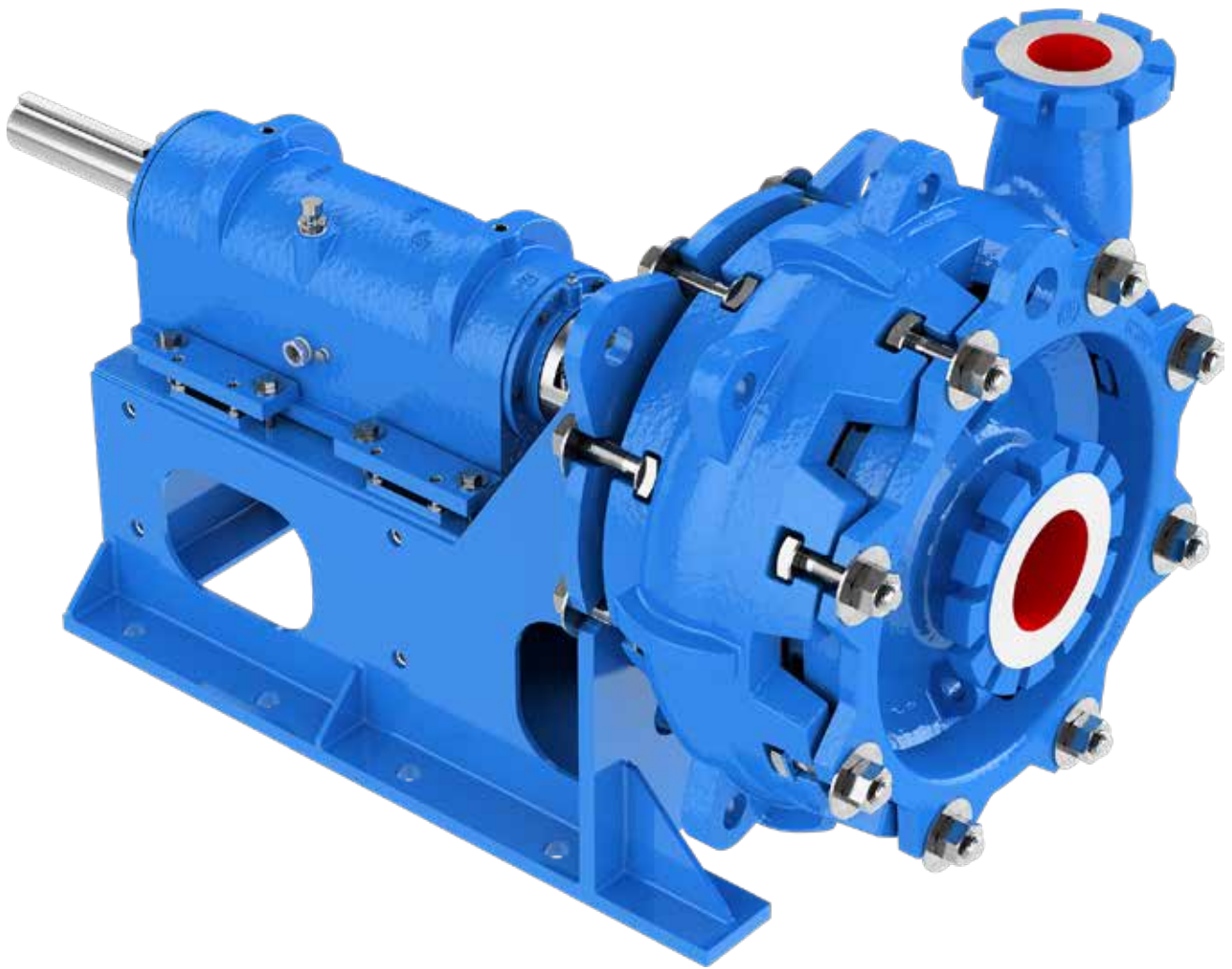


5500

Severe Duty Slurry Pump



5500

Proven leadership in mining and mineral processing

Proven Leadership

- 100 years of slurry pumping experience.
- Many industry firsts including: hard metal slurry pump, rubber lined pump and expeller / dynamic seal.

Industry Leading Coverage

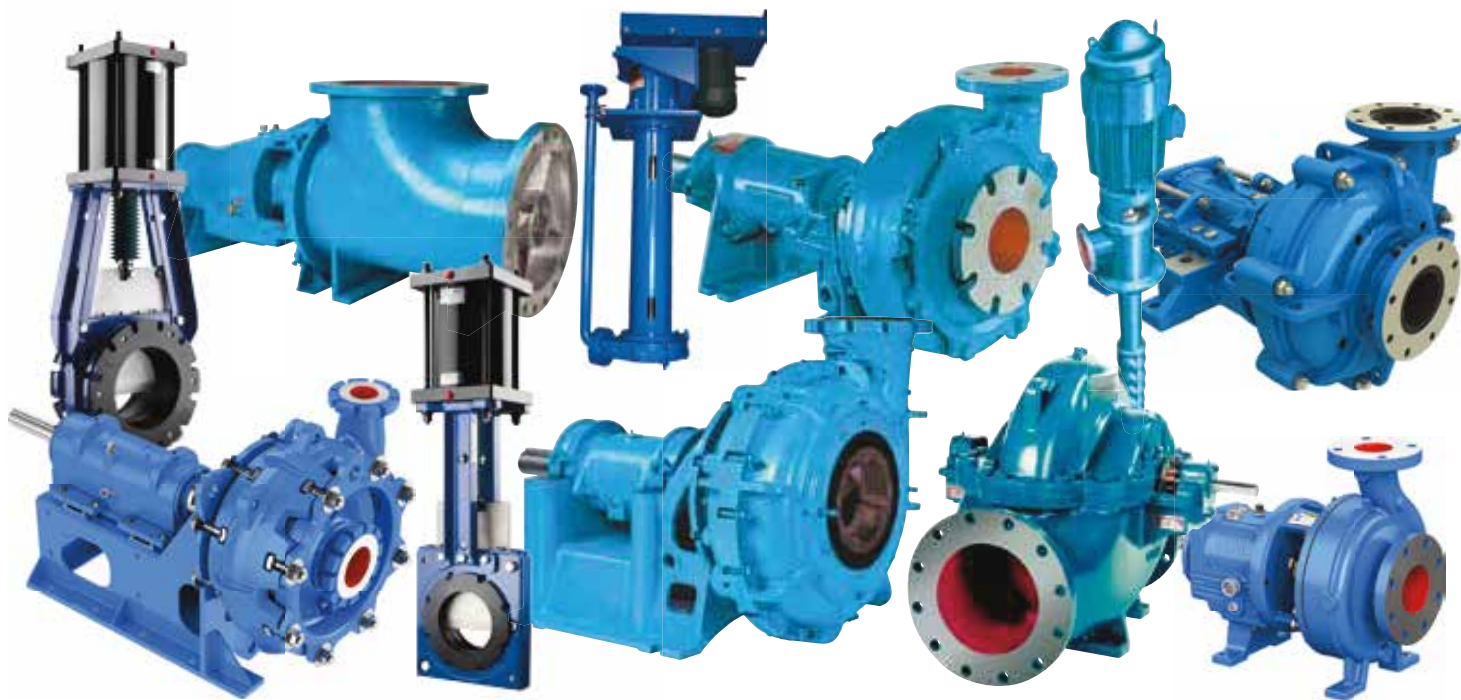
ITT Goulds Pumps offers the most complete line of products for the mining industry, including slurry, process and water pumps, valves, monitoring and control, and a full range of aftermarket and repair services.

Reliability

Due to our extensive portfolio for the mining industry, we can provide the right pump for our customers application, thus maximizing reliability. ITT Goulds Pumps can provide a complete solution for any pumping needs.

Global Coverage

With sales offices, packaging and service centers located globally, ITT Goulds Pumps provides the coverage needed to serve our customers, whether small or multi-national companies located in any region.



ITT has provided pumping solutions to all types of mineral processing sites throughout the world for well over one hundred years.

We know that only “up-time” yields money and is paramount to our customers. ITT Goulds Pumps products are engineered to maximize up-time, by offering our customers the best and most complete solutions. Our experienced and knowledgeable team further complements our portfolio of mineral processing solutions. We maximize the performance of your processing plants from start to finish.

5500

Goulds Model 5500: The Workhorse for the Toughest Services

The Model 5500 severe duty slurry pumps are engineered and manufactured for dependable performance and long life.

Tested under punishing conditions, these heavy duty pumps stay the course and keep working efficiently.

Designed for minimal maintenance, Model 5500 pumps are extremely easy to service when necessary. They are backed by Goulds parts and Goulds service, so long life in continuous use is assured. Minimize downtime, increase productivity with the Workhorse – the Goulds Model 5500.



Model 5500 with 450 HP motor-mounted overhead on gold tailings reclamation service.



Overhead motor-mounted Model 5500 in a coal preparation plant – heavy media cyclone feed service.



Model 5500 pumping Phosphogypsum in a phosphate plant.



High Pressure Design available for series pumping needs in coal processing plants.



Model 5500 is trusted to handle the most demanding services in slurry processing plants worldwide.

5500

Designed to Handle the Severest Abrasive Slurries

- Capacities to 17,000 GPM (3,861 m³/h)
- Heads to 425 ft (139 m)
- Temperatures to 250° F (121° C)
- Pressures to 500 PSIG (3,448 kPa)
- Solids to 5 inches (127 mm)

Design Features

Large Diameter Impeller

Develops higher heads at lower operating speeds

Extra Heavy Duty Shaft

Assures minimum shaft deflection while handling pulsating loads associated with high specific gravity slurries

Simplified Mechanical Design

For ease of installation and maintenance

Extra Thick Wet End Components

For extended wear life

Sealing Flexibility

Choice of packing, mechanical seal or dynamic seal



Goulds Model 5500 is the result of many years of experience designing and building severe duty slurry pumps. It's not only built to stand up to the toughest abrasive slurry services, but also is designed for extreme ease of maintenance and safety. A heavy duty bearing frame and shaft, extra thick wall sections and easily replaceable wear parts add up to many years of service even under the severest operating conditions.

Applications

Primary Metals

Ball Mill Discharge, Sag Mill Discharge, Tailings, Cyclone Feed

Coal Preparation

Heavy Media, Hydrocyclone, Cyclone Feed, Thickener Underflow

Non-Metallic Mining

Clay Slurries, Phosphate Slurries, Soda Ash, Potash

Sand and Gravel

Sand and Arregate Slurries, Tailings

Power Utility

Ash Slurries, Lime Slurries

Wet Process Cement

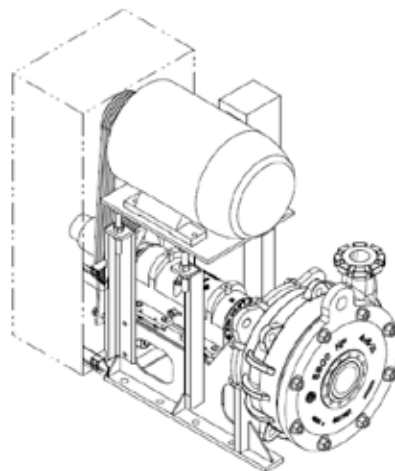
Clay Wash, Clay Storage, Kiln Feed, Raw Grind Feed, Screenings

Pulp & Paper

Black Liquor, Sand Slurries, Mill Waste, Sludge, Scrubber Water, Fly Ash

General

Foundry Sand, Plant Waste, Mill Scale, Sand Slurries, Lime Slurries, Ash Slurries



Goulds Pumps uses only the latest in product engineering software technology.

Designed for Ease of Maintenance

T-Slot Bolting

Allows ease of disassembly and reassembly - less downtime - low maintenance costs.



Cast-In Lifting Lugs

On all major wet-end components facilitates handling for less downtime, greater safety and lower maintenance cost. No special tools required.



Knock-Off Deflector

Protects bearings; facilitates threaded impeller removal. Less maintenance time, lower maintenance costs.



Flat Bottom Bearing Housing

Double register fit assures positive alignment and perfect fit with no shimming. Less maintenance and downtime.



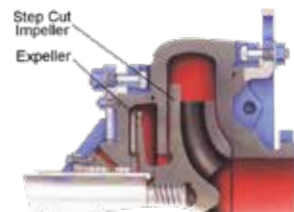
Bearing Housing Hold-Down Bolts

Accessible from the top, facilitates impeller end clearance adjustment, simplifies power end removal. Less downtime, low maintenance cost.



Dynamic Seal

Expeller option for absolute dry box sealing. Expeller and step-cut impeller engineered for positive stuffing box sealing. No outside flush required. Saves water, piping costs; eliminates product loss. All sizes performance tested.



Other Features

Optional Impeller Hook

Allows fast, easy, safe removal of impeller; less downtime.

Bottom Oil Drain

Speeds oil changes - less downtime, lower maintenance cost.

Dead-Set Bearings

No shims, adjusting rings or springs. Simple, accurate - less downtime, lower maintenance cost.

Generous Access to Stuffing Box

Facilitates servicing stuffing box for extreme ease of maintenance; less downtime.



5500

Severe Duty Slurry Pumps

Extra Heavy Duty Features for Handling Severest Abrasive Slurries

DOUBLE LIP SEALS

With grease barrier for positive bearing housing sealing.

DOUBLE ROW BEARING

Simple, rugged design.
Oil lubrication standard.

EXTRA HEAVY DUTY SHAFT

Long bearing span and large diameters reduce shaft deflection, extend bearing and packing life. Ideally suited for mounting large motors overhead.

FREE STANDING FABRICATED STEEL FRAME

For safe and easy installation; no cracking.

KNOCK-OFF DEFLECTOR

For easier impeller removal and added bearing protection.

SHAFT SLEEVE

Hook-type, extra thick for long life, reduced maintenance. Optional ceramic sleeve available for severe services.

STUFFING BOX CONNECTIONS

Standard for either "full flush" or "low dilution." Customer selects best choice for service.

STUFFING BOX BUSHING

Allows easy clearance renewal without replacing stuffing box.

FULL T-SLOT BOLTING

For ease of maintenance.

EXTERNAL IMPELLER ADJUSTMENT

Easy access and adjustment allows sustained performance. Up to 8 inches of axial adjustment extends useful life of parts and allows easy access to impeller for maintenance.

CAST IN LIFTING LUGS

Provides safe, ease of handling.

INTEGRAL REAR LINER

No joints; extra thick. Reduces parts inventory cost and simplifies maintenance.

TAPER FIT

For ease of disassembly, reassembly.

LARGE DIAMETER IMPELLER

Higher heads at lower operating speeds. Extra thick wall sections. Back pump-out vanes reduce stuffing box pressure, keep solids from entering stuffing box.

POSITIVE IMPELLER ATTACHMENT

Heavy duty Acme threads for easy impeller removal. No inserts for trouble-free operation.

OPTIONAL CERAMIC SUCTION COVER INSERT

For extended wear life in severest services.

THICK METAL SECTIONS

Casing, suction cover and impeller have extra thick wall sections for extended wear life, reduced maintenance.

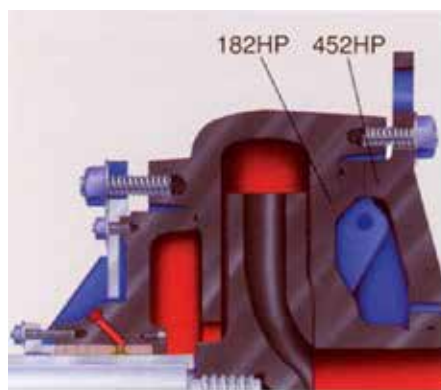
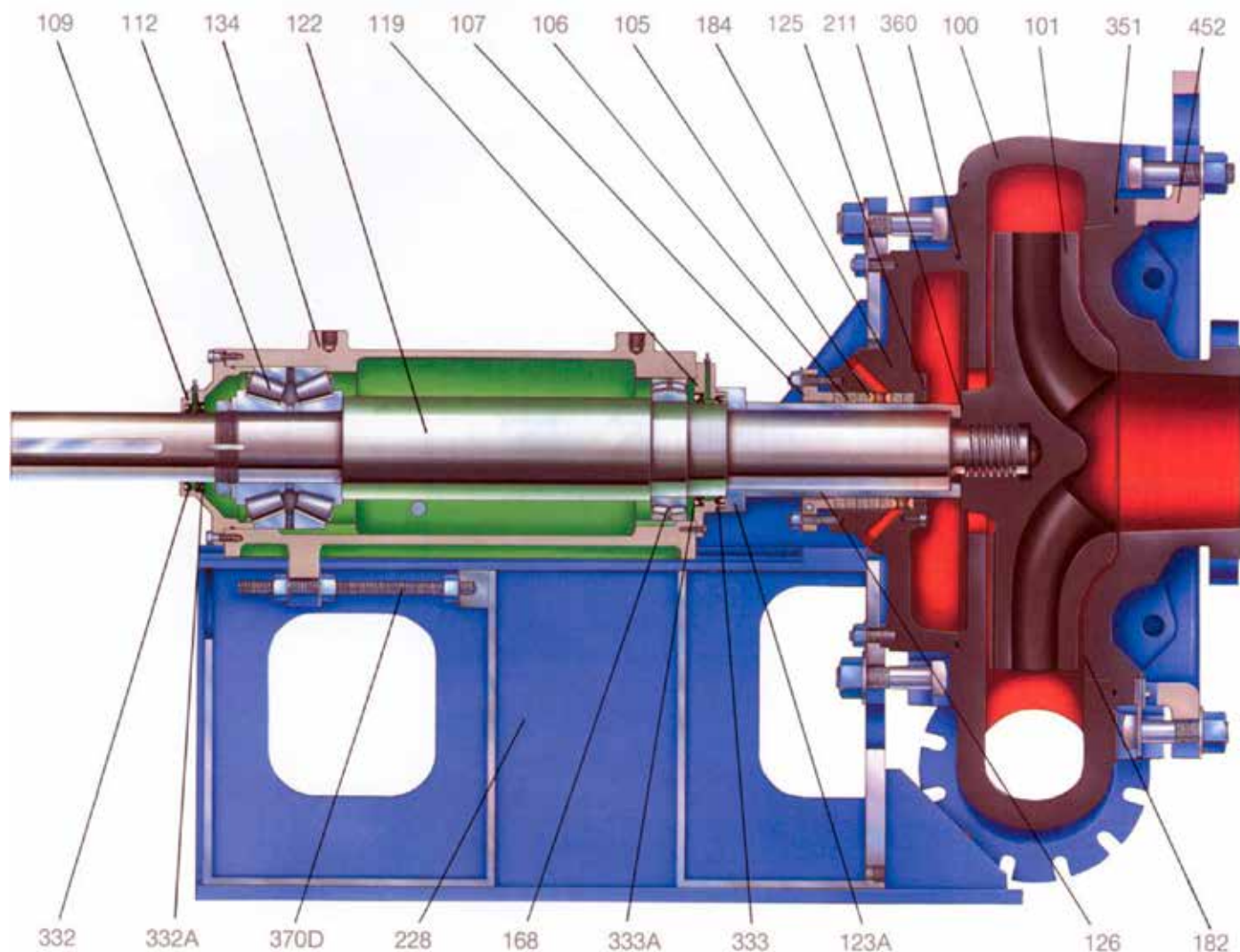


Parts List and Materials of Construction

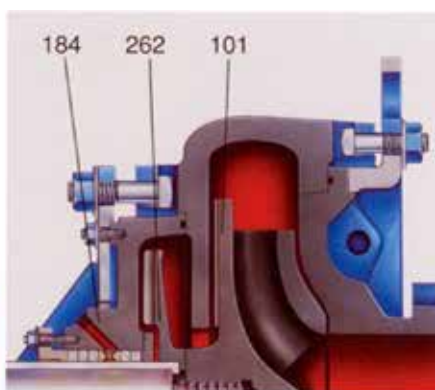
Part number	Description	Material		
		HC600 (High Chrome Iron)	EnduraChrome™ (High Chrome Iron)	CD4MCu
100	Casing	HC600	EnduraChrome™	CD4MCu
101	Impeller	HC600	EnduraChrome™	CD4MCu
105	Lantern Ring Teflon	PTFE		
106	Packing Graphite Synthetic	Graphite Synthetic		
107	Gland	Cast Iron		316 SS
109	Outboard End Cover	Cast Iron		
112	Outboard Bearing	Tapered Roller		
119	Inboard End Cover	Cast Iron		
122	Shaft	Steel		
123A	Knock-Off Deflector	Steel		
125	Stuffing Box Bushing	HC600	EnduraChrome™	CD4MCu
126	Shaft Sleeve	420 Stainless Steel (Hardened)		CD4MCu
134	Bearing Housing	Cast Iron		
168	Inboard Bearing	Spherical or Tapered Roller		
182	Suction Cover	HC600	EnduraChrome™	CD4MCu
182HP	Suction Cover Liner	HC600	EnduraChrome™	CD4MCu
184	Stuffing Box Cover	Ductile Iron	EnduraChrome™	CD4MCu
184	Stuffing Box Cover (Expeller Option)	HC600	EnduraChrome™	CD4MCu
184A	Slurry Seal Chamber	HC600	EnduraChrome™	CD4MCu
211	Gasket - Impeller to Sleeve	Fiber		
228	Frame	Steel		
262	Expeller (Optional)	HC600	EnduraChrome™	CD4MCu
322	Outboard Oil Seal (Outside)	Buna Rubber		
322A	Outboard Oil Seal (Inside)	Buna Rubber		
333	Inboard Oil Seal (Outside)	Buna Rubber		
333A	Inboard Oil Seal (Inside)	Buna Rubber		
351	O-ring-Suction Cover/Casing	Buna Rubber		
353	Mechanical Seal as required	As required		
360	O-ring-Stuffing Box/Casing	Buna Rubber		
370D	Impeller Adjusting Screw	316 Stainless Steel		
452	Suction Cover Clamp	Ductile Iron		
452HP	Suction Cover	Ductile Iron		

Description	Specification
HC600	ASTM A532, Class III Type A Hardened
EnduraChrome™	Modified ASTM A532, Class III Type A Hardened
Cast Iron	ASTM A48, Class 25
Steel	AISI 1141
420 Stainless Steel	ASTM A743 Grade CA-40
Ductile Iron	ASTM A536 Grade 80-55-06
CD4MCu	ASTM A743 Grade CD4MCu
316 Stainless Steel	ASTM A276 Type 316

Sectional View



Model 5500 HP (High Pressure Pump)



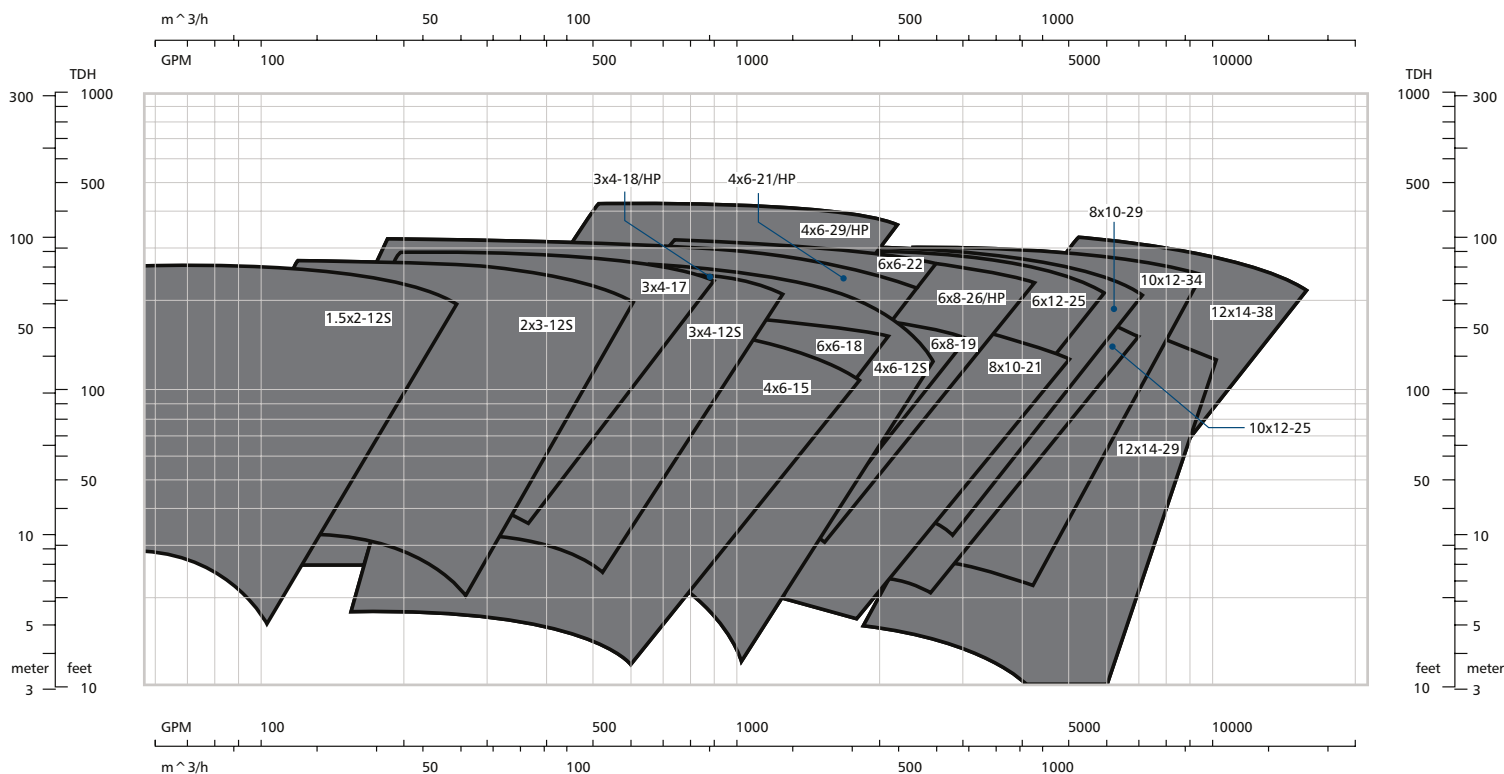
Dynamic Seal (Expeller Option)



Slurry Mechanical Seal with Slurry Seal Chamber

5500

Hydraulic Coverage: 50/60 Hz



Model 5500 HP: High Pressure, Heavy Duty Slurry Pump

Services

Tailings, Potash, Pipeline, Mud Disposal, Jet Water Ash

- Capacities to 4,000 GPM (908 m³/h)
- Heads to 425 ft (130m)
- Temperatures to 200° F (93° C)
- Pressures to 500 PSIG (3,448 kPa)
- Solids to 2½ inches (64 mm)

Features

Heavy Duty Casing

For high pressures and abrasive services.

Two-Piece Suction Cover and Liner

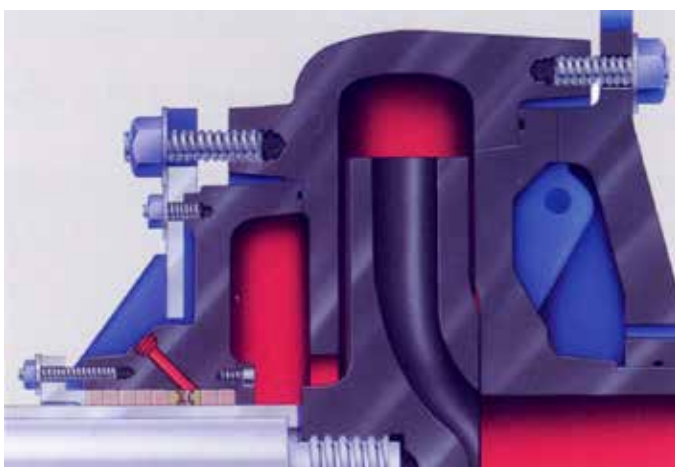
Provides temporary secondary containment; pump will operate until shut down for repair.

400 Lb. Flanges

For high pressure pumping.

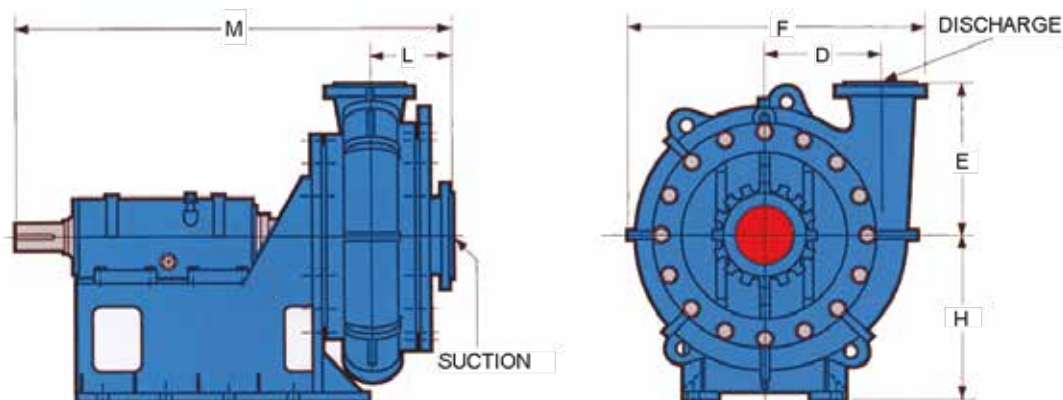
Maximum Interchangeability with 5500

For minimum inventory.

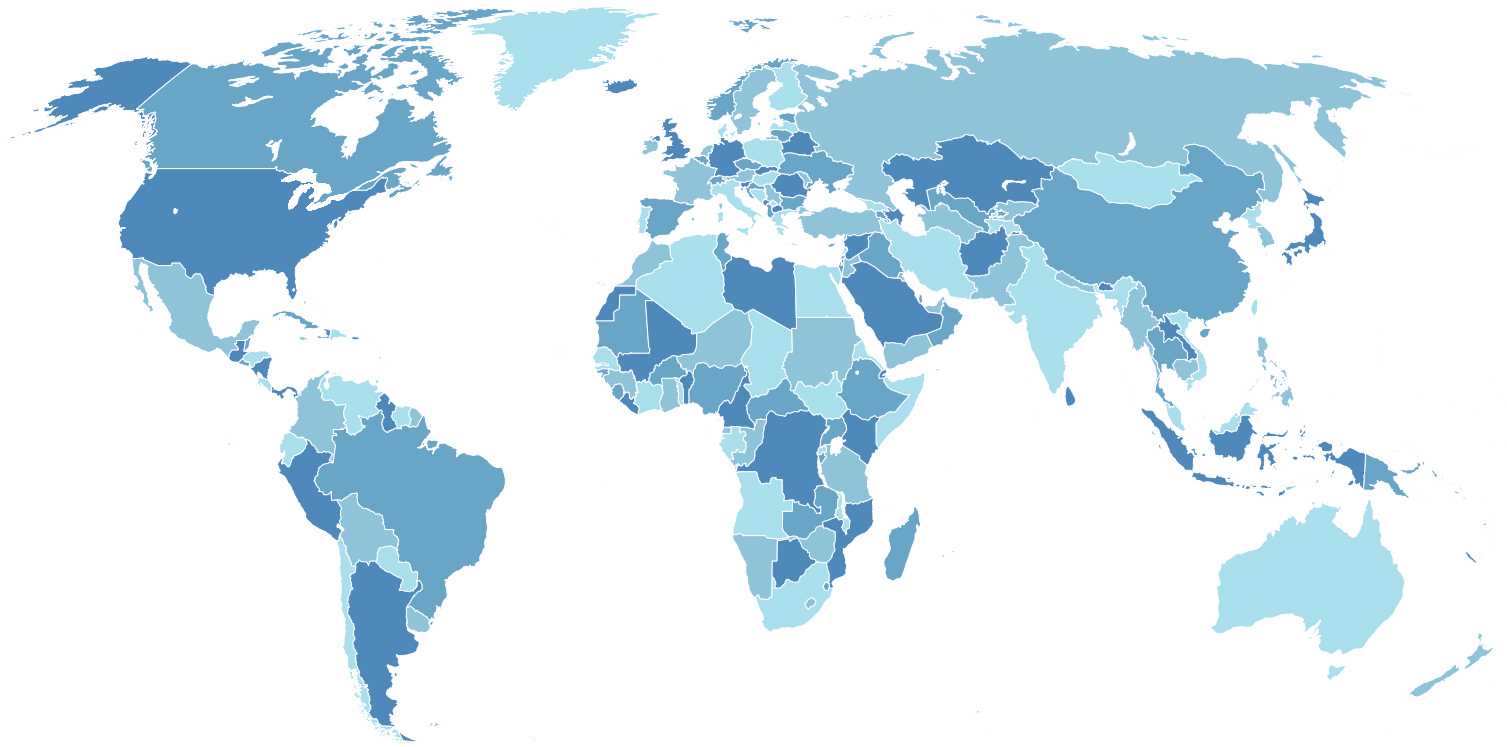


Goulds Model 5500 HP is designed to handle tough stage or series pumping. It's built with all the proven features of the standard 5500 making it the most reliable and maintenance friendly pump in the industry.

Dimensions



Pump	Frame	D		E		F		H		L		M		Weight	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
1.5x2-12	S	8.06	205	11.00	279	20.62	524	15.50	394	4.75	121	40.31	1024	1223	555
2x3-12	S	7.94	202	10.75	273	20.88	530	15.50	394	5.38	137	40.00	1016	1223	555
3x4-12	S	8.12	206	9.75	248	22.19	564	15.50	394	5.94	151	40.88	1038	1223	555
4x6-12	S	8.12	206	11.81	300	23.62	600	15.50	394	6.50	165	41.88	1064	1223	555
3x4-17	B1	11.00	279	16.00	406	28.25	718	18.12	460	8.00	203	51.00	1295	1599	725
	B2	11.00	279	16.00	406	28.65	728	18.00	457	8.00	203	57.88	1470	1890	857
3x4-18	B1	11.00	279	16.00	406	28.63	727	18.12	460	8.25	210	51.62	1311	1654	750
	B2	11.00	279	16.00	406	28.63	727	18.00	457	8.25	210	58.44	1484	1945	882
3x4-18HP	B2	11.00	279	16.00	406	30.62	778	18.00	457	8.25	210	58.44	1484	2145	973
4x6-15	B1	10.00	254	12.75	324	26.84	682	18.00	457	9.00	229	52.12	1324	1461	663
	B2	10.00	254	12.75	324	27.00	686	18.00	457	9.00	229	59.00	1499	1798	816
4x6-21	B2	14.00	356	18.00	457	35.50	902	22.00	559	10.00	254	60.12	1527	2944	1335
	B3	14.00	356	18.00	457	35.50	902	22.00	559	10.00	254	68.25	1734	3211	1456
4x6-21HP	B3	14.00	356	18.00	457	35.50	902	22.00	559	10.00	254	68.25	1734	3757	1704
4X6-29	B3	19.12	486	24.50	622	47.62	1210	30.00	762	10.50	267	70.12	1781	4410	2000
	B4	19.12	486	24.50	622	47.62	1210	30.00	762	10.50	267	77.69	1973	5400	2449
4x6-29HP	B4	19.12	486	24.50	622	47.44	1205	30.00	762	10.50	267	79.25	2013	6100	2767
6x6-18	B2	12.31	313	15.00	381	32.19	818	22.00	559	8.75	222	59.06	1500	2463	1117
	B3	12.31	313	15.00	381	32.19	818	22.00	559	8.75	222	67.19	1707	2730	1238
6x6-22	B2	14.88	378	20.00	508	38.50	978	22.00	559	10.00	254	60.12	1527	3019	1369
	B3	14.88	378	20.00	508	38.50	978	22.00	559	10.00	254	68.25	1734	3286	1491
6x8-19	B2	13.62	346	15.00	381	35.00	889	22.00	559	9.00	229	59.44	1510	2838	1287
	B3	13.62	346	15.00	381	35.00	889	22.00	559	9.00	229	67.75	1721	3105	1408
6x8-26	B3	18.25	464	21.00	533	45.69	1161	30.00	762	12.25	311	70.94	1802	5300	2404
	B4	18.25	464	21.00	533	45.69	1161	30.00	762	12.25	311	78.75	2000	6050	2744
6x8-26HP	B4	18.25	464	21.00	533	45.69	1161	30.00	762	12.12	308	78.94	2005	6420	2912
8x10-21	B2	16.81	427	17.38	441	42.38	1076	25.00	635	10.50	267	61.06	1551	3123	1417
	B3	16.81	427	17.38	441	42.38	1076	25.00	635	10.50	267	69.12	1756	3390	1538
8x10-29	B3	21.00	533	24.50	622	52.44	1332	30.00	762	13.38	340	73.06	1856	5850	2654
	B4	21.00	533	24.50	622	52.44	1332	30.00	762	13.38	340	80.62	2048	6840	3103
10x12-25	B3	20.00	508	23.00	584	53.38	1356	30.00	762	11.25	286	70.31	1786	4375	1984
	B4	20.00	508	23.00	584	53.38	1356	30.00	762	11.25	286	77.88	1978	5125	2325
10x12-34	B4	24.75	629	27.00	686	61.62	1565	35.00	889	14.50	368	82.25	2089	8700	3946
	B5	24.75	629	27.00	686	61.62	1565	35.00	889	14.50	368	93.19	2367	10300	4672
12x14-29	B3	23.38	594	25.00	635	61.25	1556	35.00	889	12.50	318	72.38	1838	5250	2381
	B4	23.38	594	25.00	635	61.25	1556	35.00	889	12.50	318	79.94	2030	6730	3053
12x14-38	B4	26.50	673	34.00	864	70.25	1784	37.00	940	18.25	464	86.06	2186	12200	5534
	B5	26.50	673	34.00	864	70.25	1784	37.00	940	18.19	462	98.50	2502	13800	6260



Visit www.ittproservices.com & www.gouldspumps.com to
find nearest service, sales, and manufacturing locations



— An ITT Brand

240 Fall Street
Seneca Falls, NY 13148
Phone: 315.568.2811
Fax: 315.568.2418
www.gouldspumps.com

© 2025 ITT Goulds Pumps Inc.

B.5500.en-US.2025-01