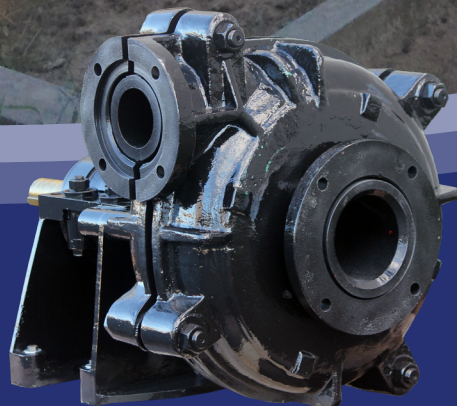
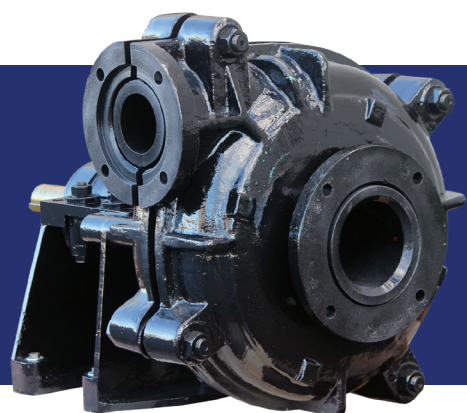


CORNELL PUMP COMPANY

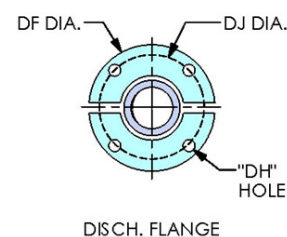
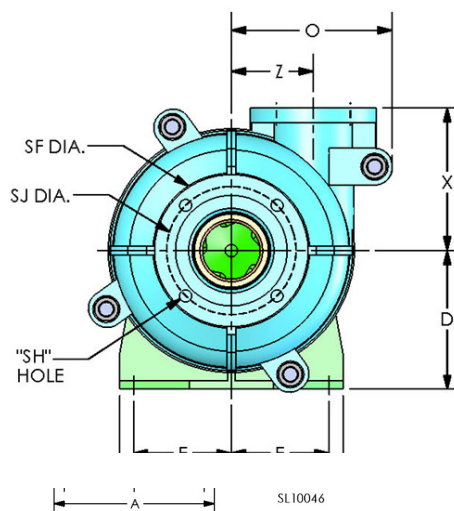
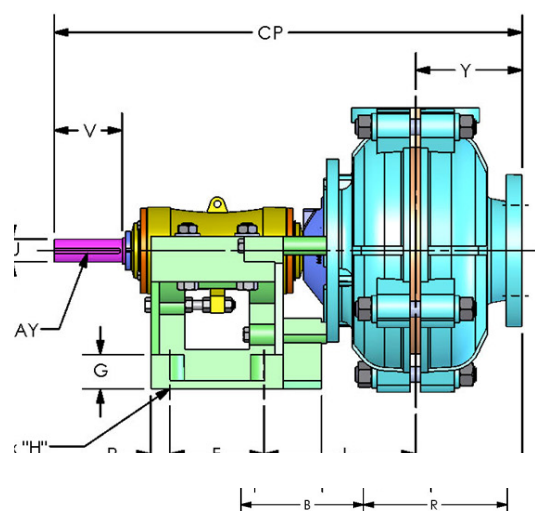
SLURRY PUMPS



SP SERIES SLURRY PUMPS



Cornell's slurry pumps are designed to handle abrasive applications in the mining process industry, expanding our dewatering pumping solutions. These pumps are equipped with our patented Cycloseal® technology, eliminating the need for flush water.



NOTES:

1. Do not use for construction unless certified.
 2. Dimension "U" and Keyway are in millimeters.
- All other dimensions in inches.

FLANGE DIMENSION						
MODEL	DISCHARGE			SUCTION		
	DF	DJ	DH	SF	SJ	SH
2SP	7.25	5.75	4x.75	8.5	7	4x.75
3SP	9.02	7.52	4x.87	10.98	9.25	4x.87
4SP	10.98	9.25	4x.87	13.27	11.5	4x.87
6SP	14.49	12.76	8x.83	15.98	14.02	8x.87
8SP	17.01	14.76	8x1.14	19.76	17.52	8x1.14
10SP	20.75	18.5	12x.98	20.75	18.5	8x.98
12SP	21.73	19.49	12x.98	23.03	20.51	12x.98

WEIGHT (LB)		
MODEL	METL.	RUBB.
2SP	420	340
3SP	580	520
4SP	1380	1000
6SP	3250	2165
8SP	8270	6900
10SP	4520	7400
12SP	14130	10300

PUMP DIMENSIONS																					
MODEL	FRAME	CONNECTION		A	B	CP	D	E	F	G	H	L	O	P	R	U	V	X	Y	Z	KEYWAY
		DISCH.	SUCT.																		
2SP	C	2	3	15.98	12.24	30.24	10	7	6.89	1.89	0.75	9.17	9.37	1.26	11.06	42mm	4.76	8.27	5.98	5.43	12mm x 8mm
3SP	C	3	4	15.98	12.24	33.19	10	7	6.89	1.89	0.75	10.63	11.5	1.26	13.94	42mm	4.76	10.31	7.4	5.87	12mm x 8mm
4SP	D	4	6	19.37	14.33	40.2	13	8.5	8.39	2.52	0.87	12.52	15.98	1.5	16.57	65mm	6.46	13.31	8.5	9.02	18mm x 11mm
6SP	E	6	8	24.49	17.64	51.26	17.99	10.75	10.12	2.99	1.14	15.83	21.69	2.13	21.93	80mm	8.74	18.11	11.5	12.52	22mm x 14mm
8SP	ST	8	10	45.28	30.71	68.82	25.59	17.72	24.41	4.92	1.89	17.28	26.5	3.15	27.24	120mm	11.02	25	13.11	16.5	32mm x 18mm
10SP	ST	10	12	45.28	30.71	71.5	25.59	17.72	24.41	4.92	1.89	16.38	29.72	3.15	30	120mm	11.02	26.54	16.26	18.27	32mm x 18mm
12SP	ST	12	14	45.28	30.71	73.74	25.59	17.72	24.41	4.92	1.89	19.13	36.89	3.15	31.87	120mm	11.02	32.76	18.74	24.76	32mm x 18mm

APPLICATIONS

Dewatering
Cyclone feed
Regrind
Flotation

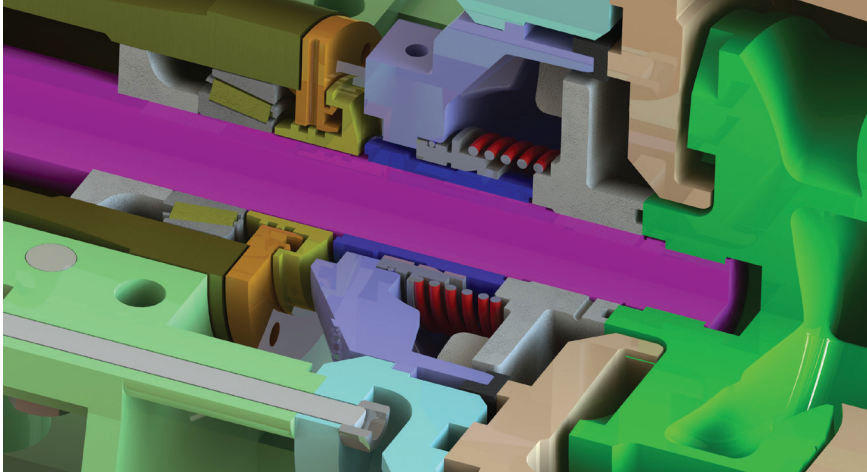
Mill discharge
Tailings and mine
refuse

Mining and mineral
processing
Heavy duty abrasive
slurries

Medium duty abrasive
slurries
In-plant slurry transfer
pumps

SP SERIES SLURRY PUMPS

CYCLOSEAL®: THE INNOVATION THAT DISTINGUISHES THE SP SERIES AS CORNELL TOUGH



The Cycloseal® technology from Cornell features deflector vanes and an expeller that work together to create a cyclo-action, removing abrasive materials and solids from the seal area while also purging air and gas pockets. This design increases the lifespan of the seal and eliminates the need for venting or water flush.

Cycloseal® technology not only extends seal life but also reduces spray-over during operation, and decreases the frequency of off-lining pumps for maintenance.

CYCLOSEAL® BENEFITS:

Cornell's Cycloseal® design offers numerous benefits, including extended seal life that has been proven in demanding applications such as manure slurry, starch recovery, clean water, food processing, self-priming, and hot cooking oil applications. In some cases, it has more than tripled the expected mechanical seal life.

The Cycloseal® system also offers a Run-Dry™ option, which lubricates the seal faces even when the pump casing is dry. This feature is essential for situations

where the pump must run dry for several hours or may suddenly lose its prime without being shut off.

In addition to the extended seal life and Run-Dry™ option, the Cycloseal® system offers system and maintenance savings. It requires no external water flush, filters, grease cups, piping, or instrumentation typically associated with packing or double mechanical seals. This translates into less pump downtime and lower maintenance costs.



SP SERIES SLURRY PUMPS

ABOUT THE SP SERIES

The SP series is designed to transport heavy abrasive slurry with a high concentration of solids at pH levels 1 to 13 (rubber lined) and 3 to 14 (metal). Pumps are available in chrome iron and rubber lining configurations. SP series pumps are designed to handle abrasive high-density slurries in mining, metallurgical, coal, manure, and other industrial applications.

BENEFITS

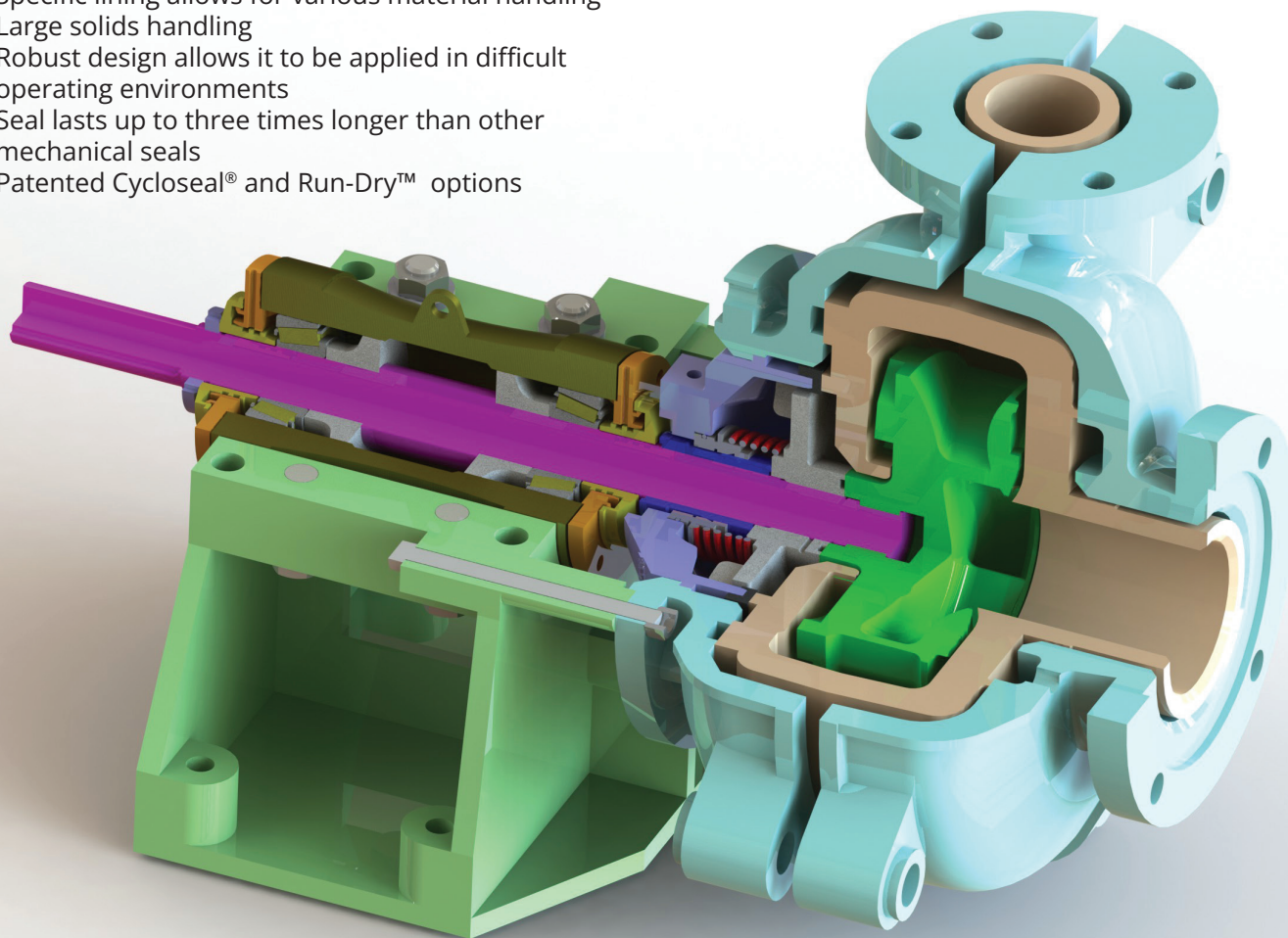
- Solids handling up to 3.5"
- Heads up to 235' at BEP
- No Flush Water Required
- Industry leading two year warranty
- Superior abrasive and corrosive wear life
- Handles pH levels 1 to 13 (rubber lined) and 3 to 14 (metal)
- Available in rubber lined or chrome-iron configuration

FEATURES

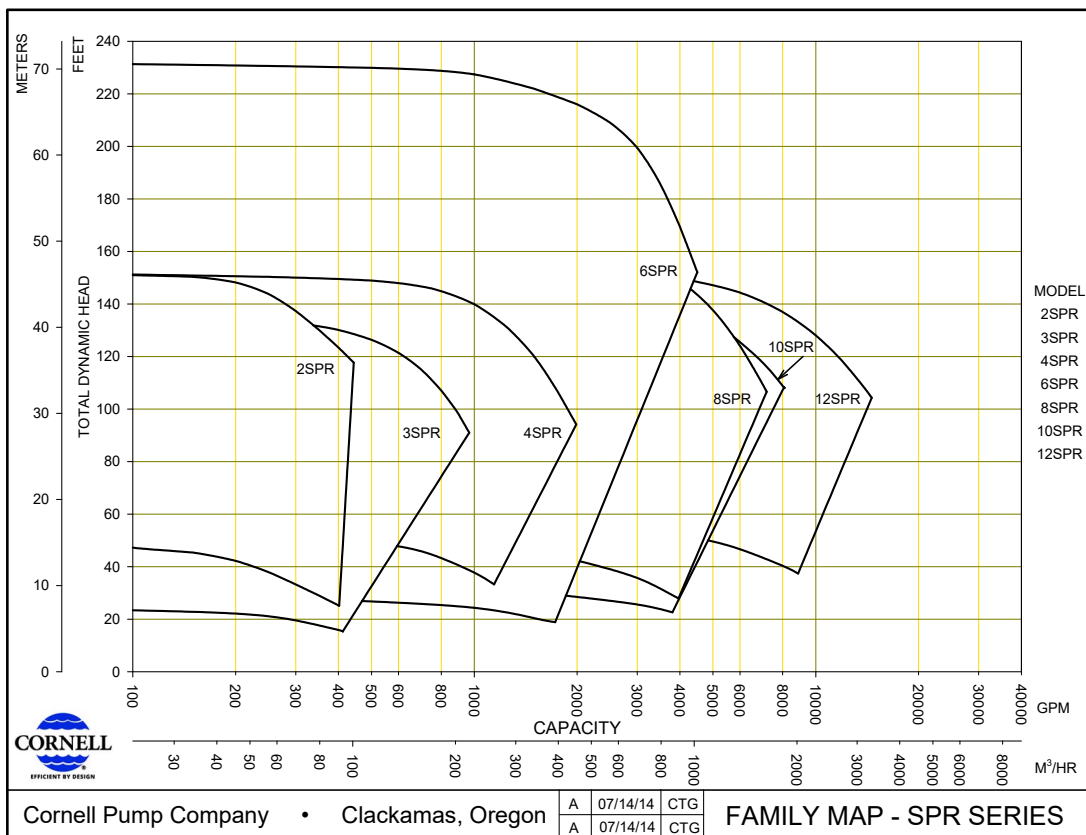
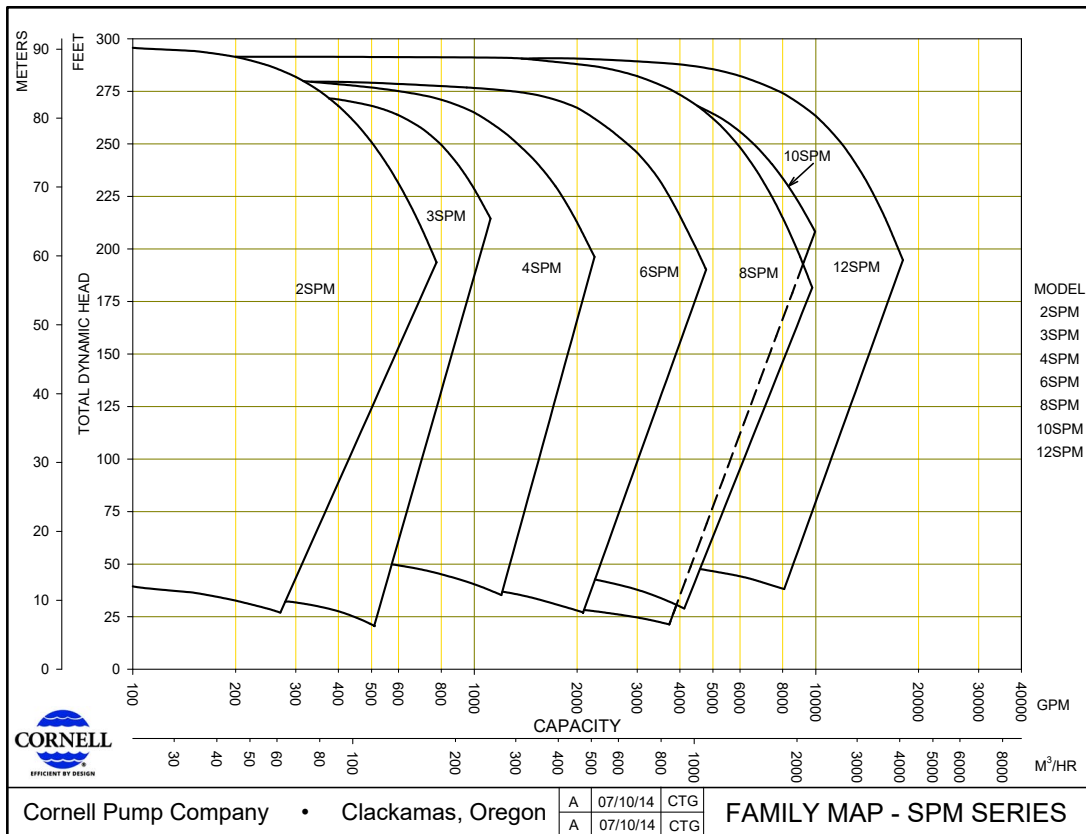
- Specific lining allows for various material handling
- Large solids handling
- Robust design allows it to be applied in difficult operating environments
- Seal lasts up to three times longer than other mechanical seals
- Patented Cycloseal® and Run-Dry™ options

SPECIFICATIONS

- Housing Material: Ductile iron
- Liner Material: Chrome iron or rubber
- Impeller Material: Chrome iron or rubber
- Backplate: Chrome iron
- Bearing Housing & Pedestal: Cast iron
- Discharge Size: 2" to 12"
- Flow rate: Up to 14,000 GPM
- Seal Type: Cycloseal or gland packing
- Solids Diameter: Up to 3.5"
- Impeller Type: Enclosed
- Head: Up to 235' at BEP



SP SERIES SLURRY PUMPS



SP SERIES SLURRY PUMPS

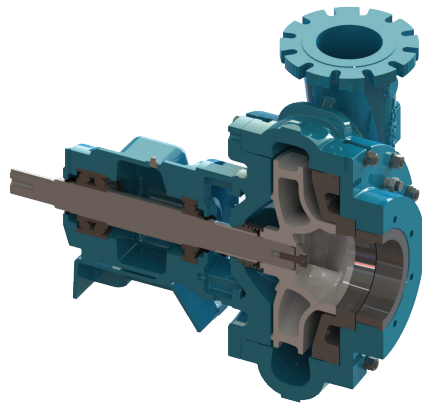
MX SERIES HIGH PRESSURE PUMPS



The MX SERIES pumps are capable of delivering pressures up to 800 feet of total dynamic head (TDH) and flows of up to 8,000 gallons per minute (GPM). These pumps are engineered to tackle high-head applications, providing a prolonged service life. Their multi-vane, enclosed impellers are specially designed to achieve industry-leading efficiency. The MX SERIES pumps feature an extra thick wall and high-quality construction with CA6NM impellers. They are available in both horizontal frame and SAE-mounted configurations.

- Discharge sizes: 2", 3", 4", 6" and 8" available
- 600' - 800' TDH flows to 8000 GPM
- CA6NM impellers
- Ductile Iron case
- Cornell Pump quality
- Industry leading efficiency
- Two-year warranty

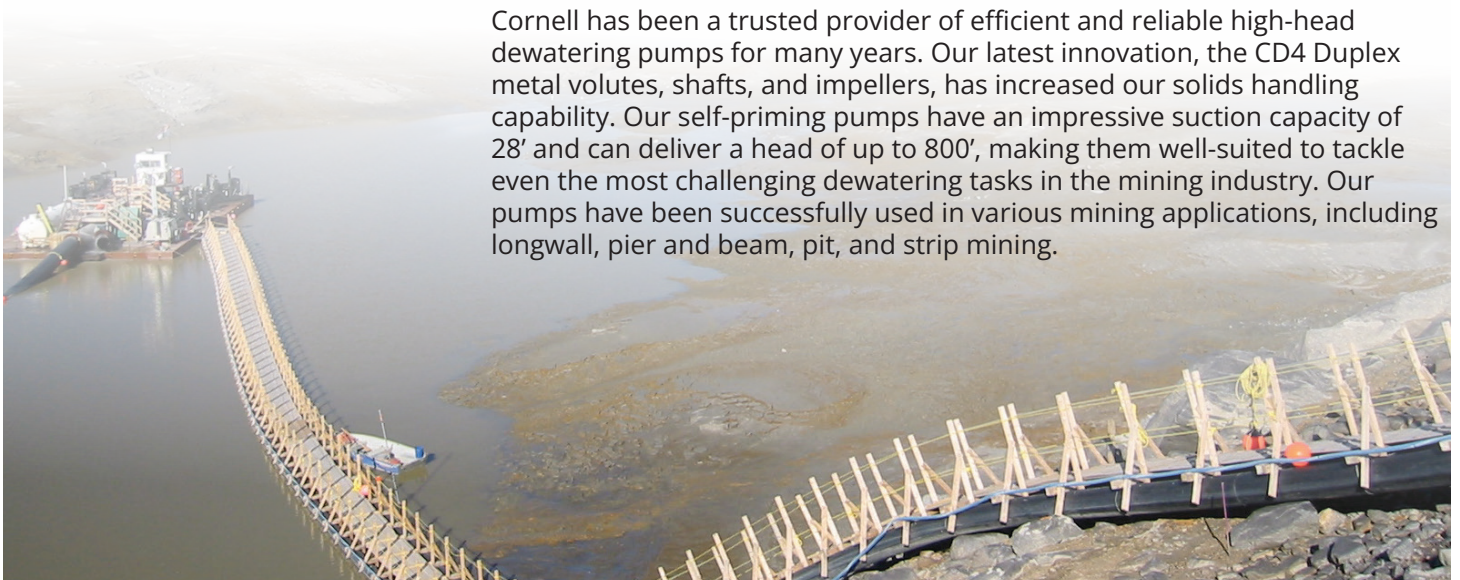
MP SERIES MINING PUMPS DESIGNED FOR COARSE ABRASIVES



The MP series is a complement to the SP series, catering to applications with high operating pressures. These pumps are specifically engineered to handle coarse abrasive slurry applications, including sand, gravel, coal, manure, and mine dewatering.

- Discharge Sizes: 4", 6", and 8"
- Flow Rates: Up to 9,000 GPM
- Heads: Up to 550'
- Solids Diameter: Up to 3"
- Seal Type: Cycloseal®
- Impeller type: Enclosed
- Available in horizontal frame and SAE mount configurations
- Heavy duty construction for aggressive applications.
- Hardness rating > 650BHN provides better wear properties compared to standard cast or ductile iron.

MINE DEWATERING



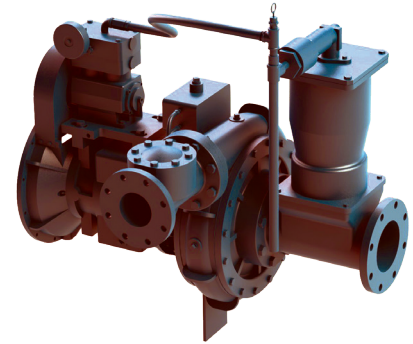
Cornell has been a trusted provider of efficient and reliable high-head dewatering pumps for many years. Our latest innovation, the CD4 Duplex metal volutes, shafts, and impellers, has increased our solids handling capability. Our self-priming pumps have an impressive suction capacity of 28' and can deliver a head of up to 800', making them well-suited to tackle even the most challenging dewatering tasks in the mining industry. Our pumps have been successfully used in various mining applications, including longwall, pier and beam, pit, and strip mining.

SP SERIES SLURRY PUMPS

WATER TRANSFER HYDRAULIC FRACTURING

Cornell's hydraulic fracturing pumps are engineered to withstand the toughest and most challenging environments. They are built to set the standard for hydraulic fracturing, and have been proven to exceed operating expectations from the Antrim to Woodford Shales. These pumps offer hydraulic fracturing companies unparalleled uptime, reliability, and efficiency.

- Heads up to 800'
- Valve eliminates any liquid carry-over
- Hardened Iron extends life of pump
- Fully automated priming and self-priming, dry-run pumps
- Handles Air/liquid mixtures with ease
- High suction lift capabilities up to 28'
- Up to 7,000 GPM flow



HYDRAULIC SUBMERSIBLE PUMPS

The DuraSub™ by Cornell features a robust pump end and bearing frame that can be directly coupled to a hydraulic motor. Its modular design allows for standard Cornell pump ends to be utilized as a hydraulic submersible pump, offering versatility and efficiency in various applications.

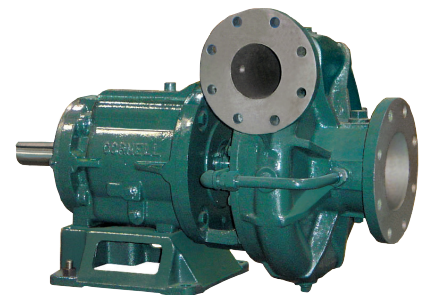
- Available for most Cornell pump models
- Hydraulic motor driven
- Various adapter plates available for hydraulic motor fit
- Heavy duty shaft / bearing frame assembly and wet end construction
- Premium wet end efficiencies reduce horsepower requirements
- Heavy duty pump ends for long service life and reliability



CLEAR LIQUID PUMPS

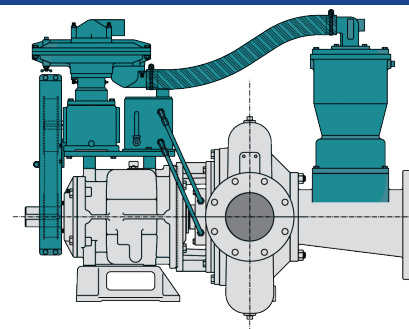
Cornell's Clear Liquid pumps have a wide range of applications, including commercial and residential irrigation, golf course and lawn maintenance, aquaculture, fountains, breweries, laundries, cooling towers, fire fighting, reverse osmosis feed, and water boosting.

The W, Y, R, and H series pumps are available in various materials with discharge sizes ranging from 1" to 10", heads to 450' TDH, and flow rates up to 7,000 GPM.

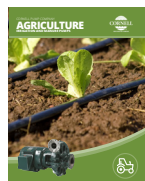


REDI-PRIME®

The Redi-Prime® pumps from Cornell are equipped with enlarged suctions to increase flow, reduce friction losses, and achieve higher suction lift. To ensure environmental safety, the priming system adopts a positive sealing float box and a diaphragm vacuum pump that prevents water carry-over and avoids contamination. The Redi-Prime® system can be easily installed on most Cornell pumps, which can deliver suction lifts up to 28', heads up to 800', and flow rates of over 36,000 GPM.



CORNELL PUMP COMPANY MARKET & PRODUCT LINE



AGRICULTURE



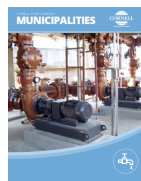
FOOD PROCESS



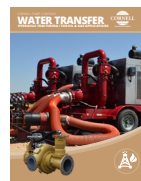
INDUSTRIAL



MINING



MUNICIPAL



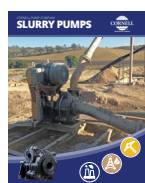
WATER
TRANSFER



REFRIGERATION



CONSTRUCTION



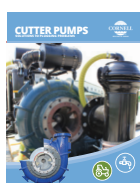
SLURRY



SLURRY SM



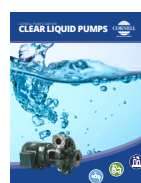
MANURE



CUTTERS



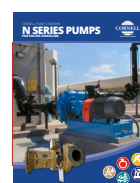
SELF PRIMING



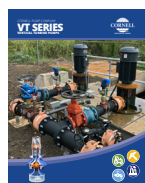
CLEAR LIQUIDS



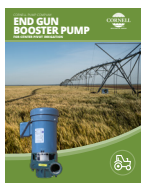
MX SERIES



N SERIES



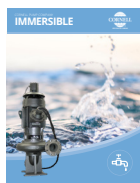
CYCLONE™



EDGE™



HYDRAULIC
SUBS



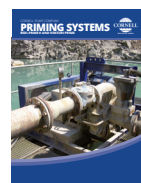
IMMERSIBLE



CD4MCU



RUN-DRY™



PRIMING
SYSTEMS



CYCLOSEAL®

Cyclo Seal® and Redi-Prime® are Registered Trademarks of Cornell Pump Company.

Cornell pumps and products are the subject of one or more of the following U.S.
and foreign patents:

6,074,554; 6,036,434; 6,079,958; 6,309,169; 6,104,949.

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