft (31 m)	up to 24 ft (7.3 m)	1.5 in (38 mm)
3 in (75 mm)	to 450 GPM (102 m <sup>3</sup> /hr)	to 112 ft (34 m)	up to 25 ft (7.6 m)	2.5 in (63.5 mm)
4 in (100 mm)	to 730 GPM (166 m <sup>3</sup> /hr)	to 119 ft (36 m)	up to 25 ft (7.6 m)	3 in (75 mm)
6 in (150 mm)	to 1,480 GPM (336 m <sup>3</sup> /hr)	to 111 ft (34 m)	up to 25 ft (7.6 m)	3 in (75 mm)
8 in (200 mm)	to 2,620 GPM (595 m <sup>3</sup> /hr)	to 109 ft (33 m)	up to 23 ft (7 m)	3 in (75 mm)
10 in (250 mm)	to 3,200 GPM (727 m <sup>3</sup> /hr)	to 133 ft (41 m)	up to 22 ft (6.7 m)	3 in (75 mm)

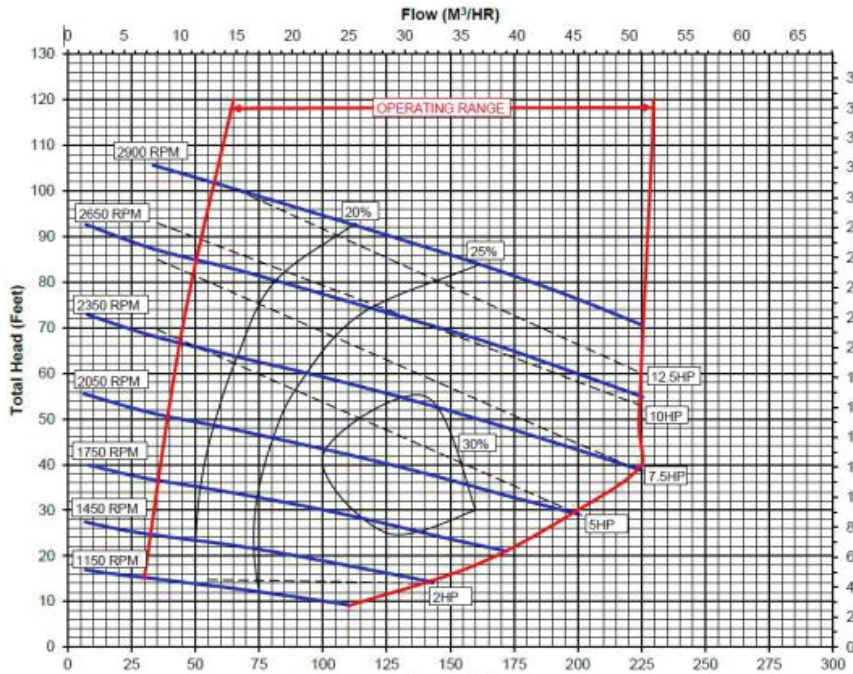
### HIGH HEAD SELF-PRIMER PUMPS:



Size	Flow	Heads	Repriming Lift	Solids Size
3 in (75 mm)	to 370 GPM (84 m <sup>3</sup> /hr)	to 210 ft (64 m)	up to 23 ft (7 m)	0.81 in (20 mm)
4 in (100 mm)	to 650 GPM (148 m <sup>3</sup> /hr)	to 190 ft (58 m)	up to 17 ft (5.1 m)	1.12 in (28 mm)
6 in (150 mm)	to 1360 GPM (309 m <sup>3</sup> /hr)	to 175 ft (53 m)	up to 15 ft (4.5 m)	1.25 in (32 mm)

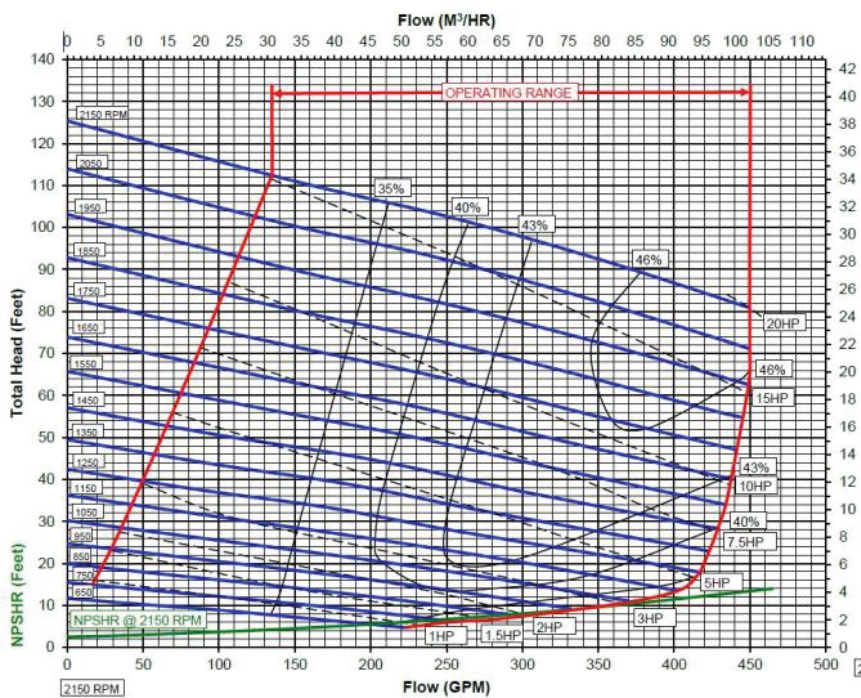
## 2" PUMPS

### TRILLIUM WSP2A



## 3" PUMPS

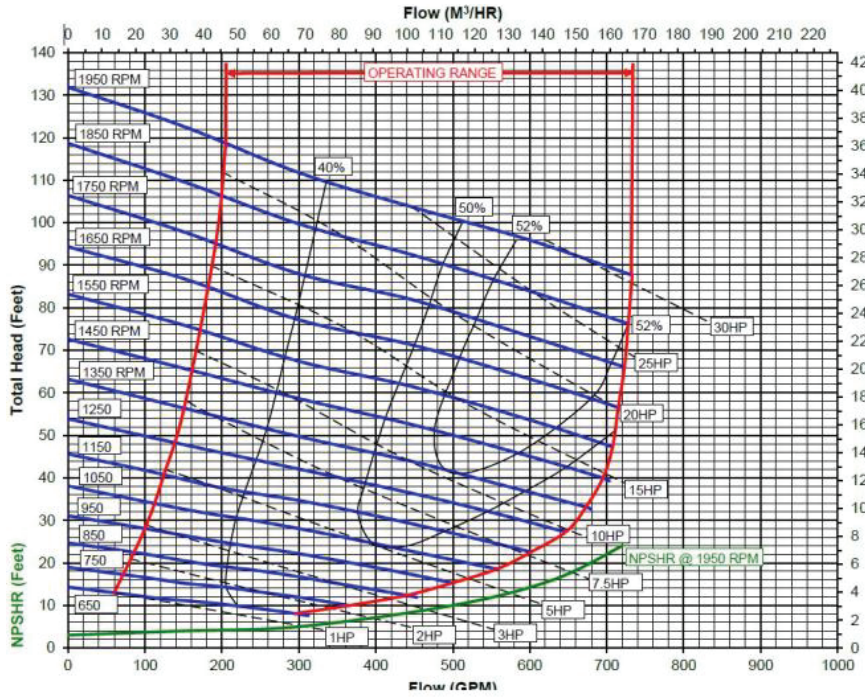
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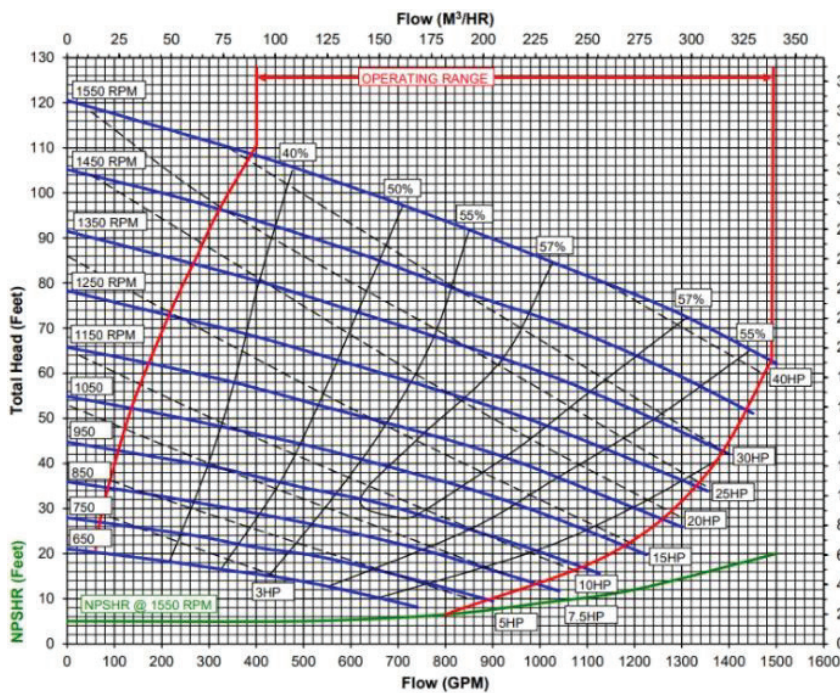
## 4" PUMPS

### TRILLIUM WSP4A



## 6" PUMPS

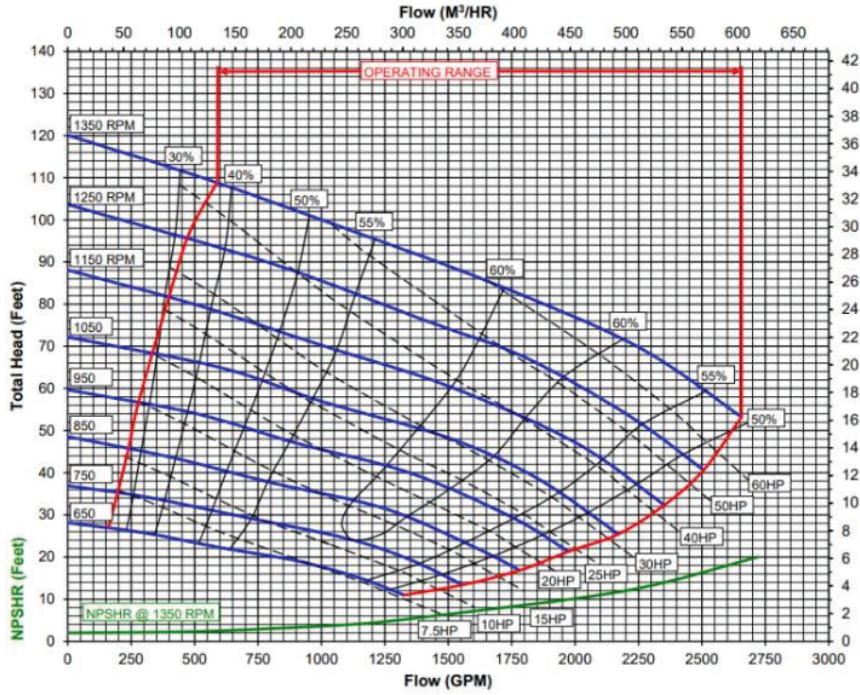
### TRILLIUM WSP-6





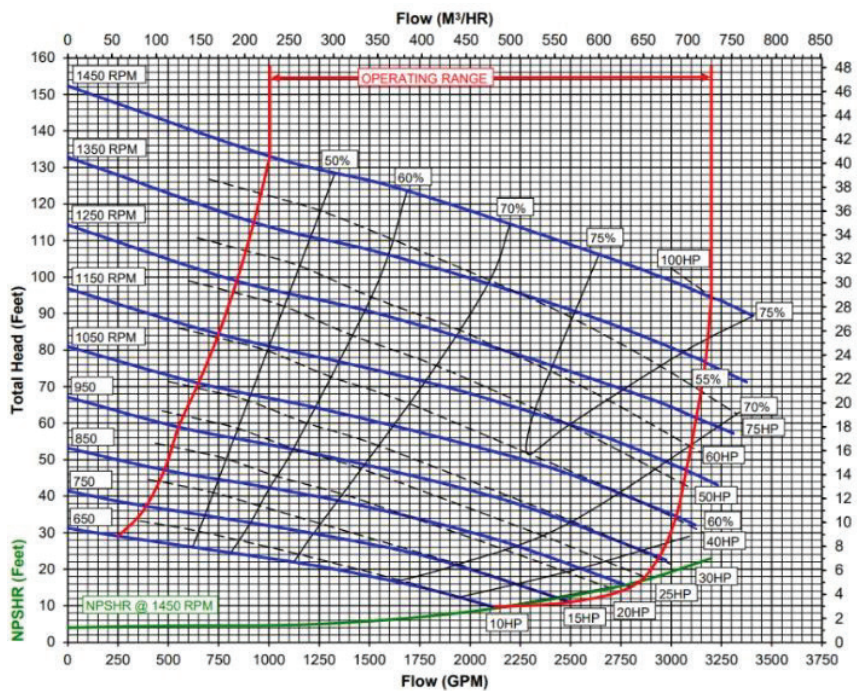
## 8" PUMPS

### TRILLIUM WSP-8



## 10" PUMPS

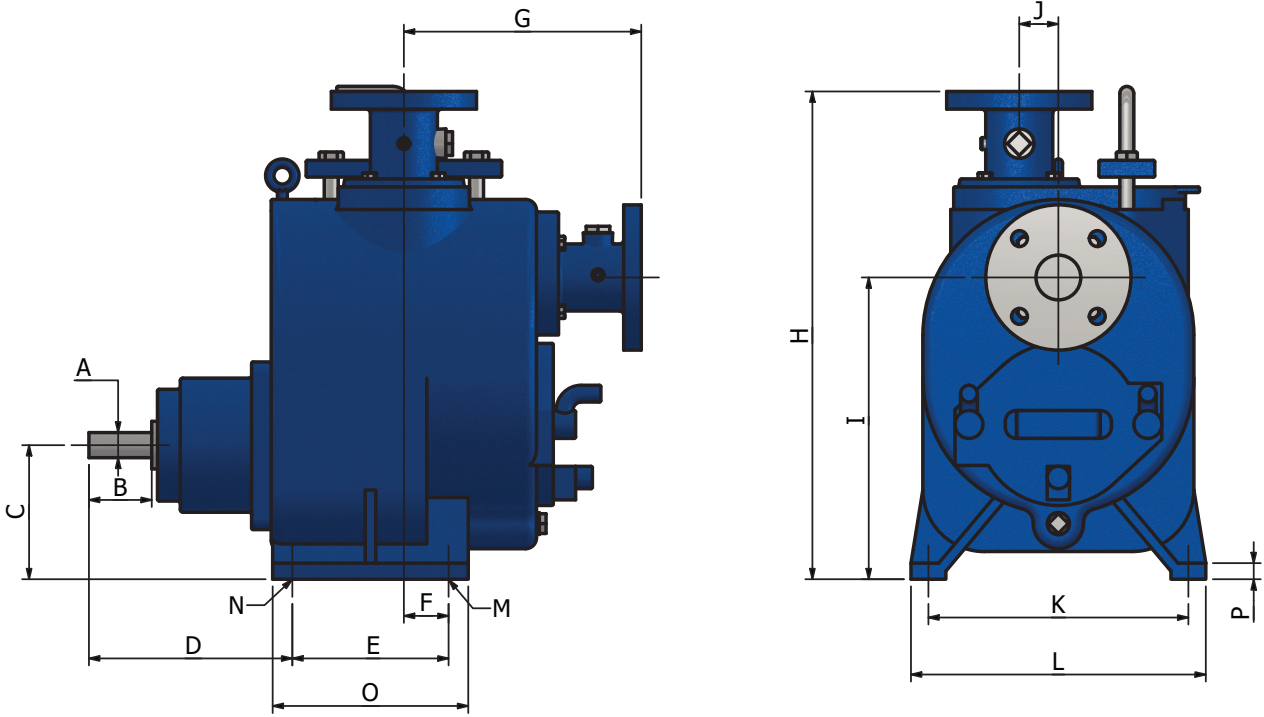
### TRILLIUM WSP-10



# WSP™ VS COMPETITION PUMP DIMENSIONS

## 2" PUMPS

### TRILLIUM WSP2A



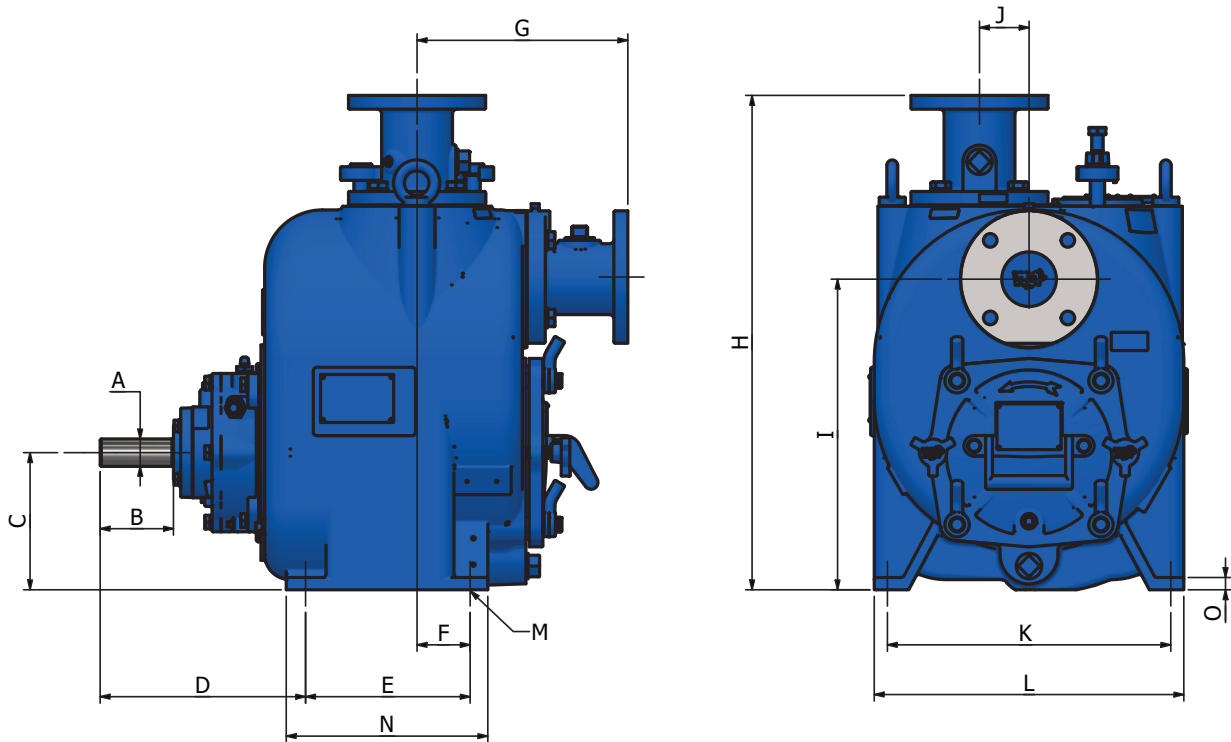
PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
<b>TRILLIUM WSP2A</b>	2" ASA/ 2"NPT/ 50mm DIN 2527/ 50mm JIS	2" ASA/2"NPT/ 50mm DIN 2527/ 50mm JIS	Ø1.12" [28.6mm]	2.81" [71.5mm]	6" [152.4mm]	9.1" [231.1mm]	6.99" [177.6mm]	6.99" [177.6mm]	10.62" [269.7mm] ASA/DIN/JIS 6.37" [161.7mm] NPT	21.82" [554.4mm] ASA/DIN/JIS 17.57" [445.41mm] NPT	13.5" [342.9mm]	1.75" [44.5mm]	11.63" [295.3mm]	13.19" [335mm]	2x Ø0.63" [Ø16mm] x HOLE	2x Ø0.63" x 1.02" [Ø16mm x 26mm] SLOT	8.75" [222.3mm]	0.72" [18.2mm]
<b>GORMAN RUPP T2 SERIES</b>	2" DIN, ANSI, NPT	2" DIN, ANSI, NPT	Ø1.12" [28.6mm]	3.52" [89.5mm]	6" [152.4mm]	8.91" [226.4mm]	7.19" [182.6mm]	2" [50.8mm]	10.57" [268.4mm] ANSI 6.41" [162.7mm] NPT 10.66" [270.7mm] DIN	21.70" [551.1mm] ANSI 17.79" [451.8mm] NPT 21.79" [553.4mm] DIN	13.50" [342.9mm]	1.75" [44.4mm]	11.62" [295.3mm]	12.75" [323.8mm]	4x Ø0.56" [Ø14.2mm] HOLE	N/A	8.48" [215.6mm]	0.69" [17.5mm]

DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.

# WSP™ VS COMPETITION PUMP DIMENSIONS

## 3" PUMPS

### TRILLIUM WSP3A



PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
<b>TRILLIUM WSP3A</b>	3" ASA/ 3" NPT/3" BSP/ 80mm DIN 2527/ 80mm JIS	3" ASA/ 3" NPT/ 80mm DIN 2527/ 80mm JIS	Ø1.5" [38.1mm]	4.01" [101.9mm]	7.5" [190.5mm]	11.24" [285.4mm]	9" [228.6mm]	2.90" [73.8mm] ASA/DIN/JIS/ NPT 2.85" [72.5mm] BSP	11.53" [292.8mm] ASA/DIN/JIS 7.31" [185.7mm] NPT 10.23" [259.8mm] BSP	27.04" [686.7mm] ASA/DIN/JIS 22.25" [565.1mm] NPT 25.24" [641.1mm] BSP	16.99" [431.5mm]	2.71" [68.8mm]	15.5" [393.7mm]	16.93" [430mm]	4x Ø0.69" [Ø17.5mm] HOLE	11.02" [280.0mm]	0.67" [17.1mm]
<b>GORMAN RUPP T3 SERIES</b>	3" DIN, ANSI, NPT	3" DIN, ANSI, NPT	Ø1.5" [38.1mm]	4.01" [101.9mm]	7.5" [190.5mm]	11.31" [287.3mm]	9" [228.6mm]	3" [76.2mm]	11.54" [293mm] ANSI 7.29" [185.1mm] NPT 11.57" [293.8mm] DIN	27.04" [686.7mm] ANSI 7.29" [185.1mm] NPT 22.22" [564.5mm] NPT 27.07" [687.5mm] DIN	17" [431.8mm]	2.75" [69.8mm]	15.5" [393.7mm]	17" [431.8mm]	4x Ø0.69" [Ø17.5mm] HOLE	11.0" [279.4mm]	11.0" [279.4mm]

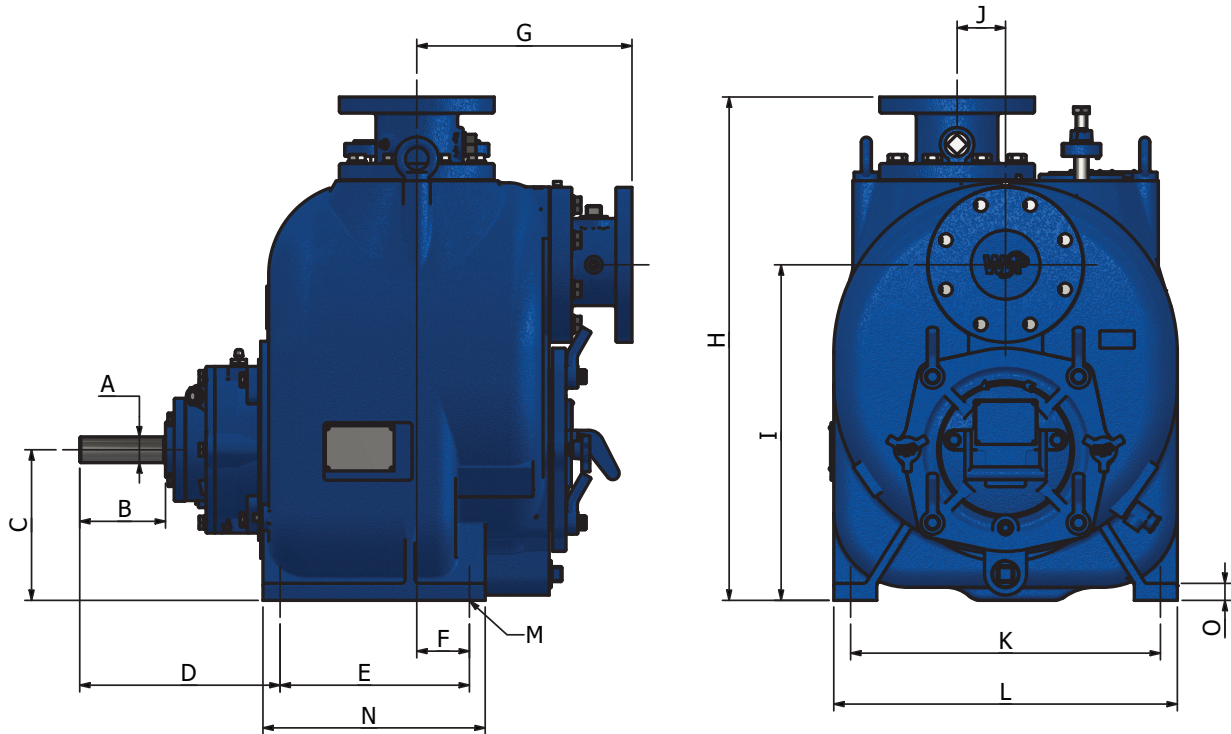
DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.



# WSP™ VS COMPETITION PUMP DIMENSIONS

## 4" PUMPS

### TRILLIUM WSP4A



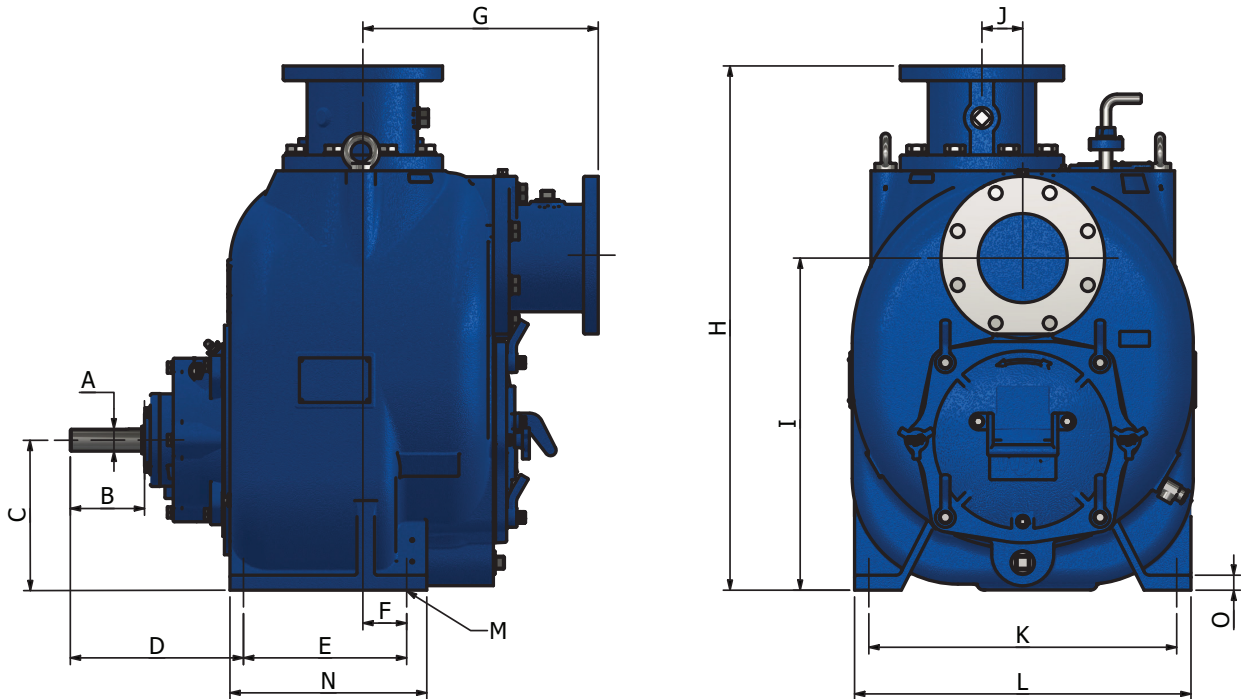
PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
TRILLIUM WSP4A	4" ASA/ 4" NPT/ 4" BSP/ 100mm DIN 2527/ 100mm JIS	4" ASA/ 4" NPT/ 4" BSP/ 100mm DIN 2527/ 100mm JIS	Ø1.5" [38.1mm]	4.98" [126.6mm]	8.75" [222.3mm]	11.65" [295.8mm]	11" [279.4mm]	3.06" [77.7mm]	12.5" [317.6mm] ASA 12.35" [313.7mm] DIN/JIS 9.01" [228.8mm] NPT 11.83" [300.4mm] BSP	29.25" [742.8mm] ASA 29.1" [739.0mm] DIN/JIS 25.75" [654.05mm] NPT 28.51" [724.21mm] BSP	19.50" [495.3mm]	2.82" [71.5mm]	18" [457.2mm]	19.96" [507mm]	4x Ø0.69" [Ø17.5mm] HOLE	12.91" [328mm]	0.99" [25.2mm]
									12.49" [317.2mm] ANSI 11.60" [294.6mm] NPT 12.34" [313.4mm] DIN	29.23" [742.3mm] ANSI 25.73" [653.4mm] NPT 29.08" [738.5mm] DIN							
GORMAN RUPP T4 SERIES	4" DIN, ANSI, NPT	4" DIN, ANSI, NPT	Ø1.5" [38.1mm]	4.99" [126.8mm]	8.75" [222.2mm]	11.64" [295.8mm]	11" [279.4mm]	3.06" [77.7mm]	12.49" [317.2mm] ANSI 11.60" [294.6mm] NPT 12.34" [313.4mm] DIN	29.23" [742.3mm] ANSI 25.73" [653.4mm] NPT 29.08" [738.5mm] DIN	19.50" [495.3mm]	2.75" [69.8mm]	18" [457.2mm]	20" [508mm]	4x Ø0.69" [Ø17.5mm] HOLE	13" [330.2mm]	1" [25.4mm]

DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.

# WSP™ VS COMPETITION PUMP DIMENSIONS

## 6" PUMPS

### TRILLIUM WSP-6



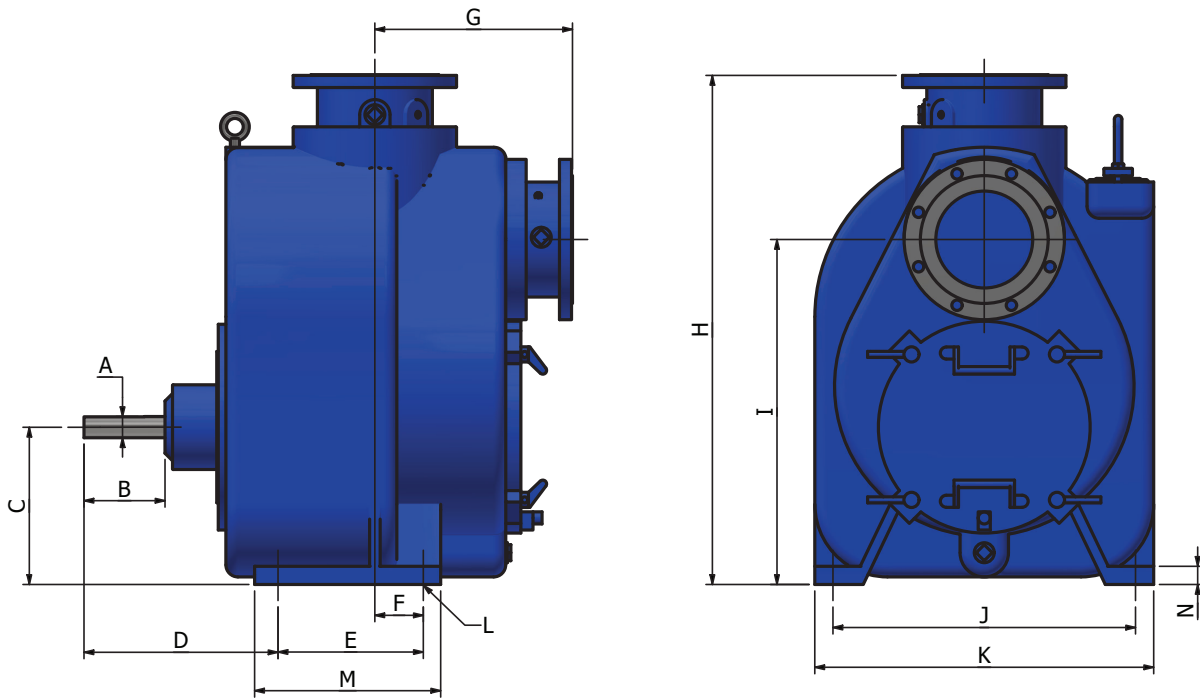
PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
TRILLIUM WSP-6	6" ASA/ 6" NPT/6" BSP/ 150mm DIN 2527/ 150mm JIS	6" ASA/ 6" NPT/6" BSP/ 150mm DIN 2527/ 150mm JIS	Ø1.5" [38.1mm]	5.0" [127.1mm]	10.12" [257.1mm]	11.67" [296.5mm]	11" [279.4mm]	3.09" [78.5mm]	16.01" [406.5mm]	35.34" [897.6mm]	22.38" [568.6mm]	2.75" [69.9mm]	20.75" [527.1mm]	22.68" [576.0mm]	4x Ø0.69" [Ø17.5mm] HOLE	13.27" [337.0mm]	1.01" [25.7mm]
									15.87" [403.1mm]	35.14" [892.6mm]							
									10.56" [267.1mm]	29.87" [758.7mm]							
									15.55" [395.0mm]	34.94" [887.4mm]							
GORMAN RUPP T6 SERIES	6" DIN, ANSI, NPT	6" DIN, ANSI, NPT	Ø1.5" [38.1mm]	5.0" [127.1mm]	10.12" [257.1mm]	11.65" [295.8mm]	11" [279.4mm]	3.06" [77.7mm]	15.98" [405.8mm]	35.28" [896.0mm]	22.37" [568.2mm]	2.75" [69.9mm]	20.75" [527.1mm]	22.75" [577.8mm]	4x Ø0.69" [Ø17.5mm] HOLE	13.0" [330.2mm]	1.06" [26.9mm]
									10.54" [267.6mm]	29.88" [759mm]							
									15.85" [402.5mm]	35.15" [892.7mm]							

DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.

# WSP™ VS COMPETITION PUMP DIMENSIONS

## 8" PUMPS

### TRILLIUM WSP-8



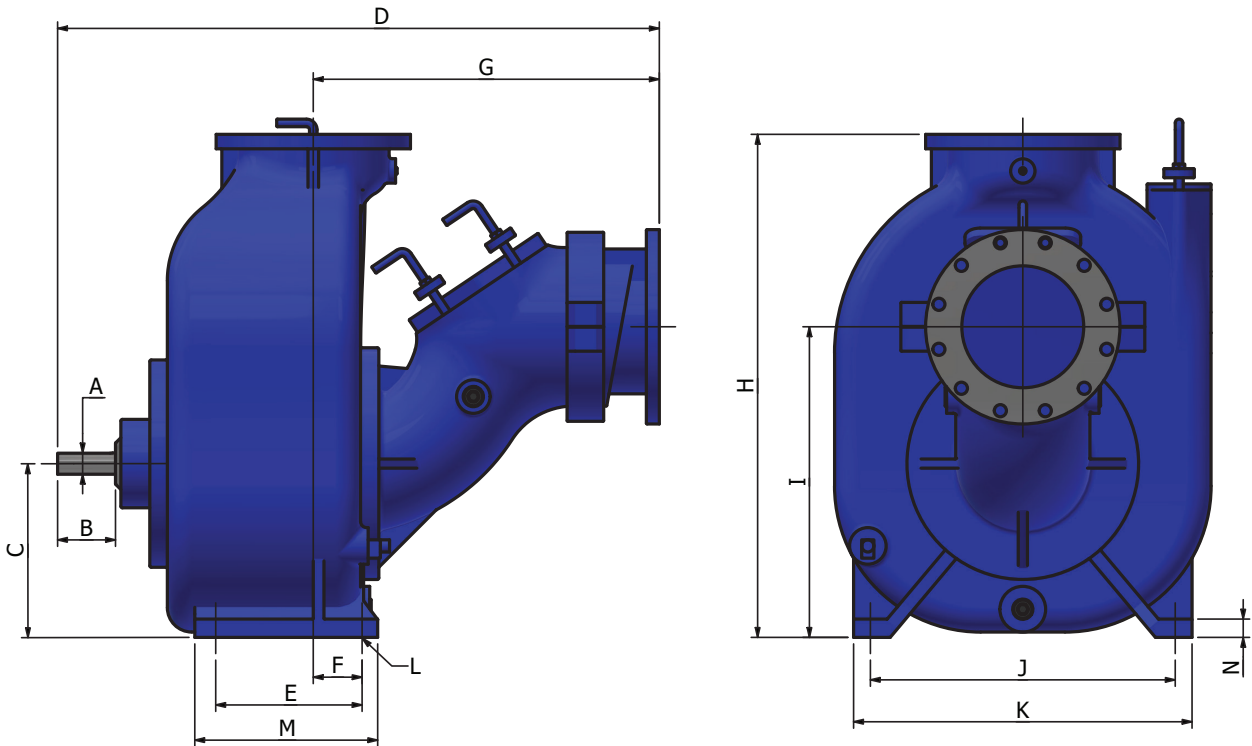
PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>TRILLIUM WSP-8</b>	8" ASA / 200mm DIN 2527 / 200mm JIS	8" ASA / 200mm DIN 2527 / 200mm JIS	Ø1.75" [44.4mm]	6.74" [171.1mm]	13" [330.2mm]	16.14" [409.9mm]	12" [304.8mm]	4.06" [103.1mm]	16.32" [414.7mm] ASA 16.11" [409.1mm] DIN/JIS	42.06" [1068.31mm] ASA 41.88" [1063.8mm] DIN/JIS	28.5" [723.9mm]	25" [635.0mm]	27.33" [694.2mm]	4x Ø0.88" [Ø22.0mm] HOLE	15.14" [384.5mm]	1.30" [33.0mm]
<b>GORMAN RUPP T8 SERIES</b>	8" DIN, ANSI, NPT	8" DIN, ANSI, NPT	Ø1.75" [44.4mm]	6.75" [171.4mm]	13" [330.2mm]	16.16" [410.4mm]	12" [304.8mm]	4.0" [101.6mm]	16.22" [411.9mm] ANSI/NPT 16.04" [407.3mm] DIN	42.04" [1067.7mm] ANSI 37.79" [959.8mm] NPT 41.86" [1063.1mm] DIN	28.5" [723.9mm]	25" [635.0mm]	27.75" [704.8mm]	4x Ø0.88" [Ø22.0mm] HOLE	15.0" [381.0mm]	1.25" [31.8mm]

DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.

# WSP™ VS COMPETITION PUMP DIMENSIONS

## 10" PUMPS

### TRILLIUM WSP-10



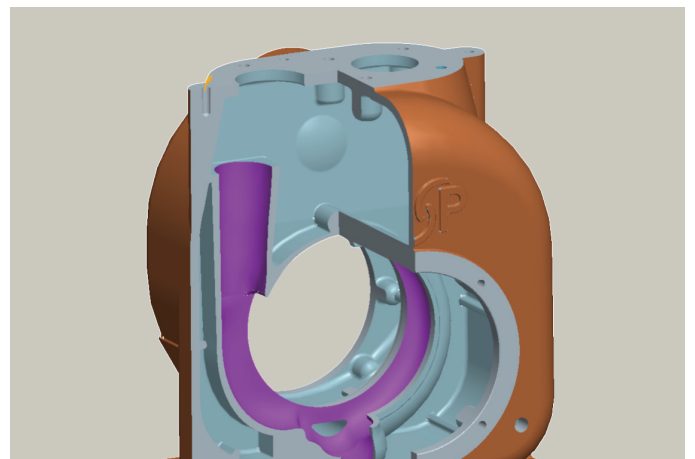
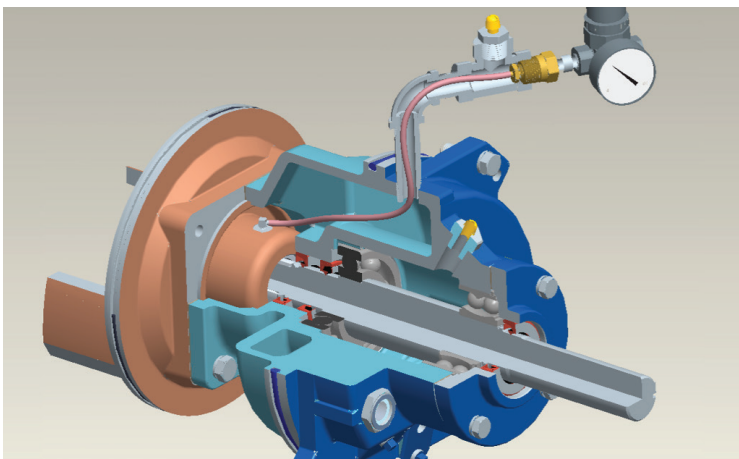
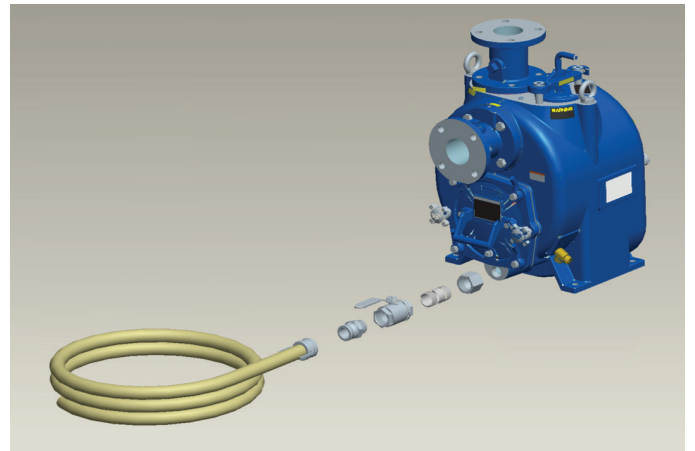
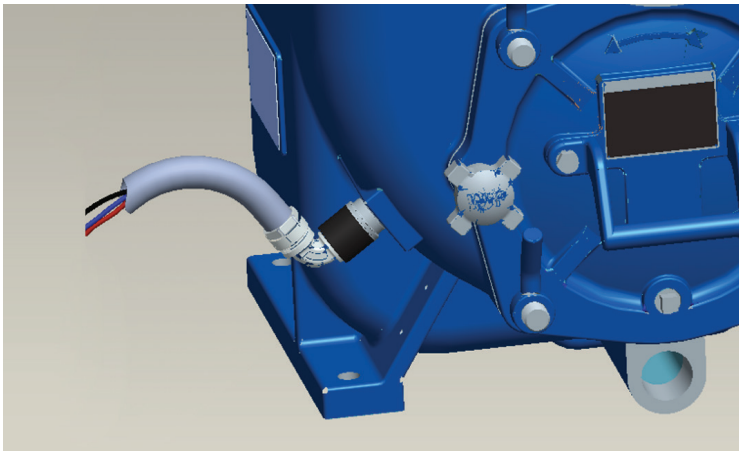
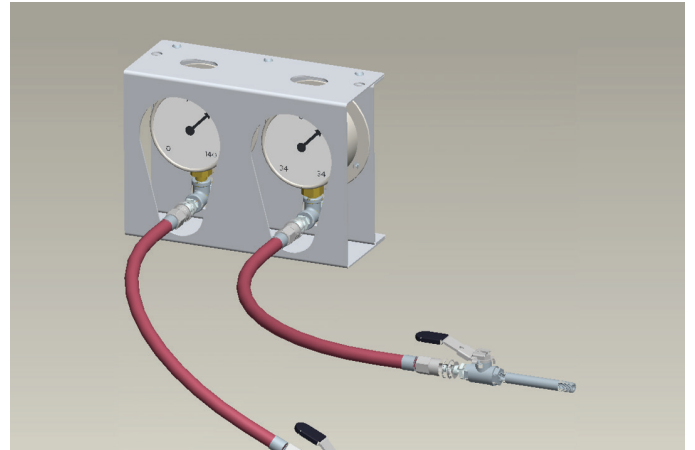
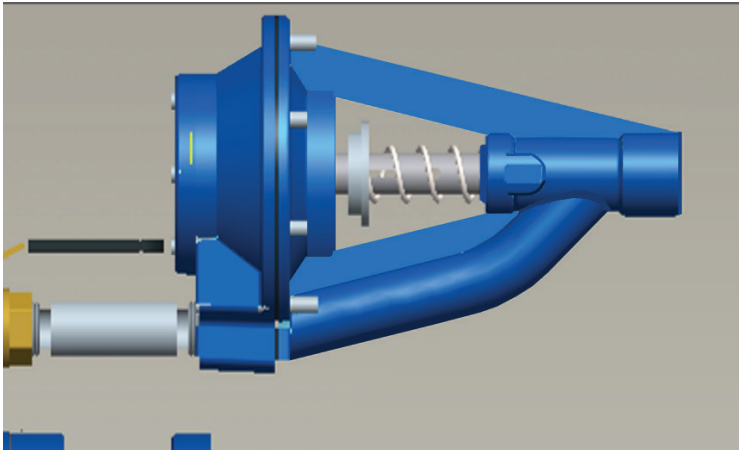
PUMP	SUCTION	DISCHARGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>TRILLIUM WSP-10</b>	10" ASA/ 250mm DIN 2527/ 250mm JIS	10" ASA/ 250mm DIN 2527/ 250mm JIS	01.75" [44.4mm]	4.63" [117.5mm]	14" [355.6mm]	48.77" [1238.7mm] ASA 48.62" [1235.0mm] DIN/JIS	12" [304.8mm]	4.01" [101.9mm]	28.05" [712.4mm] ASA 27.95" [709.9mm] DIN/JIS	41" [1041.4mm] ASA/DIN 47.86" [1215.6mm] JIS	25.06" [636.5mm]	25" [635.0mm]	27.91" [709mm]	4x Ø0.88" [Ø22.0mm] HOLE	15.0" [381.0mm]	1.23" [31.2mm]
<b>GORMAN RUPP T10 SERIES</b>	10" DIN, ANSI	10" DIN, ANSI	01.75" [44.4mm]	4.81" [122.2mm]	14" [355.6mm]	48.71" [1237.2mm] ANSI 48.66" [1236.0mm] DIN	12" [304.8mm]	4.0" [101.6mm]	28.0" [711.2mm] ANSI 27.95" [709.9mm] DIN	41" [1041.4mm] ASA/DIN 47.86" [1215.6mm] JIS	25.06" [636.5mm]	25" [635.0mm]	27.75" [704.8mm]	4x Ø0.88" [Ø22.0mm] HOLE	15.0" [381.0mm]	1.25" [31.8mm]

DIMENSIONALLY INTERCHANGEABLE WITH COMPETITOR BRANDS.



# OPTIONS & ACCESSORIES

- Air release valves
- Gauge kits
- Casing heaters
- High temperature shut down switch
- Drain kits
- Internal coatings



## CASE STUDY:



# HOW WSP™ SELF-PRIMER MADE WASTEWATER HANDLING MORE EFFICIENT

## THE PROBLEM

An industrial plant faced ongoing issues with its wastewater system, as stringy solids frequently clogged their Gorman Rupp trash pumps. The client initially considered switching to submersible pumps, but the high temperature of the pit risked overheating the pump motors. This led them to explore another option: using cheap chinese centrifugal pumps. While these pumps would lower upfront replacement costs, they would likely result in more frequent downtime and higher maintenance expenses.



## THE SOLUTION

After thoroughly analysing the situation, All-Pumps recommended replacing the client's Gorman Rupp trash pumps with the more reliable WSP™ self-primer pumps. These durable centrifugal trash pumps feature a unique Buzzsaw™ wear plate, designed with a sawtooth-shaped profile to shred stringy materials before they enter the pump. As a result, the client's wastewater treatment plant experienced no more clogs or breakdowns, saving them both time and money on repairs and maintenance.



## PROJECT HIGHLIGHTS

The WSP™ self-primer pump is a rugged, dependable, self-priming, solids-handling trash pump. What sets the WSP™ pumps apart from competitors is their streamlined, tool-less maintenance, along with the innovative Buzzsaw™ wear plate. This feature breaks down small, large, and stringy solids, protecting the system from costly downtime and improving overall wastewater management.





# CUTTING COSTS AND DOWNTIME: A GAME-CHANGING PUMP FOR PULP AND PAPER WASTE MANAGEMENT

## THE PROBLEM

A pulp and paper manufacturer had been struggling with their waste product clean up. After cleaning out tanks various times per month to avoid build up and maintain quality, their wash down collection pits had failing vertical column pumps.

The pumps, while built as durable as possible, needed maintenance every 3 or 4 months. The pumps themselves were difficult to remove from the pit, needing a crane and often covered in layers of solid paper mulch. The task to clean them out was about a day on its own, then to rebuild them would take 2 or 3 days. The parts were also very expensive.

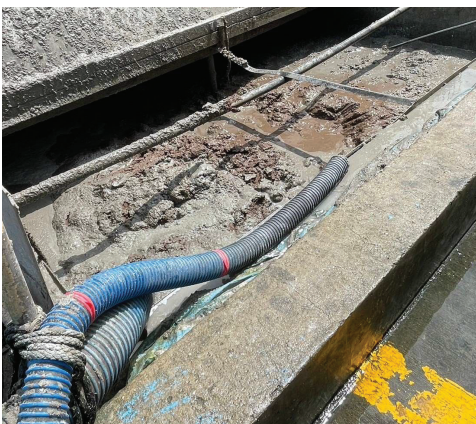




# CUTTING COSTS AND DOWNTIME: A GAME-CHANGING PUMP FOR PULP AND PAPER WASTE MANAGEMENT

## THE SOLUTION

A high-chrome metal self-primer pump was installed as a trial. The high chrome content allowed the pump to resist the abrasive nature of paper slurry and the self-priming Buzzsaw™ chopping action and open impeller meant the pump was clog-free. The client was hoping to get 6 months out of the pump to reduce downtime. They also liked the fact these pumps are completely external to the pit and the rotating assembly can be replaced in an hour or so. The multiple access points to the pump casing allowed it to be cleaned out easily and quickly unblocked if anything too large got through to the pump. After 8 months of running with only a couple of blockages, they decided to transfer another 4 pumps over to this type of system. Over the course of two years, more than 30 pump sets have been supplied for wastewater and pit management. The maintenance team loved them, and the engineering team have been surprised by the versatility of the applications they can cover.





# CUTTING COSTS AND DOWNTIME: A GAME-CHANGING PUMP FOR PULP AND PAPER WASTE MANAGEMENT

## PROJECT HIGHLIGHTS

- The WSP™ pump is out of the pit and quick and easy to service
- Using a high-quality hi-chrome wet-end meant the pump was very durable in an abrasive application
- The open impeller and Buzzsaw™ wear plate chopping action minimises the blockages
- Maintenance time was reduced from 4 days to 3 or 4 hours
- Recurring savings on lower costs of spare parts
- Increased site safety with no risk of anyone going near edge of pit during pump maintenance and removed the risk of crane operation
- Outlasted the other pump by more than double mean time between failure











We're All About Experience.