CORNELL PUMP COMPANY

MX SERIES

HIGH HEAD PUMPS

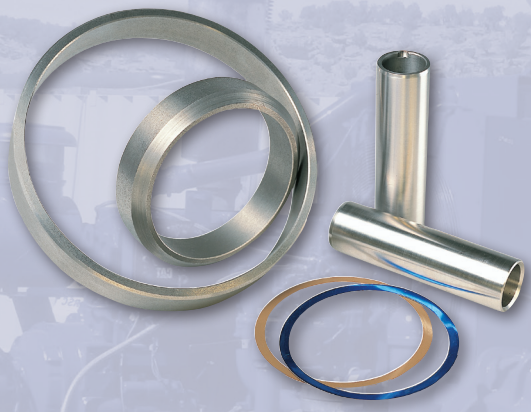
EFFICIENT BY DESIGN

CORNELL MX SERIES

Designed to handle high head applications while providing a long service life, the MX SERIES pumps have multi-vane, enclosed CA6NM impellers designed for **INDUSTRY LEADING EFFICIENCY OF UP TO 78%!**

- Heads to 800’
- Flows to 8,000 GPM
- Handles up to 2.38” solid
- Available in 2” to 8” models

FEATURES AND BENEFITS



CORNELL CYCLOSEAL® SEALING SYSTEM with tungsten carbide vs. silicon carbide seal and grit removal system.

17-4 PH STAINLESS STEEL SHAFT and double angular contact thrust bearings* extends the operating range and reduces shaft breakage.

HIGH-EFFICIENCY DESIGN pumps more liquid using less energy for substantial savings over the life of the pump.

3 OR 4 VANE ENCLOSED IMPELLERS are dynamically balanced and designed to handle solids up to 2.38**”**

DUCTILE IRON CONSTRUCTION for increased durability and resistance to wear.

300LB RATED DISCHARGE FLANGES and all iron frame construction for durability in harsh conditions.

CA6NM IMPELLER is standard on MX Series pumps.

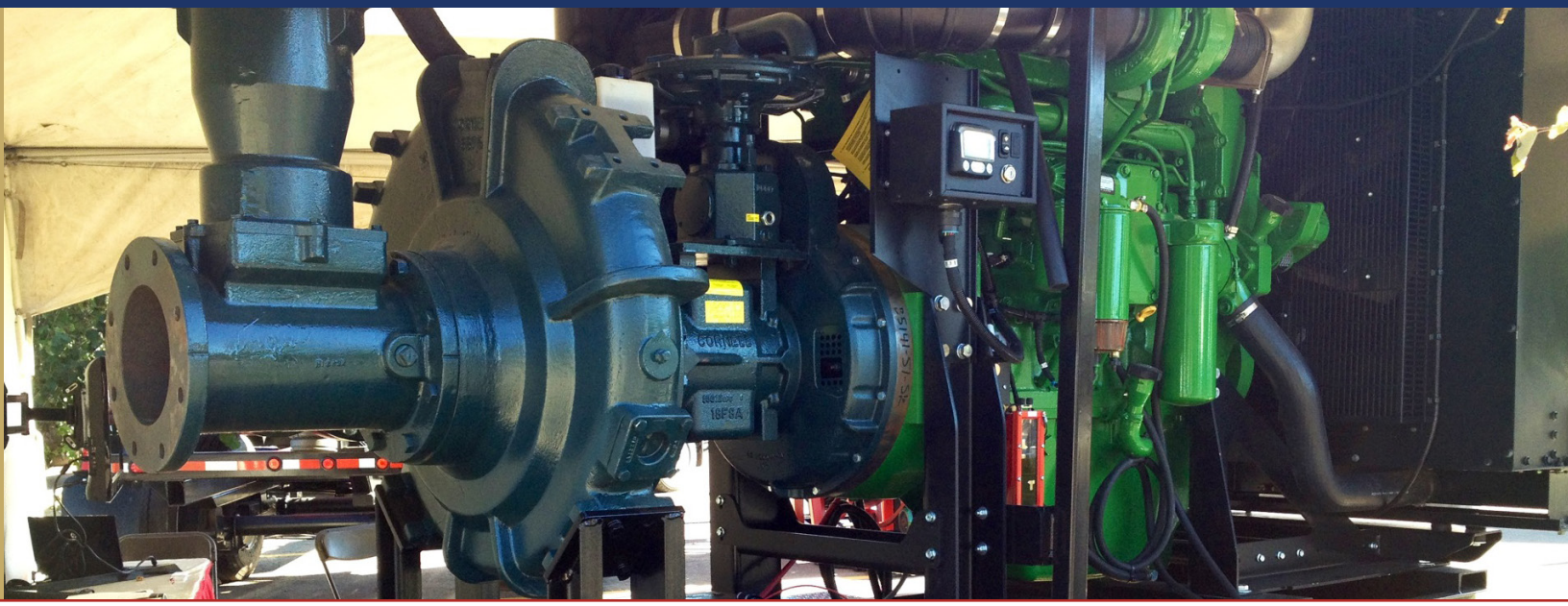
WITHSTANDS HIGH OPERATING PRESSURES to achieve 600’ to 800’ TDH and flows up to 8,000 GPM.

OPTIONAL HARDENED WEAR RINGS on the impeller and volute provide added resistance to abrasive materials.

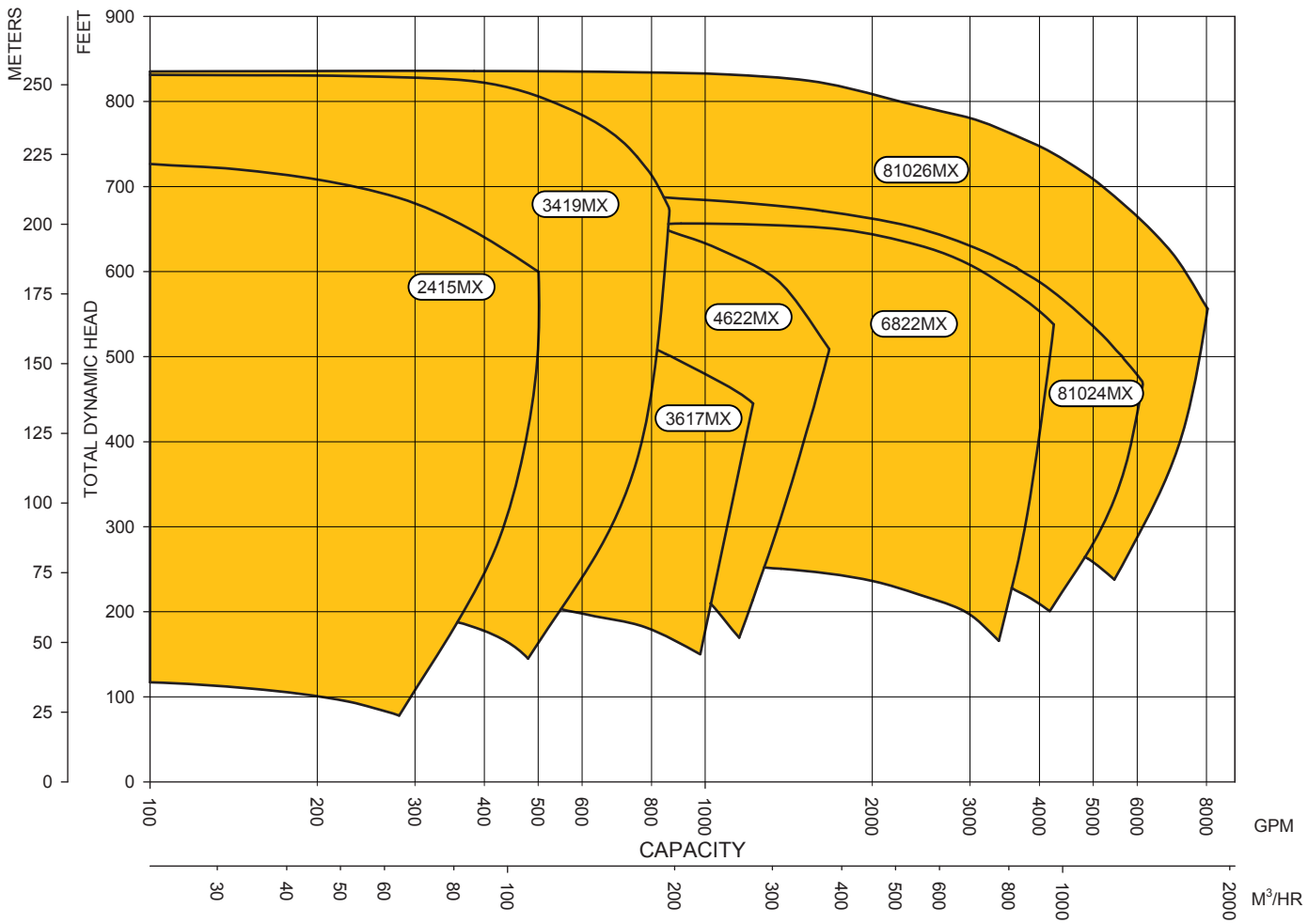
TWO-YEAR WARRANTY is standard on all MX Series pumps.

* The 80126MX includes triple angular contact bearings.

MX SERIES



MX SERIES FAMILY CURVE

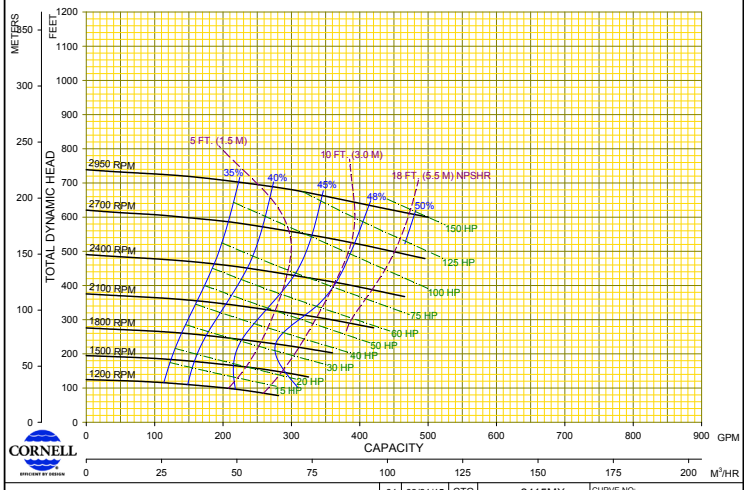


MX SERIES CURVES

2415MX

- Flow rates from 115 to 480 GPM (25 to 110 m³/h)
- Pressure to 350 PSI (2415 kPa)
- 50% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	15.22"	ENCLOSED	SINGLE	.62"	530	4"	2"	3

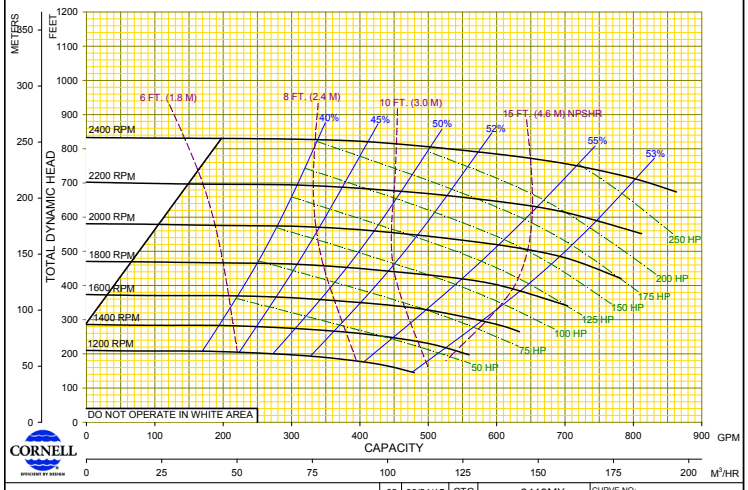


Cornell Pump Company • Clackamas, Oregon						
	01	03/31/15	CTG	MODEL : 2415MX	CURVE NO:	2415MXVA
	00	06/08/11	- - -	TYPE :MX SERIES		

3419MX

- Flow rates from 170 to 800 GPM (40 to 180 m³/h)
- Pressure to 350 PSI (2415 kPa)
- 55% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	19.59"	ENCLOSED	SINGLE	.75"	450	4"	3"	4

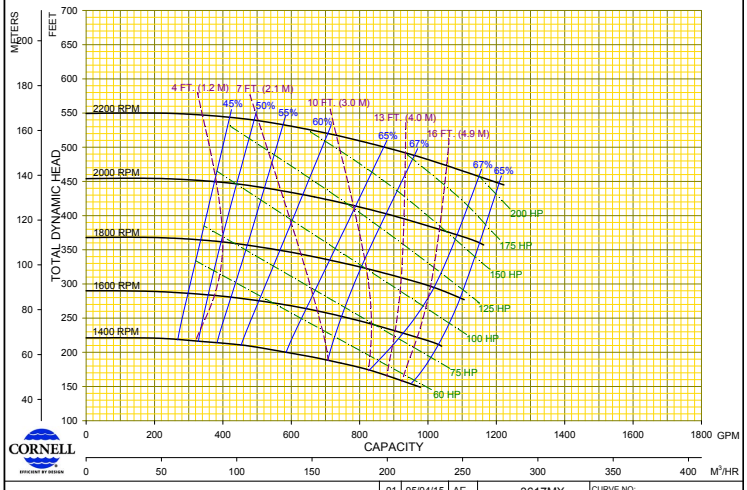


Cornell Pump Company • Clackamas, Oregon						
	02	03/31/15	CTG	MODEL : 3419MX	CURVE NO:	3419MXVA
	00	06/03/09	- - -	TYPE :MX SERIES		

3617MX

- Flow rates from 230 to 1220 GPM (50 to 275 m³/h)
- Pressure to 250 PSI (1725 kPa)
- 67% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	17.50"	ENCLOSED	SINGLE	.75"	700	6"	3"	4

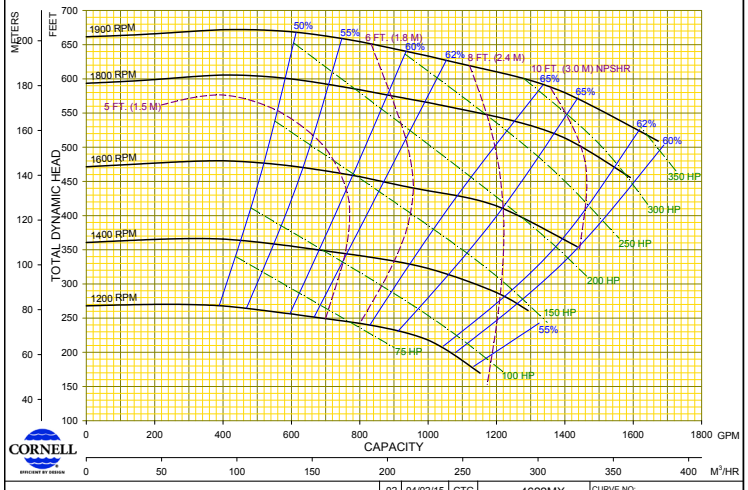


Cornell Pump Company • Clackamas, Oregon						
	01	05/04/15	AE	MODEL : 3617MX	CURVE NO:	3617MXVA
	00	09/02/15	AE	TYPE : MX SERIES		

4622MX

- Flow rates from 390 to 1680 GPM (90 to 380 m³/h)
- Pressure to 440 PSI (3035 kPa)
- 65% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	21.95"	ENCLOSED	SINGLE	.98"	552	6"	4"	4



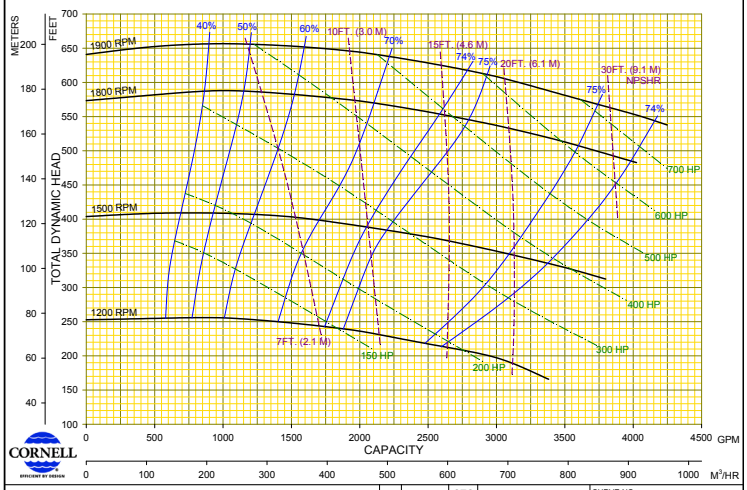
Cornell Pump Company • Clackamas, Oregon						
	02	04/02/15	CTG	MODEL : 4622MX	CURVE NO:	4622MXVA
	00	3/11/09	CTG	TYPE :MX SERIES		

MX SERIES CURVES

6822MX

- Flow rates from 575 to 4150 GPM (130 to 945 m³/h)
- Pressure to 350 PSI (2415 kPa)
- 75% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	21.95"	ENCLOSED	DOUBLE	2.00"	709	8"	6"	4

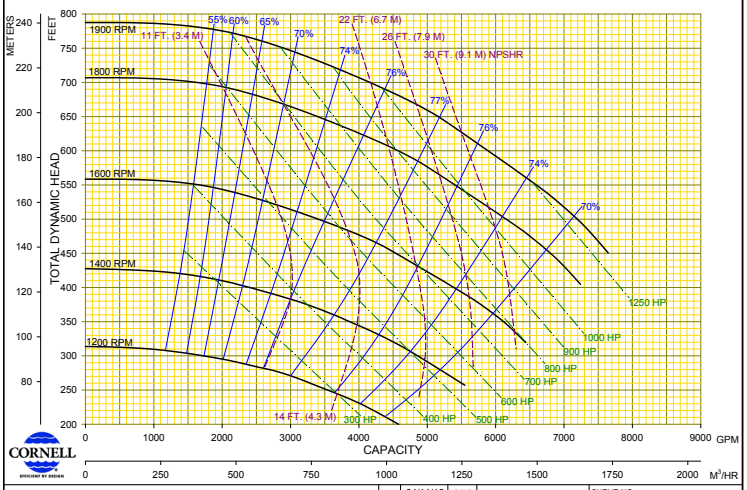


Cornell Pump Company • Clackamas, Oregon					CURVE NO:
01	04/06/15	CTG	MODEL : 6822MX		6822MXVA
00	07/22/09	- - -	TYPE :MX SERIES		

81024MX

- Flow rates from 1200 to 7150 GPM (275 to 1625 m³/h)
- Pressure to 340 PSI (2344 kPa)
- 73% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	24.25"	ENCLOSED	DOUBLE	2.38"	1080	10"	8"	3

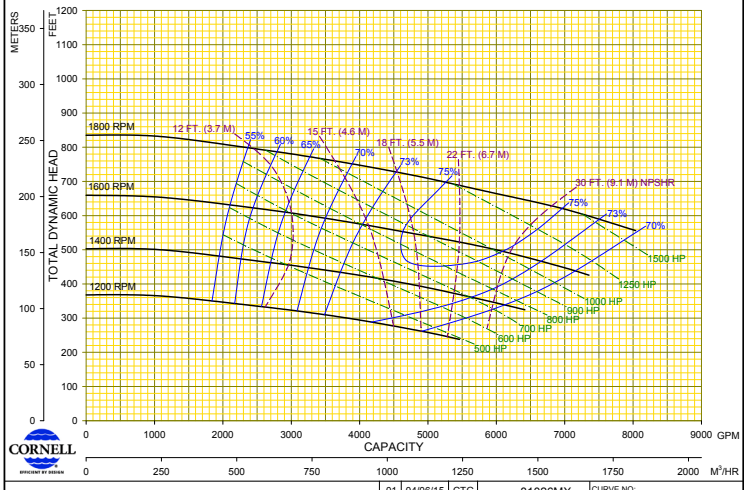


Cornell Pump Company • Clackamas, Oregon					CURVE NO:
02	04/11/16	CTG	MODEL : 81024MX		81024MXVA
00	03/20/15	JG	TYPE : MX SERIES		

81026MX

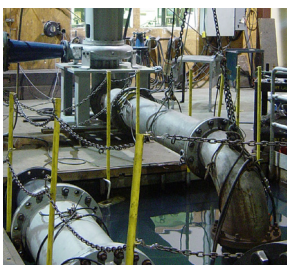
- Flow rates from 1800 to 8000 GPM (410 to 8000 m³/h)
- Pressure to 475 PSI (3275 kPa)
- 78% efficient at Best Efficiency Point

Speed	Impeller Dia.	Style	Volute	Solids Dia.	N_S	Suction	Discharge	No. Vanes
VARIOUS	26.5"	ENCLOSED	DOUBLE	2.38"	1080	10"	8"	3



Cornell Pump Company • Clackamas, Oregon					CURVE NO:
01	04/06/15	CTG	MODEL : 81026MX		81026MXVA
00	09/05/12	- - -	TYPE :MX SERIES		

WE PUT OUR BEST IDEAS TO THE TEST

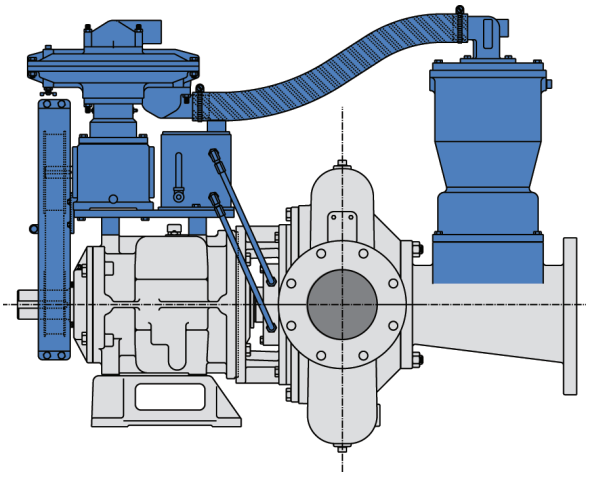


Our modern hydraulics lab is the proving ground for all Cornell pumps. Our goal is to deliver the most efficient pumps at a time when energy costs are escalating. Technicians, under the direction of registered Professional Engineers, conduct certified performance tests that precisely determine the performance and NPSH required for particular design conditions.

The focal point of the research facility is a 80,000 gallon closed loop system for running accurate low pressure tests. It can circulate up to 60,000 gallons of water per minute. All test motors are calibrated, and adhere to the Hydraulic Institute Standards in testing. A variable frequency drive will allow us to test pumps up to 4,000 horsepower at various speeds. Additional tests can be conducted upon customer request.

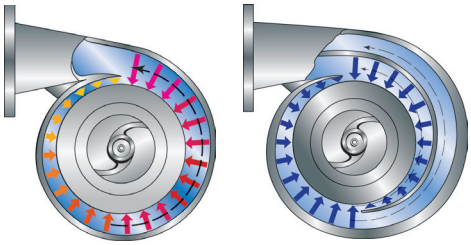
MX FEATURES & OPTIONS

REDI-PRIME® DRY-PRIMING OPTION



Cornell Redi-Prime® pumps are designed with oversized suctions to provide more flow, reduced friction losses, and higher suction lift. The priming system was designed with the environment in mind. By using a positive sealing float box and a diaphragm vacuum pump, there is no water carry-over to contaminate the environment. Redi-Prime is offered on all Cornell industrial pumps, and is available in virtually every other pump we manufacture as well.

- Fully automatic priming and repriming
- Handles air/liquid mixtures with ease
- Rapidly primes and re-primes completely unattended
- Environmentally safe priming system designed to prevent product leakage
- Premium hydraulic efficiency for reduced energy consumption

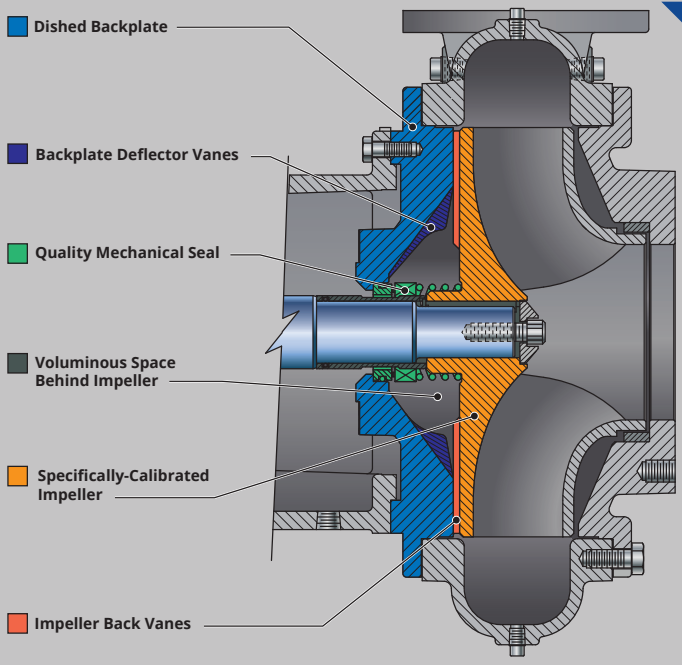


SINGLE VOLUTE DOUBLE VOLUTE

DOUBLE VOLUTE DESIGN

Cornell's double volute system minimizes radial thrust loads common with high capacity, high-head centrifugal pumps, by balancing the radial forces around the impeller.

- Minimizes radial thrust load
- Eliminates shaft flexing and fatigue
- Greatly extends life of packing/seal, wear rings and bearings
- Effectively meets high pressure and high volume requirements
- Increases bearing life



CYCLOSEAL® SYSTEM FOR GRIT REMOVAL

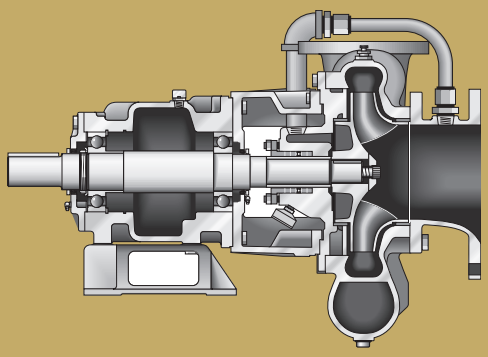
Cycloseal® is patented system with a self-contained single mechanical seal with a dished line. The Cycloseal pattern cast into the pump backplate in conjunction with contoured impeller back vanes and a dished backplate creates pressure gradients that move solids and entrained vapor away from the seal faces. The Cycloseal system is only available on Cornell pump series.

- Removes grit from pump seal compartment
- Extends pump seal life three times standard mechanical
- No drips/mess at application site
- Reduced maintenance costs
- Increased uptime and reliability

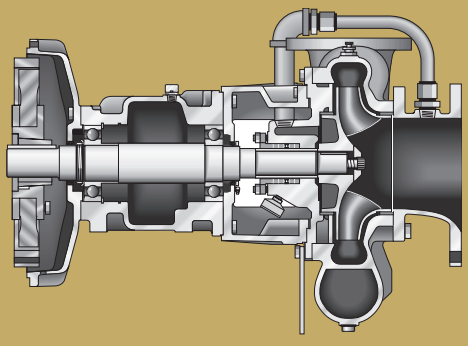
MX FEATURES & OPTIONS

MOUNTING CONFIGURATIONS

Cornell's modular frame design allows for easy adaptability. Choose a pump and then pick the mounting configuration best suited to your application. Right-hand and left-hand rotation, along with tangential or centerline discharges, are available for most pumps.



F
HORIZONTAL FRAME MOUNTED



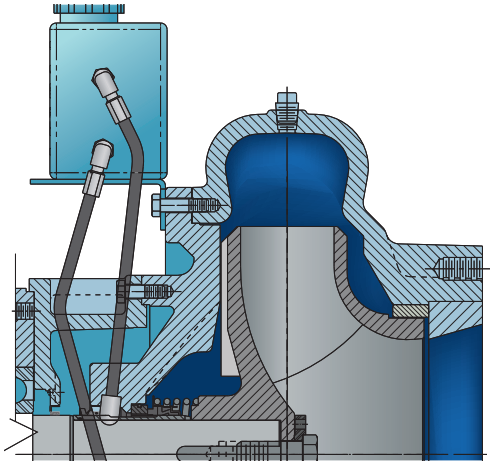
EM
ENGINE MOUNTED

CD4MCU STAINLESS STEEL OPTIONS

CD4MCu is a duplex stainless steel, with greater corrosive resistance than 304 stainless steel. CD4MCu allows the pumps to be used in more abrasive applications, and it won't pit like 304 stainless steel, has a better stress/corrosive cracking resistance than 304 stainless, and higher strength than 304 stainless steel. And, compared with cast iron material, it is much more resistant to corrosion and much stronger.

Cornell distributors have access to 13 of Cornell's most popular models in CD4MCu, allowing us to slash production time and price. Cornell can supply a CD4MCu pump in as little as one to two weeks.

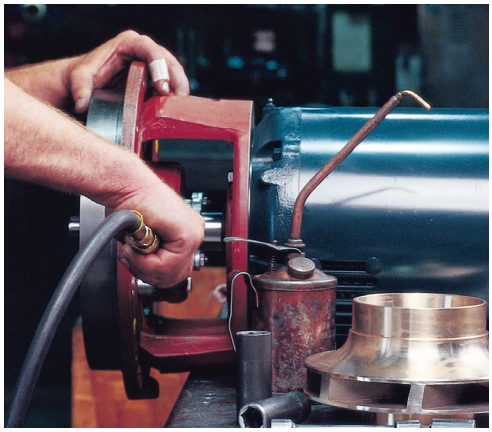
- Clean Steel
- Usable in pH levels of 2 to 13.5
- Brinell hardness up to 275
- Corrosion and pitting resistance
- Higher strength than 304 stainless steel
- Improved ductility and weldability
- Better resistance to embrittlement



RUN-DRY™ SEAL PROTECTION

Cornell's Run-Dry system consists of an auxiliary gland and oil reservoir that keeps the seal faces lubricated and prevents dry running of the seal faces during priming, re-priming, or standby operation.

- Run dry for hours without damaging the seal
- Cools and lubricates seal faces
- Ideal for applications that could experience dry operation
- Useable in conjunction with Cycloseal® and Redi-Prime®



QUALITY ASSURANCE

Cornell Pump proudly maintains its ISO 9001:2008 certification that validates Cornell is in compliance with all necessary processes to meet customer requirements.

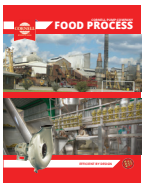
The elements associated with ISO 9001:2008 certification include such areas as contract review, design and development, production, purchasing, quality control and service.

CORNELL®

EFFICIENT BY DESIGN

MARKET AND PRODUCT LINE

AGRICULTURAL



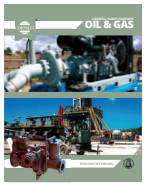
FOOD PROCESS

INDUSTRIAL

MINE DEWATERING

MUNICIPAL

REFRIGERATION



OIL & GAS

CYCLOSEAL®

CHOPPER

CUTTER

EDGE™

HYDRAULIC SUBS

HYDRO TURBINE

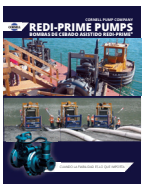
IMMERSIBLE

MANURE

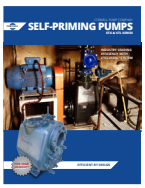
MP SERIES

MX SERIES

MX MINING



REDI-PRIME®

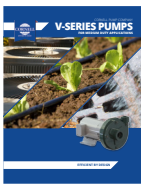


SELF PRIMING

SLURRY

SUBMERSIBLE

WATER TRANSFER



V SERIES

Cycloseal® 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: 3,207,485; 3,282,226; 3,295,456; 3,301,191; 3,630,637; 3,663,117; 3,743,437; 4,335,886; 4,523,900; 5,489,187; 5,591,001; 6,074,554; 6,036,434; 6,079,958; 6,309,169; 2,320,742; 96/8140; 319,837; 918,534; 1,224,969; 2,232,735; 701,979 and are the subject of pending U.S. and foreign patent applications.

CORNELLPUMP.COM

©2015 CORNELL PUMP COMPANY

ISO 9001:2008 CERTIFIED

Cornell Pump Company
Clackamas, Oregon, USA
P: +1 (503) 653-0330
F: +1 (503) 653-0338

AUTHORIZED CORNELL PUMP DISTRIBUTOR

MILLER SALES & ENGINEERING INC.

mseinc.net
3801 N. Highway Drive
Tucson, Arizona 85705

520-888-4101
800-666-8320
info@mseinc.net