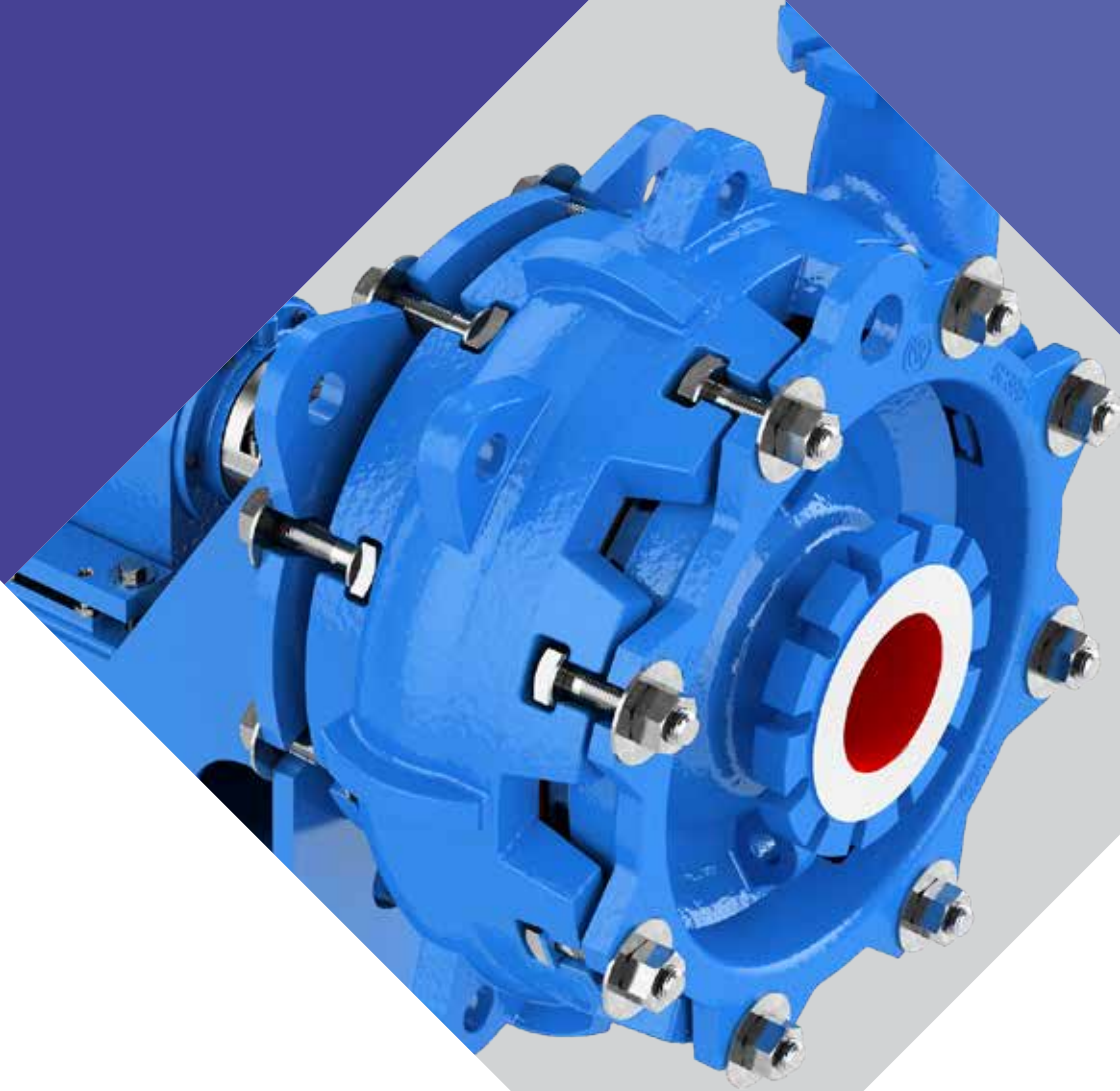


 **GOULDS PUMPS**

Goulds 5500

Severe Duty Slurry Pump



ITT

ENGINEERED FOR LIFE

Goulds 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.

Reliability

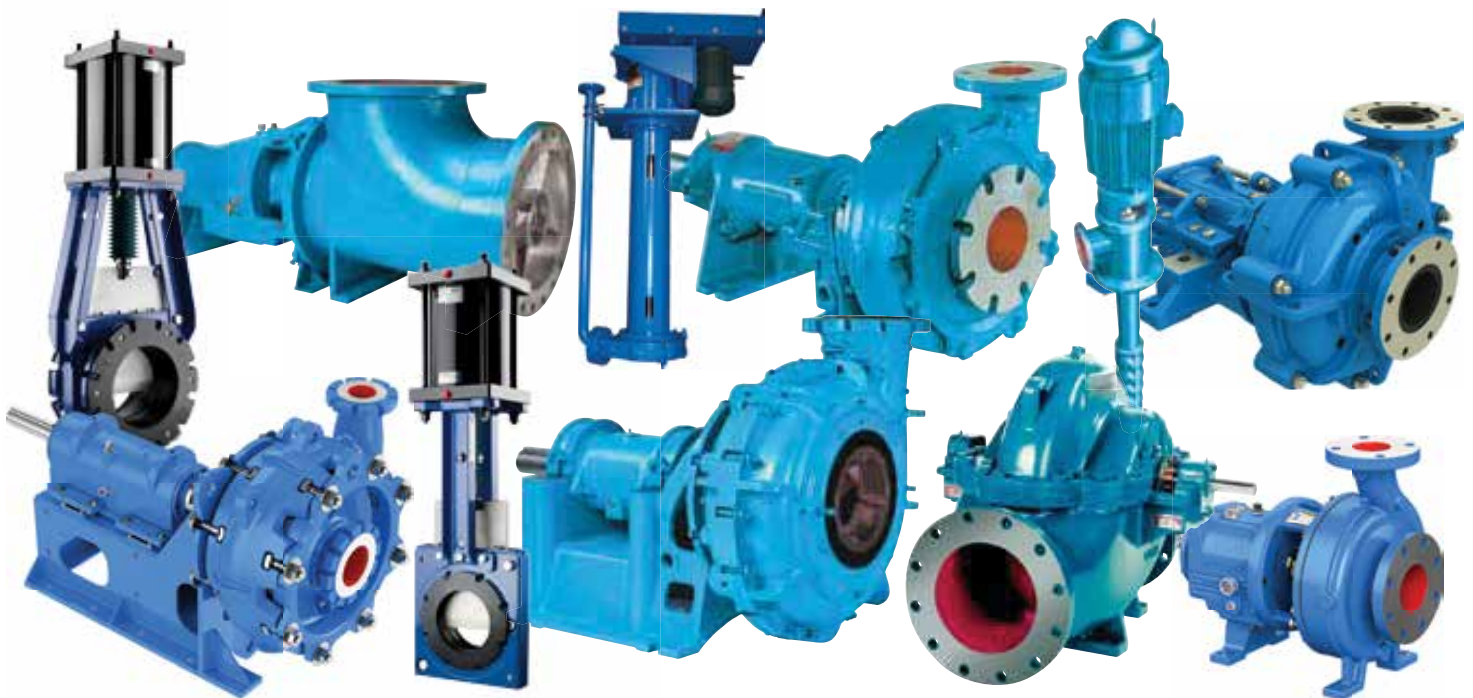
Due to our extensive portfolio for the mining industry, we can provide the right pump for our customers application, thus maximizing reliability. ITT Goulds Pumps can provide a complete solution for any pumping needs.

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.

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.

Goulds 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.

Goulds 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

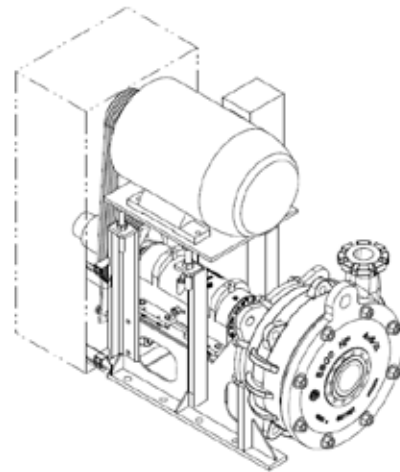
Clay Wash, Clay Storage, Kiln Feed, Raw Grind Feed, Screenings

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.



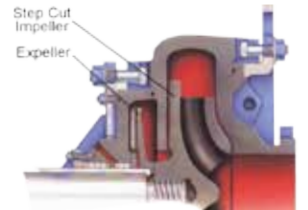
Bearing Housing Hold-Down Bolts

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.



Goulds 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.

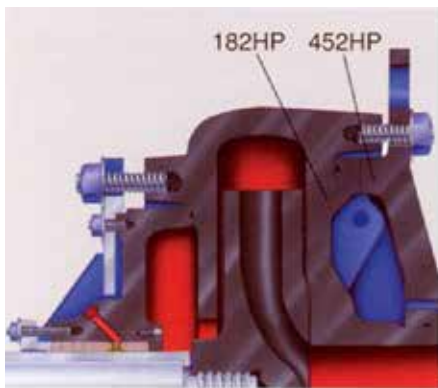
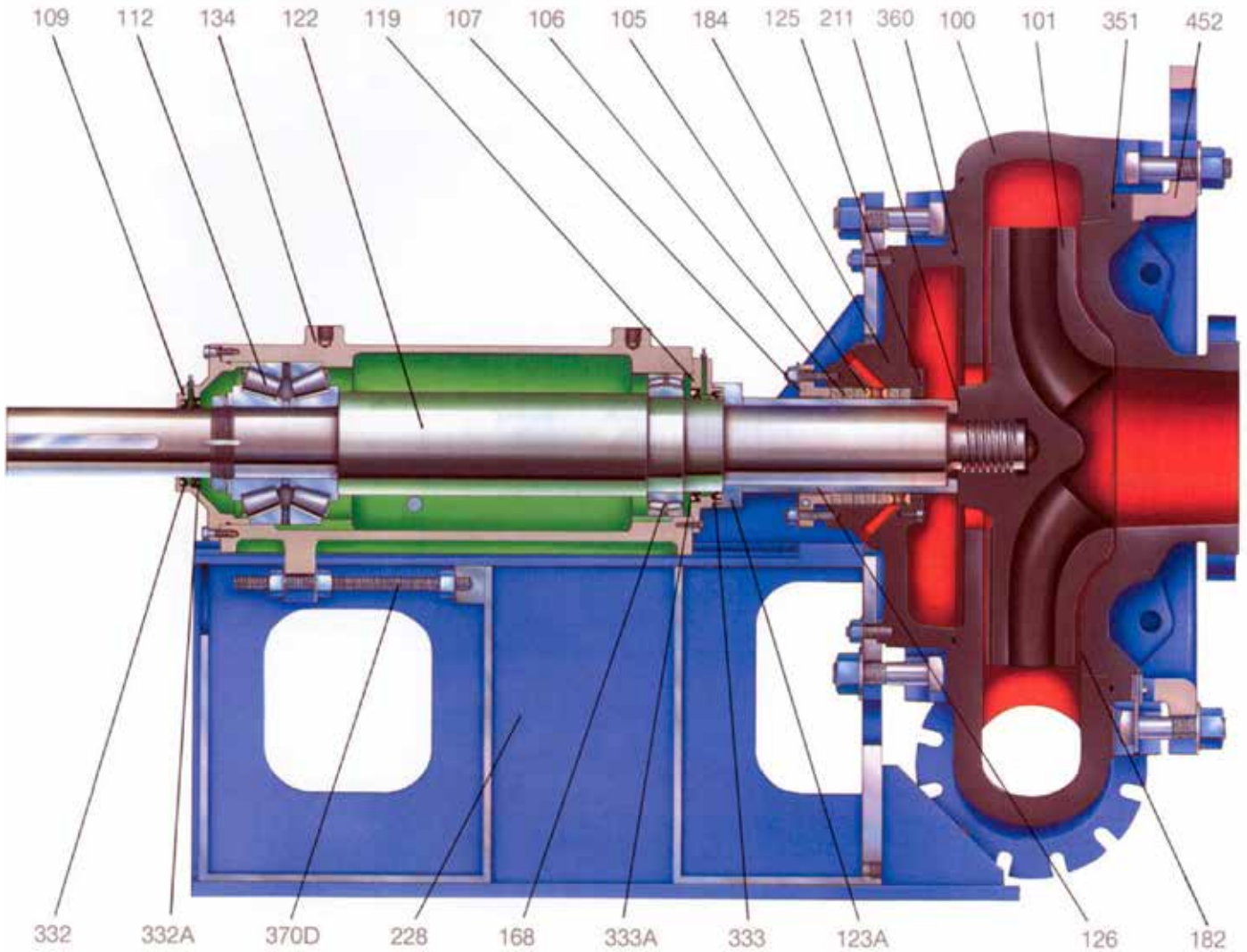


Parts List and Materials of Construction

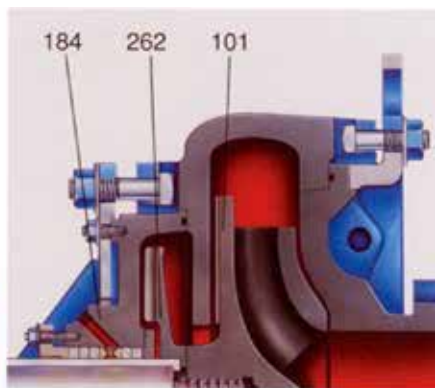
| Part number | Description | Material | | |
|-------------|--------------------------------------|--------------------------------|-------------------------------------|--------|
| | | HC600 (High Chrome Iron) | EnduraChrome™ (High Chrome Iron) | CD4MCu |
| 100 | Casing | HC600 | EnduraChrome™ | CD4MCu |
| 101 | Impeller | HC600 | EnduraChrome™ | CD4MCu |
| 105 | Lantern Ring Teflon | Teflon | | |
| 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 |

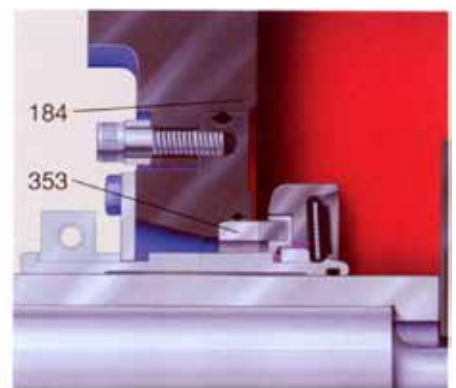
Sectional View



Model 5500 HP (High Pressure Pump)



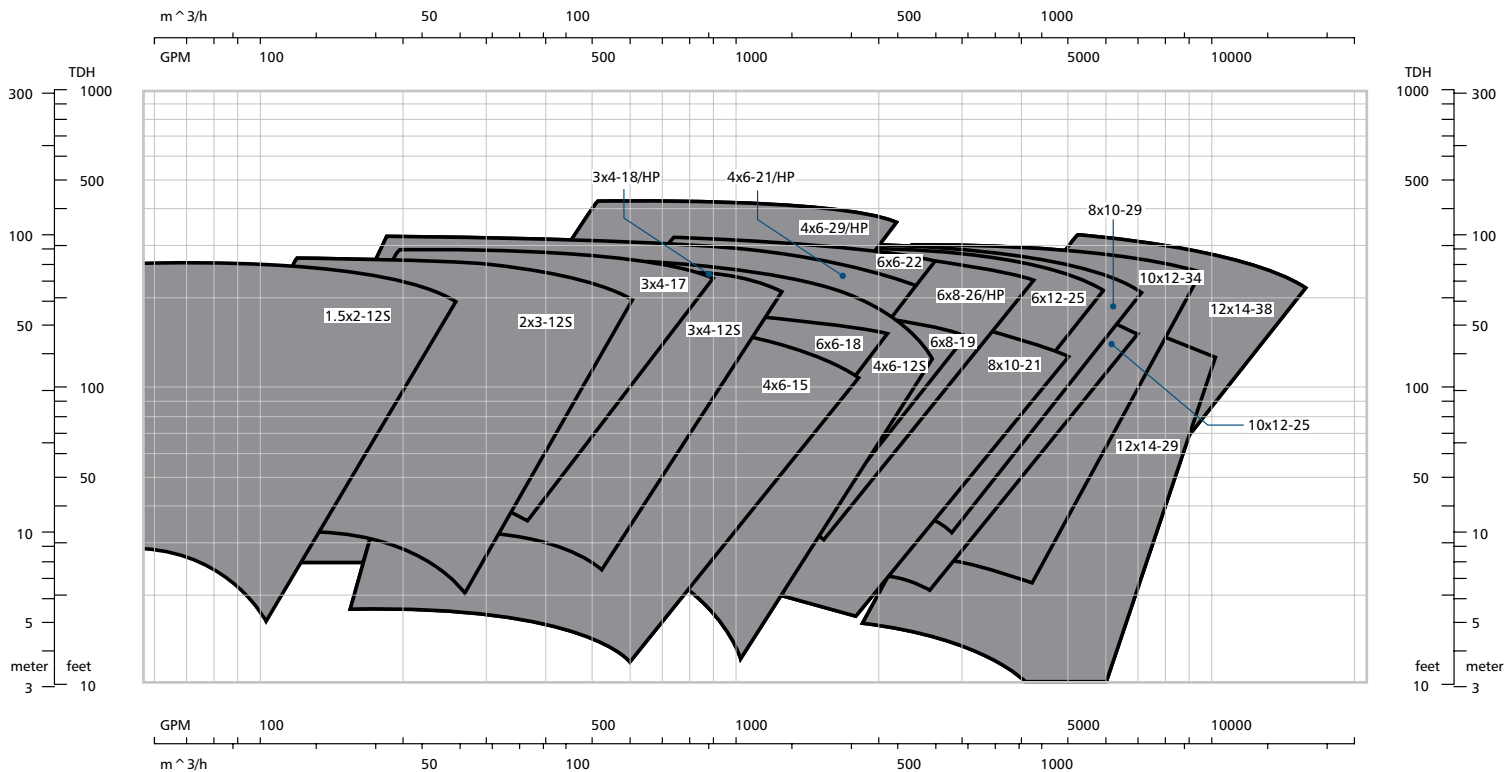
Dynamic Seal (Expeller Option)



Slurry Mechanical Seal with Slurry Seal Chamber

Goulds 5500

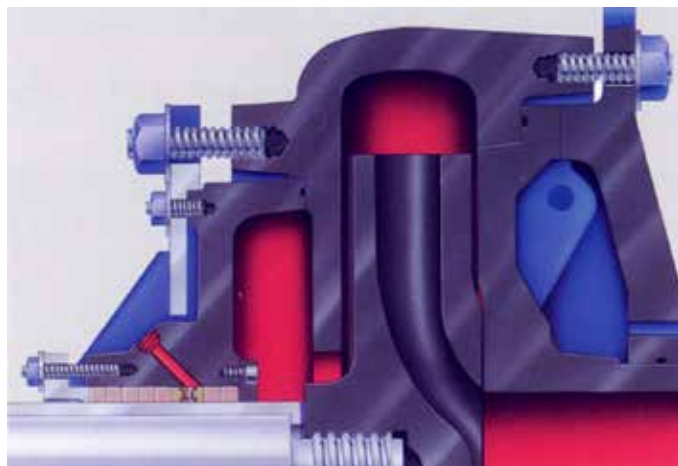
Hydraulic Coverage: 50/60 Hz



Model 5500 HP: High Pressure, Heavy Duty Slurry Pump

Services

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



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.

- 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.

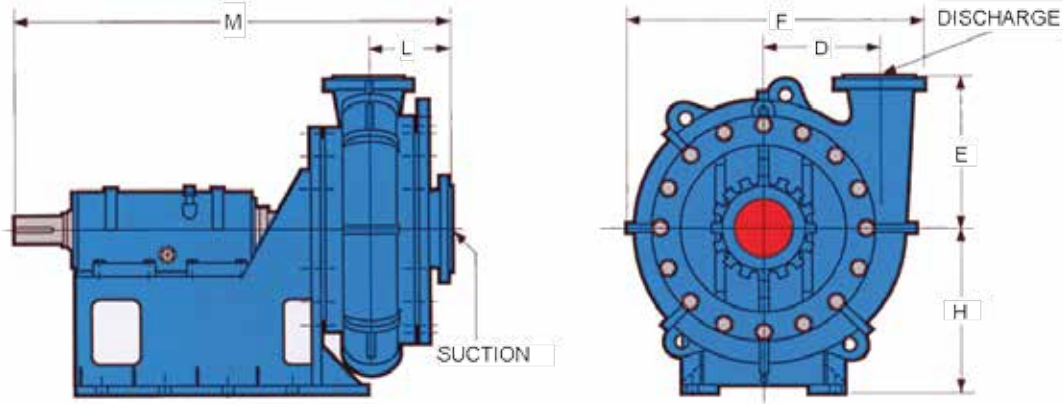
Two-Piece Suction Cover and Liner

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

400 Lb. Flanges

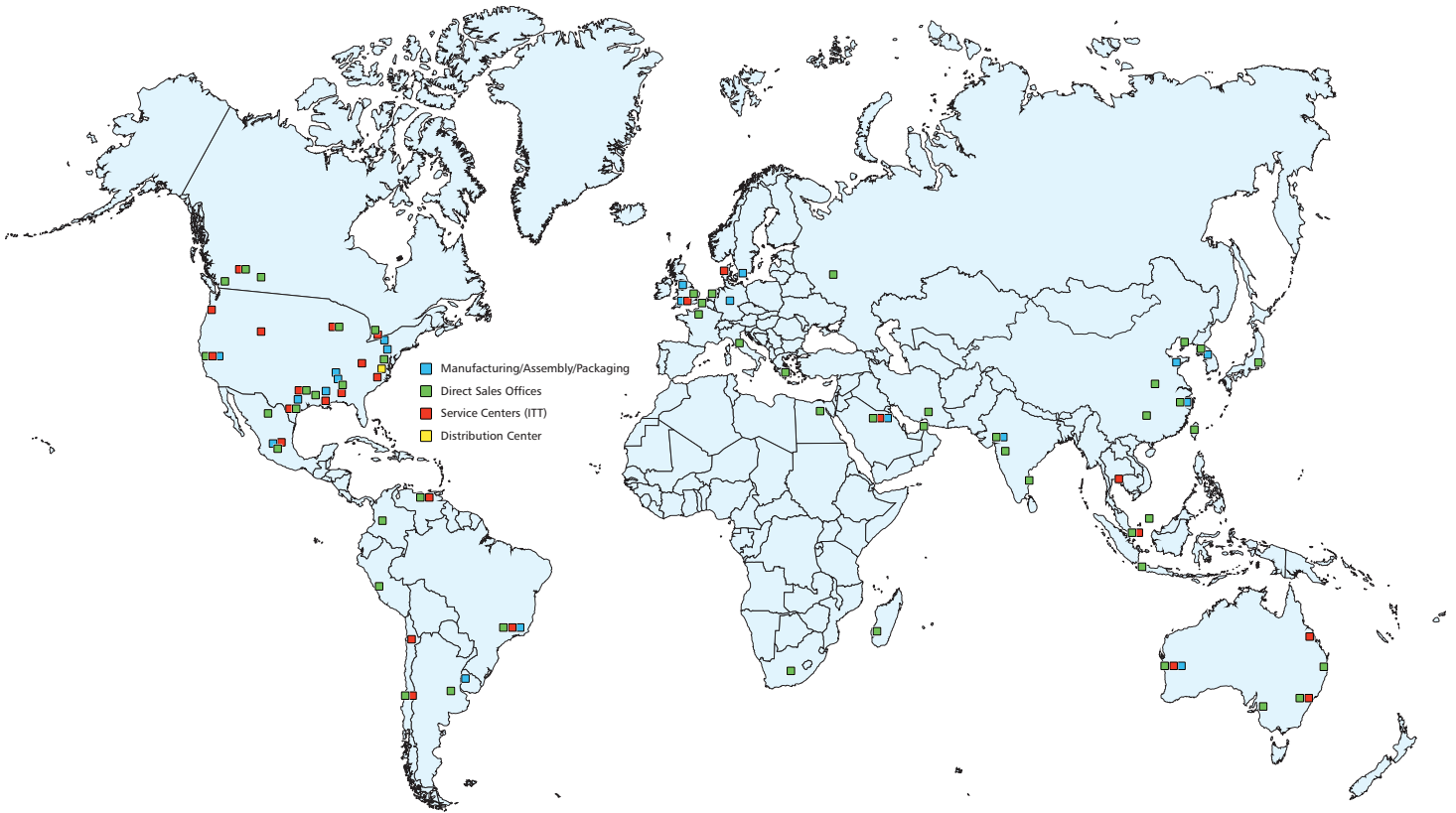
For high pressure pumping.

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 |

Wherever you are, we're there too.



PRO services

Reliability has no quitting time.

Building on over 160 years of Goulds Pumps experience, PRO Services provides an array of services focused on reducing equipment total cost of ownership (TCO) and increasing plant output, including predictive monitoring, maintenance contracts, field service, engineered upgrades, inventory management, and overhauls for pumps and other rotating equipment.

Your Total Solution For Equipment Life Cycle Optimization

