



## **JEFFERSON PARISH**

**TWO TRASH PUMPS, 6 INCH SELF PRIMING, TRAILER MOUNT  
FOR JEFFERSON PARISH SEWERAGE DEPARTMENT.**

COMMERCIAL PROPOSAL

QUOTATION NO., BID NUMBER 50 - 130298

DATE: MAY 14, 2020

**PRESENTED BY:**

**PAUL DWYER**

**UE MANUFACTURING**

**EMAIL: [PDWYER@UEMANUFACTURING.COM](mailto:PDWYER@UEMANUFACTURING.COM)**

**TABLE OF CONTENTS**

<b>TABLE OF CONTENTS</b>	<b>1</b>
<b>COMMERCIAL PROPOSAL</b>	<b>2</b>
<b>BID FORM</b>	<b>3</b>
<b>NOTARIZED AFFIDAVIT</b>	<b>5</b>
<b>COMMERCIAL NOTES</b>	<b>8</b>
<b>PRODUCT DESCRIPTION</b>	<b>10</b>
<b>PRODUCT CUT SHEETS</b>	<b>12</b>
<b>EXCEPTIONS</b>	<b>26</b>
<b><u>TERMS AND CONDITIONS OF SALE</u></b>	<b><u>27</u></b>

# **COMMERCIAL PROPOSAL**

DATE: 4/28/2020

Page: 5

BID NO.: 50-00130298

**BID FORM**  
Non Public Works

All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES \_\_\_\_\_ NO X

MAXIMUM ESCALATION PERCENTAGE REQUESTED \_\_\_\_\_%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF \_\_\_\_\_

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

05/28/2020

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) \_\_\_\_\_

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: UE Manufacturing

ADDRESS: 10000 NW 2<sup>nd</sup>

CITY, STATE: Oklahoma City, Oklahoma ZIP: 73127

TELEPHONE: (281) 728 1070 FAX: ( )

EMAIL ADDRESS: pdwyer@uemanufacturing.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ 124,840

AUTHORIZED SIGNATURE: Paul Dwyer

Paul Dwyer  
Printed Name

TITLE: Account Manager

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

DATE: 4/28/2020

Page 6

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00130298

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	2.00	EA	<p>ONE TIME PURCHASE:</p> <p>0001 - Trash Pump, 6 inch self priming, trailer mount with DOT trailer lights package, driven by an Isuzu model 4LE2T, tier 4 diesel engine, passes 3 inch solids</p> <p>Part no. 6HT-DIST-4LE2T</p> <p>Please Note: One pump is for Eastbank Sewerage Lines Division. One pump is for Westbank Sewerage Lines Division. As per attached specifications</p>	\$62,420	\$124,840

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A \_\_\_\_\_ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

Choice B X There are NO debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

*[The remainder of this page is intentionally left blank.]*

Non-Public Works Bid

AFFIDAVIT

STATE OF Oklahoma

PARISH/COUNTY OF Canadian

BEFORE ME, the undersigned authority, personally came and appeared: Matthew Hughes, (Affiant) who after being by me duly sworn, deposed and said that he/she is the fully authorized Representative of United Eng. Manuf. (Entity), the party who submitted a bid in response to Bid Number 50-130298, to the Parish of Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A \_\_\_\_\_ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X there are NO campaign contributions made which would require disclosure under Choice A of this section.



That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Matthew Hughes  
Signature of Affiant:

Matthew Hughes  
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME  
ON THE 8<sup>th</sup> DAY OF May, 2020.

Courtney Fuller  
Notary Public

Courtney Fuller  
Printed Name of Notary

18009030  
Notary/Bar Roll Number



My commission expires 9-7-2022.



**COMMERCIAL NOTES:**

1. Prices are quoted in US Dollars.
2. Prices and deliveries are subject to prior sale.
3. Prices are valid for fourteen (14) days from date of proposal.
4. Delivery for the above equipment is EXW – EX WORKS (UE Manufacturing Plant) per INCOTERMS® 2010.
5. Delivery for the above equipment is based upon component availability and production schedule at time of order. Quoted delivery is from receipt of order. Order is considered received after all of the following are received:
  - a. Signed order acknowledgement and
  - b. Down payment or letter of credit (as defined in payment terms).
6. Quoted delivery is as follows (subject to prior sale):
  - a. Per Proposal included in Bid Form
7. UE Manufacturing equipment is certified according to United States Department of Transportation rules and regulations. Compliance to any additional export country's road laws and regulations shall be the customer's sole responsibility.
8. While UE Manufacturing will use all efforts to meet our on-time delivery commitment, we cannot accept responsibility for events outside our control, where 3rd party's quality or delivery issues may negatively impact our finished product deliveries.
9. Ultimate destination of equipment – USA, UE Manufacturing Technologies LLC shall be excused from performing any obligation under this contract that we are unable to perform in the event that we are not authorized to export the products, technical information or services under the U.S. Export Regulations or Laws.
10. Payment terms as follows:
  - a. A non-refundable Down Payment equal to 20% of the purchase price is required with valid purchase order or signed contract with UE Manufacturing Terms & Conditions. Receipt of this down payment represents formal acceptance of order by UE Manufacturing.
  - b. 80% Balance is due prior to delivery.

All payments shall be in U.S. Dollars, without offset, backcharge, retention or withholding of any kind.

In the event of a delay in the timely receipt of either the Progress Payment or the Final Balance Due by UE Manufacturing, delivery will be adversely impacted. Additionally, a holding charge of 18% per annum will be added to the purchase price, in the event of any delay beyond 1 week of the Progress Payment or the Balance Due.

In the event of a delay in the timely receipt of either the Progress Payment or the Final Balance Due by UE Manufacturing, an equipment storage charge of 12% per annum will be added to the purchase price, in the event of any delay beyond 1 week of the Progress Payment or the Balance Due.
11. UE Manufacturing terms and conditions apply.

**ORDER ACKNOWLEDGMENT**

By execution below, **UE Manufacturing** agrees to sell, and **Jefferson Parish** agrees to buy, the goods and services included in this proposal number Quote **Bid Number 50 - 130298** which includes the Technical Specifications, Commercial Price, Delivery, Commercial Notes, and Additional Terms of Sale.

**Jefferson Parish**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**UE Manufacturing**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2020**

## TRASH PUMPS, 6 INCH SELF PRIMING, TRAILER MOUNT

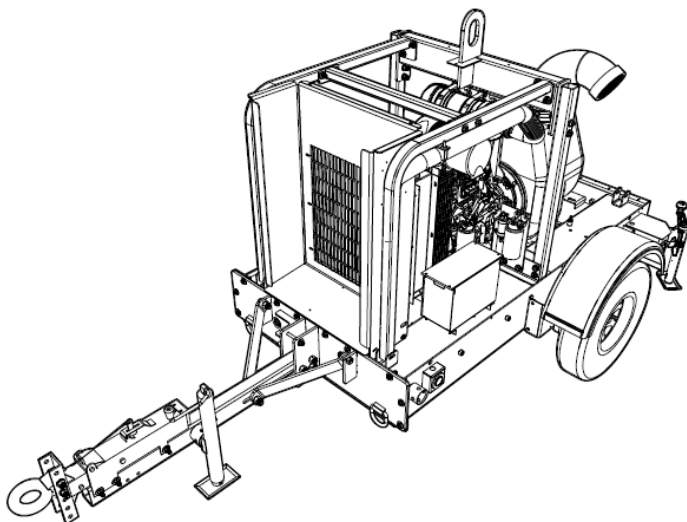
### DESCRIPTION

Mobile Trash Pump - Configured  
With the following configuration

Mobile Pump OEM	Domestic 49 States
Do you know the Base Model?	Yes - Configure base model
Base Model	MTP6SZ
Fuel	Diesel
Engine and Tier	Deutz F4
Discharge Type	6" Discharge
Prime Type	Wet
Flow Rate	1680gpm (6359Lpm)
Controls	LOFA 750 Controls
Trailer or Skid	Trailer Unit
Axle Brake Type	Single Surge Brake
Hitch Type	3" Adjustable Ring
Connection Type	7 Spade Adapter
Cabinet	Open
Brand	None
Coolant	50/50 Coolant/Water
Telemetry	No
Use Case	Fleet
Invisible	MTP_CABINET

SPECIAL OPT select if required	Special Options NOT required
Model -Sales/Mktg/MM/Type Code	MTP6SZ
Alternate number	MTP6SZ-01
Body Type Description	SINGLE AXLE OPEN
Unit Weight (lbs)	4728 lb
Unit Weight (kg)	2144 kg
Data Label Form	SFC626A Mobile DPL Small
Notes for Data Plate Line 8	Generac Mobile Products LLC
GAWR (Gross Axle Wt. Rating)	6000 lb
GAWR (Gross Axle Wt. Rating)KG	2,721 kg
GVWR (Gross Vehicle Wt. Rating)	6000 lb
GVWR (Gross Vehicle Wt. Rtg)KG	2,721 kg
Tire Specs	ST225/75R15(D)
Rim Size	15X6J
Tire Pressure (PSI)	65
Tire Pressure (KPA)	448 kPa
Number of Axles	SINGLE
Trailer Type	P = Pintle
Trailer Type for VIN Tag	TRAILER
Form for VIN tag	MGM001Z
Do Not Use	SINGLE AXLE
Length	13
Trailer Body Type for VIN Nr	P = Pump
Number for axles for VIN Nr	1
Emission Designation	M02.9DSD0055Z1

# Product Sheets



## ENGINE

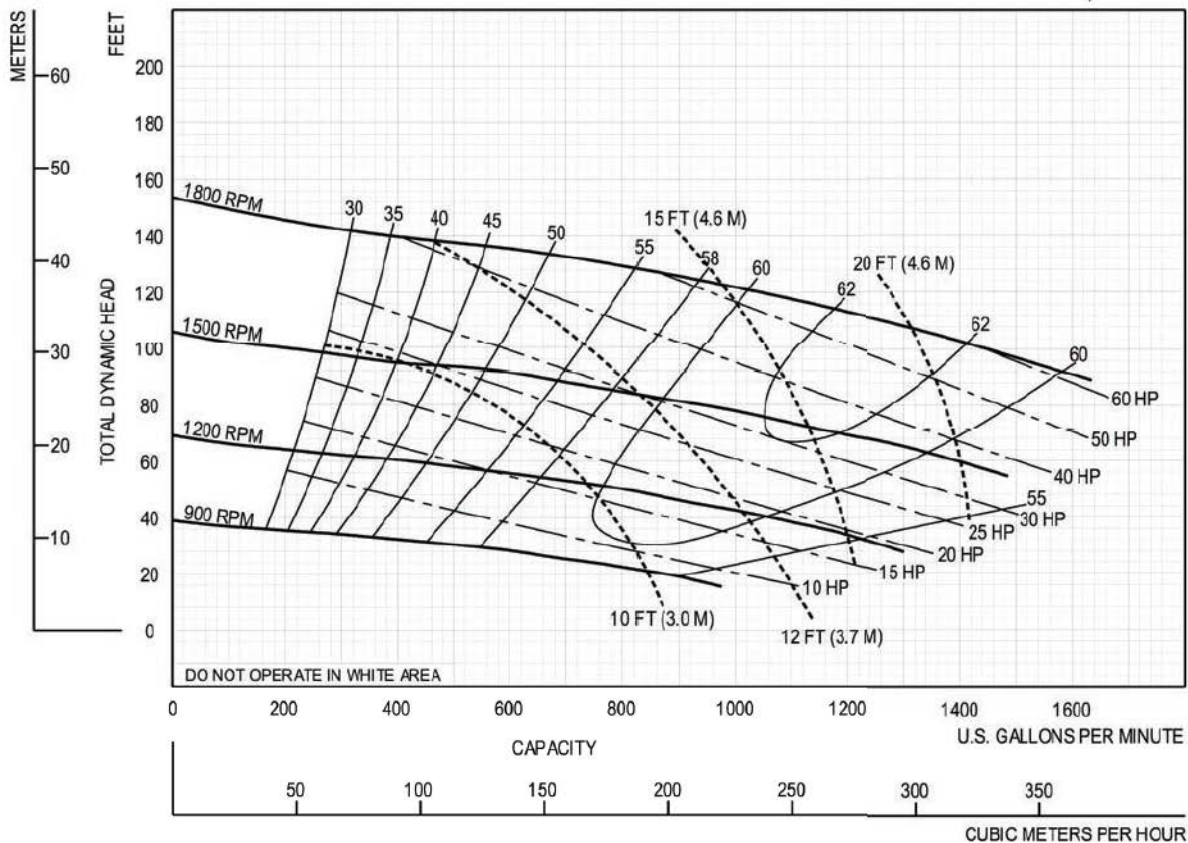
- Deutz TD 2.9 L4 – water-cooled, turbo-charged diesel engine
  - 75 hp @ 2600 rpm
  - 4 cylinder
  - 2.9 Liter displacement
  - DOC only for exhaust after treatment
  - EPA Final Tier 4 approved
  - Steel, single wall fuel tank
    - 113 gal. (428 L) capacity / 100 gal. (379 L) usable
- Fuel consumption at prime: 100% - 3.27 gph (12.4 Lph)
- Cooling system capable of operating at 120°F (49°C) ambient
- Disposable air filter – paper element
- 950 CCA wet cell battery
- 95 Amp alternator
- Low coolant warning/shutdown

## PUMP

- Cornell 6STX Self Prime Centrifugal Pump
- 6.00" NPTF – suction & discharge connection
- Ductile Iron ASTM A536, 65-45-12 volute casing
- Ductile Iron ASTM A536, 100-70-03 impeller
- Self-cleaning wear plate – mild steel
- Impeller is a 2 vane, semi-open design
- Single mechanical seal, John Crane Type 2, with tungsten carbide vs silicon carbide faces
- Replaceable wear plate
- Pump shaft – 17-4 PH Stainless steel

**PUMP PERFORMANCE**

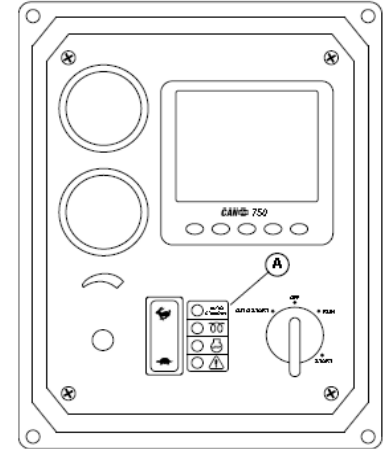
- Pump maximum output – 1680 gpm (6,359 Lpm)
- Lift suction – 28 ft. (8.5 m)
- Maximum diameter of solids – 3.00" (76.2 mm)
- Impeller diameter: 12.38 inches (cm)
- Maximum Efficiency (BEP Percent) – 62%
- BEP Flow – 1280 gpm (4,845Lpm) @ 110ft. TDH
- Total dynamic head – 170 ft. (m)
- Duty Points:
  - 1054 gpm @ 76.0-ft TDH @ 1500 RPM, 62% efficiency, NPSHR 12.9 ft.
  - 1469 gpm @ 112.0-ft TDH @ 1900 RPM, 62% efficiency, NPSHR 22.3 ft.

**FLOW CHART / PUMP CURVE**

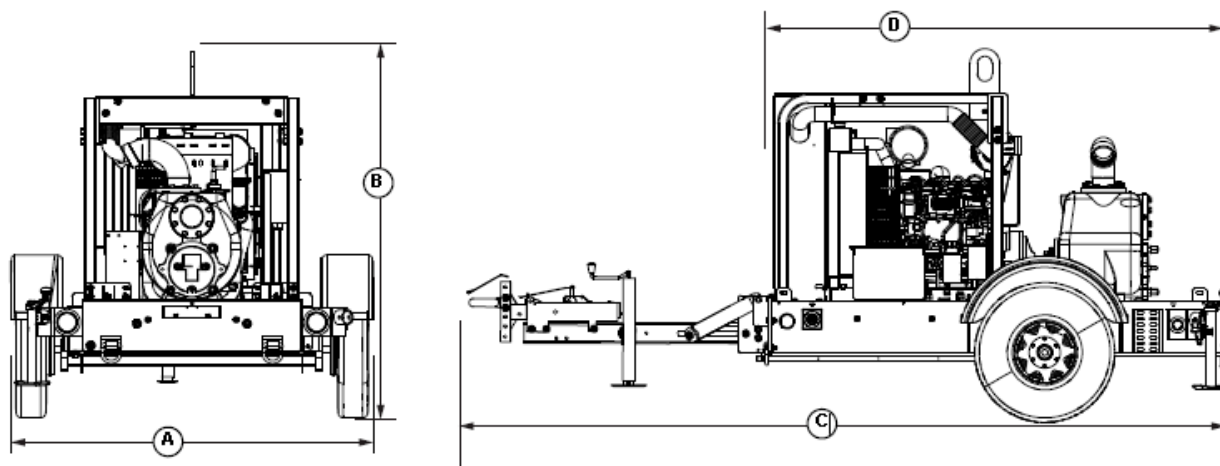


**SYSTEM CONTROLS**

- White LED lighting control panel lighting
- Standard controller – LOFA CP750
  - Large, backlit 4.3 in. (109 mm) LCD display
    - Displays engine temp, engine speed, fuel level, engine hrs., coolant temp, and oil pressure
  - Advanced automatic start/stop control for use with two-switch inputs and 4-20mA transducer
  - Configurable high and low set points control start/stop operation
  - Alarm output to signal start warning or shutdown conditions
  - Heavy-duty IP64 water-resistant key switch with booted key
  - RS485 serial interface for auxiliary equipment
  - Electronic e-stop with red LED engagement indicator light

**TRAILER**

- Flip-tongue design
- Bolt-on, replaceable front tongue mounting plate
- DOT approved LED tail, side, brake, and directional lights
- (4) transportation tie downs capable of handling 3 in. (76.2 mm) trailer straps
- Safety chains with spring loaded safety hooks
- 2 in. (50.8 mm) adjustable ball hitch
- 6000 lb. (2722 kg) torsion axle with surge brakes
- 2000 lb. (907 kg) tongue jack with footplate
- (2) 2000 lb. (907 kg) top wind jacks, with option to add up to (4)
- ST225/75R15 tubeless tires – 8 ply
- UV & fade resistant, high temperature cured, black polyester power paint
- Central lifting point
- Document holder with operating manual including the AC/DC wiring diagrams

**WEIGHT & DIMENSIONS**

A	B	C	D
75.00 in.(1.905 m)	73.88 in. (1.877 m)	150.12 in. (3.813 m)	98.00 in. (2.489 m)

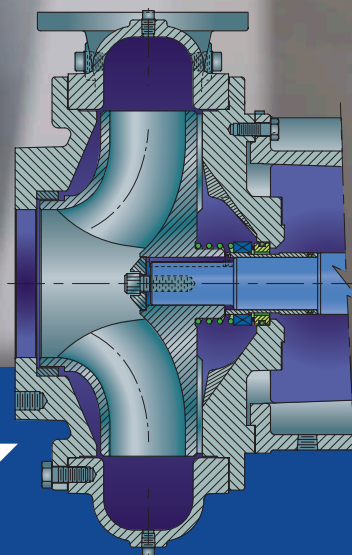
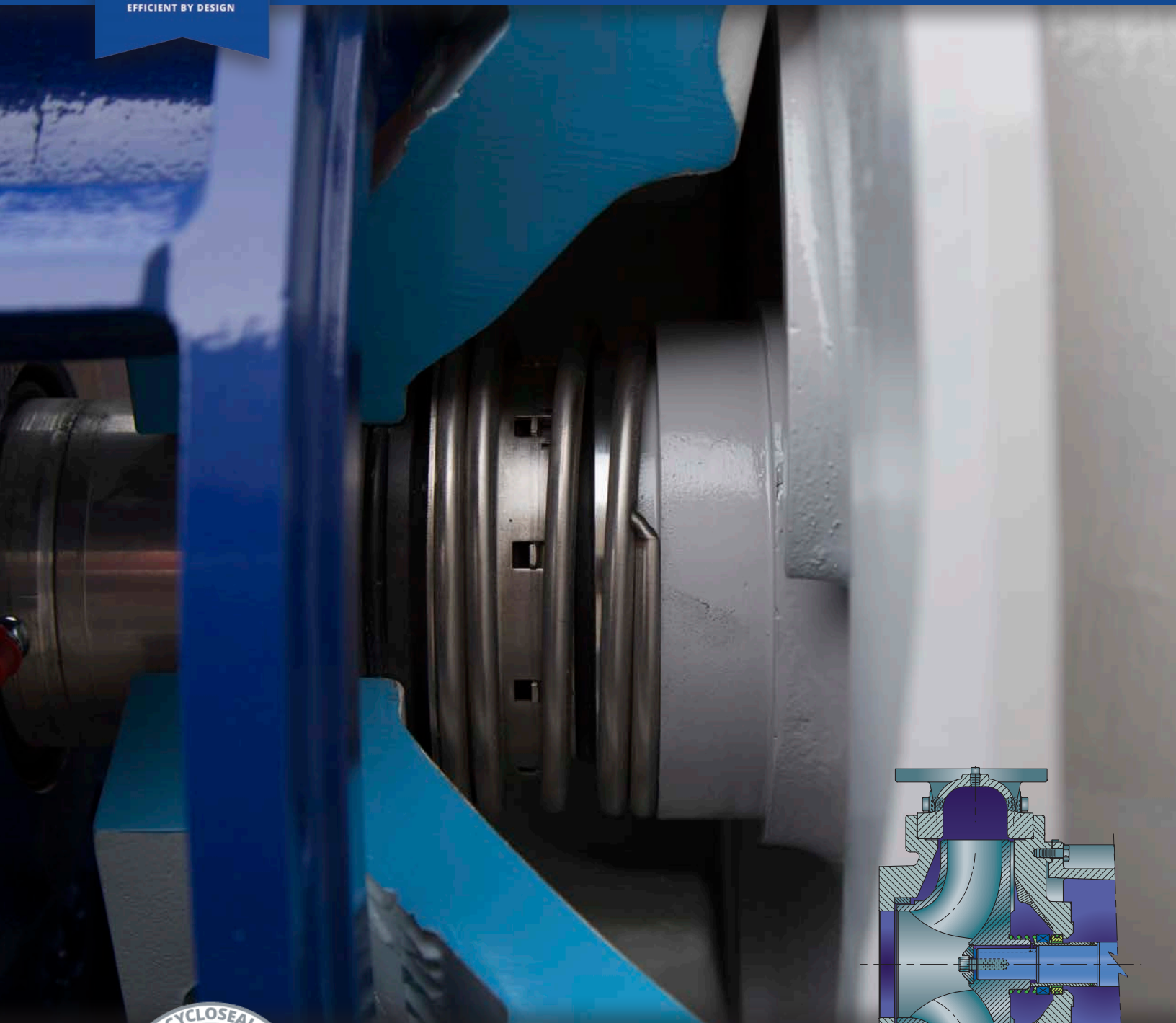
- Trailer Mounted
  - Dry weight: 3,914 lbs. (1,775 kg)
  - Operating weight: 4,728 lbs. (2,144 kg)
  - Dimensions: 150.12 x 75.00 x 73.88 in. (3.81 x 1.91 x 1.88 m)
- Skid Mount
  - Dry weight: 3,294 lbs. (1,494 kg)
  - Operating weight: 3,488 lbs. (1,582 kg)
  - Dimensions: 91.16 x 66.60 x 61.50 in. (2.32 x 1.69x 1.56 m)

**WARRANTY**

1 Year, Unlimited Hours / 2 Years, 2000 Hours; See warranty policy for complete details



CORNELL PUMP COMPANY  
**CYCLOSEAL®**  
PATENTED, LONG LASTING, FLUSHLESS SEALING SYSTEM



EFFICIENT BY DESIGN



## 25 YEARS OF EXCEPTIONAL SEAL TECHNOLOGY

Cycloseal grew out of a need to address municipal seal failure. In 1994, the idea that you could have a mechanical seal that didn't require a water flush, and wouldn't leak, was revolutionary. Twenty-five years later, that idea still resonates with customers — the ease of care and reliability have seen Cycloseal installed on more than 100,000 pumps in dozens of countries around the world.

## CYCLOSEAL® DESIGN: The patented, premium mechanical seal system that distinguishes Cornell Pumps from all others.

One of the main reasons Cornell Pumps have a service advantage compared to competitors is our patented Cycloseal design that removes solids and abrasive material from the seal area, while purging air and gas pockets. This innovative cyclonic action extends seal life and eliminates the need for venting or flush water.

These benefits come from the Cycloseal system's unique deflector vanes, which work with the impeller backvanes to create the cyclo-action. The Cycloseal design is available in all Cornell solids handling pumps, as well as many of our clear liquids and food handling pumps.

## CYCLOSEAL® SAVES YOUR FROM FLUSHING AWAY MONEY!

Each pump with flush water can be \$6,000 or more in water costs.

A typical 6" pump uses 3 gallons a minute in flush water. Doesn't seem like much...but that's over 1.57M gallons/5,950 m<sup>3</sup> per year. An 8" pumps uses more, and big 16" to 24" pumps use much more — 8 million gallons/30,300 m<sup>3</sup> or more per year!

And that's one pump...multiple by several pumps per location, and the possibility of several locations per organization and the water used just for seals is HUGE!

Cycloseal® provides an answer:

- REQUIRES NO FLUSH WATER.
- Uses inexpensive and easy-to-change type 1 or 2 mechanical seals.
- Saves \$6,000 or more in flush costs.
- More environmentally friendly alternative.
- Plus Cornell Pumps are high-efficiency and can save your operation even more money.

COST OF A GALLON OF WATER	GALLONS PER MIN	GALLONS PER DAY	GALLONS PER YEAR	EXPENSE
\$0.004	1	1,440	525,600	<b>\$2,102</b>
\$0.004	3	4,320	1,576,800	<b>\$6,307</b>
\$0.004	5	7,200	2,628,000	<b>\$10,512</b>
\$0.004	8	11,520	4,204,800	<b>\$16,819</b>

Table is illustrative—and costs per gallon are what is what is typically paid by a waste water treatment plant for their own water. Some location can be as high as \$.022 per gallon; so that same 6" pump costs nearly \$35,000 in flush water.



# CYCLOSEAL® SEALING SYSTEM

## CYCLOSEAL® BENEFITS

**No Flush Water or Packing:** Through the backplate and sweeping vanes, Cycloseal requires no flush water or packing, saving expense, service time, and messy drips.

**Extended Seal Life:** Cornell's Cycloseal design has proven itself in the toughest applications, from manure, slurry, starch recovery, municipal waste water, and clear water, to food processing and self-priming applications – in some cases more than tripling the normally-expected seal life.

**Run-Dry™ Option:** All pumps with Cornell's Cycloseal system can be equipped with an optional Run-Dry feature, which serves to lubricate the seal faces even when there is no liquid in the pump casing. In situations where the pump must run dry for several hours, or where the pump may suddenly lose prime without being shut off, the Run-Dry feature is a must.

**System Savings:** The Cycloseal system requires no external water flush, filters, grease cups, or piping normally associated with packing or mechanical seals in other pumps.

**Better for Abrasive Applications:** More resilient than packing and standard mechanical seals bathed in grit and other materials, Cycloseal keeps solids away from the seal area for reduced seal wear.

**Greater Reliability:** Through positive seating, end users can tell when the seal is perfectly fitted. With greater ability to withstand to grit, the Cycloseal system results in longer intervals between service.

**Maintenance Savings:** The end result of a longer-lasting seal is less down-time and lower maintenance costs over the life of the pump.

## TYPE I & II MECHANICAL SEAL FEATURES

*Cycloseal® relies on Type I & II Mechanical seals as part of the Cycloseal system. The seals provide these benefits:*

**No Set Screws:** Nothing to mar the shaft or sleeve.

**Temperature Limits:**  
-40°F to +160°F (Buna);  
-40°F to +400°F (Viton®)

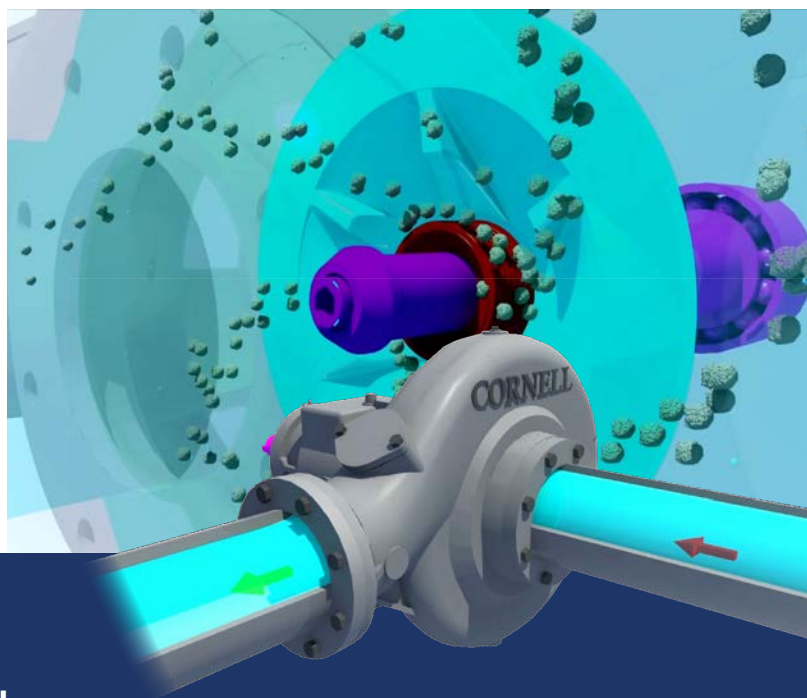
**Seal Faces:** Tungsten carbide vs. silicon carbide or carbon vs. ceramic (other material options available.)

**Elastomeric Bellows Options:** Buna-N, Viton® and other materials available.

**Hardware:** Stainless or plated steel.



*Photograph reprinted with the permission of John Crane. ©John Crane 2014*



**Watch the Cycloseal video online to see it in action:**

<http://www.cornellpump.com/support/videos.html>



# CYCLOSEAL® SEALING SYSTEM



## HOW CYCLOSEAL® WORKS

Cycloseal isn't just a seal, but rather a sealing system. Designed by Cornell engineers in the 1990's, and refined over the years, the elegance of the system is that it utilizes a traditional Type I or II Mechanical Seal in such a way that the Cycloseal system provides much longer life than the seal would normally experience.

Through a pressure gradient, the Cycloseal system pulls grit and material away from the seal face, leaving it in an environment with fewer particulates than a standard seal.

Cycloseal creates this environment with these modifications to standard sealing systems:

### Dished Backplate

While most pump manufacturers have a small cavity around the seal, believing the smaller the space the less grit and material can attack the seal, in Cycloseal the area behind the seal is comparatively large. This gives the dirty water enough area to fling/cyclone debris away from the seal.

### Backplate Deflector Vanes

Designed at particular pitches, these deflector vanes help create the cyclonic action.

### Quality Mechanical Seal

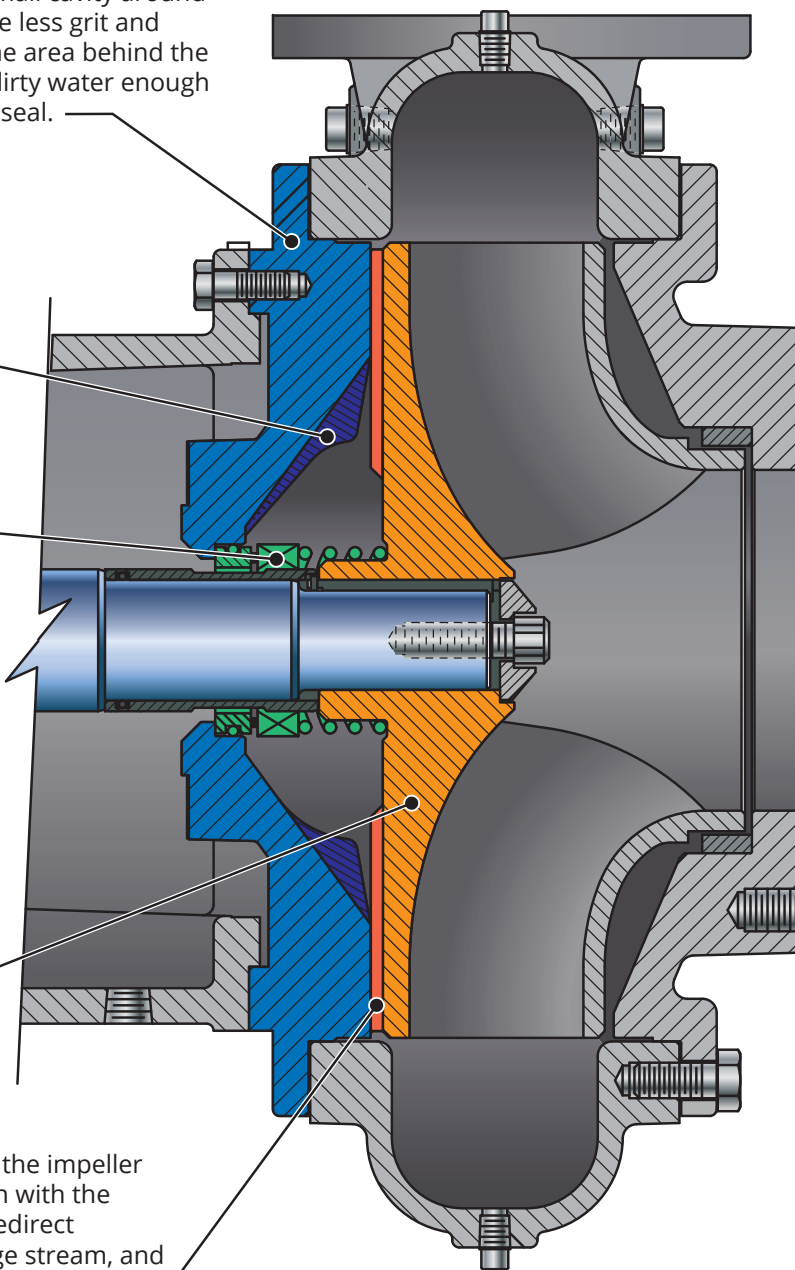
The seal is replaceable with a quality Type I or II mechanical seal.

### Specifically-Calibrated Impeller

Balanced to precise tolerances, Cornell impellers provide the kinetic energy needed to whisk away the particulates from the seal faces.

### Impeller Back Vanes\*

In solids handling applications the impeller back vanes work in conjunction with the stationary deflector vanes to redirect particles back into the pumpage stream, and away from the seal face.



\*In clear liquid pumps the balance line serves a similar function by reducing pressure and improving hydraulic efficiency; increases the life of mechanical seals and bearings, and providing positive control of axial forces.

**EFFICIENT BY DESIGN**



# CYCLOSEAL® SEALING SYSTEM

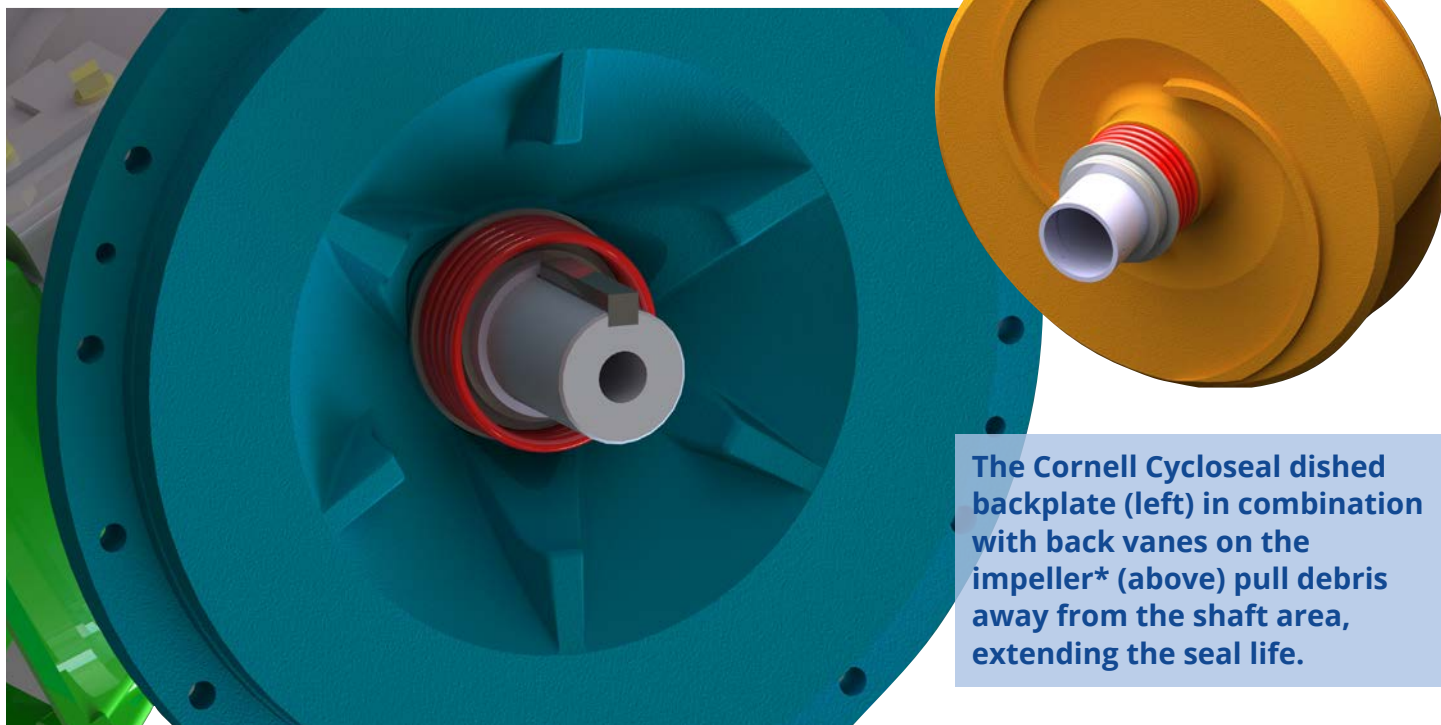
## SEAL COMPARISON

FOUR MAIN TYPES OF SEALS USED IN CENTRIFUGAL PUMPS ARE COMPARED USING RELATIVE COST, DURABILITY, AND LEAKAGE.

	Packing	CYCLOSEAL® SYSTEM	Double Mechanical Seal	Cartridge Seals
Cost	Low cost	<b>Low cost</b>	Medium cost	High cost
Leak Propensity	Profuse leaks	<b>No/ Negligible leaks</b>	Negligible leaks	Small leaks
Flush	Flush optional	<b>No flush required</b>	Flush required	Flush required
Durability	Not durable	<b>Very Durable</b>	Somewhat durable	Very Durable

**YOU WILL EXPERIENCE THESE BENEFITS EMPLOYING CORNELL'S CYCLOSEAL® PATENTED LONG LASTING, LEAK-FREE SEALING SYSTEM:**

- ✓ **No Flush Water or Packing**
- ✓ **No Gauging or Instrumentation**
- ✓ **Extended Seal Life**
- ✓ **Run-Dry Option**
- ✓ **System Savings**
- ✓ **Better for Abrasive Applications**
- ✓ **Greater Reliability**
- ✓ **Maintenance Savings**



The Cornell Cycloseal dished backplate (left) in combination with back vanes on the impeller\* (above) pull debris away from the shaft area, extending the seal life.



# ADDITIONAL OPTIONS



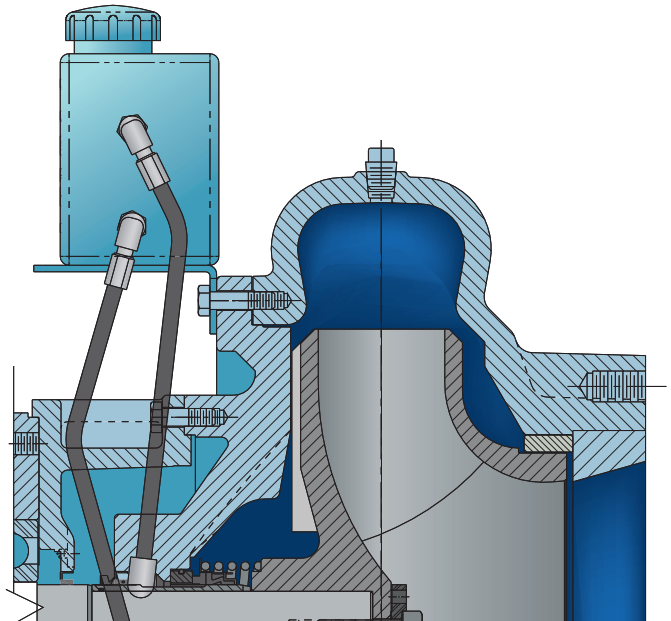
## RUN DRY™ AND REDI-PRIME® OPTIONS

All pumps equipped with Cornell's Cycloseal® sealing system have an optional Run-Dry™ system, designed to lubricate the seal faces even when there is no liquid in the pump casing. Nearly all of the Cycloseal-ready pumps can also employ Cornell Redi-Prime technology, a mechanically-driven, low-maintenance, high-volume vacuum pump system for rapid priming and repriming.

### RUN-DRY™

The Cornell Run-Dry system is a unique, state-of-the-art solution for providing continual lubrication to mechanical seals. Run-Dry provides a gland on the back side of mechanical seal through which lubricant can circulate, providing cooling to the precision hardened seals faces of the mechanical seal. The result is exceptional seal life, regardless of the operating conditions, from full-flow to no-flow—Run-Dry!

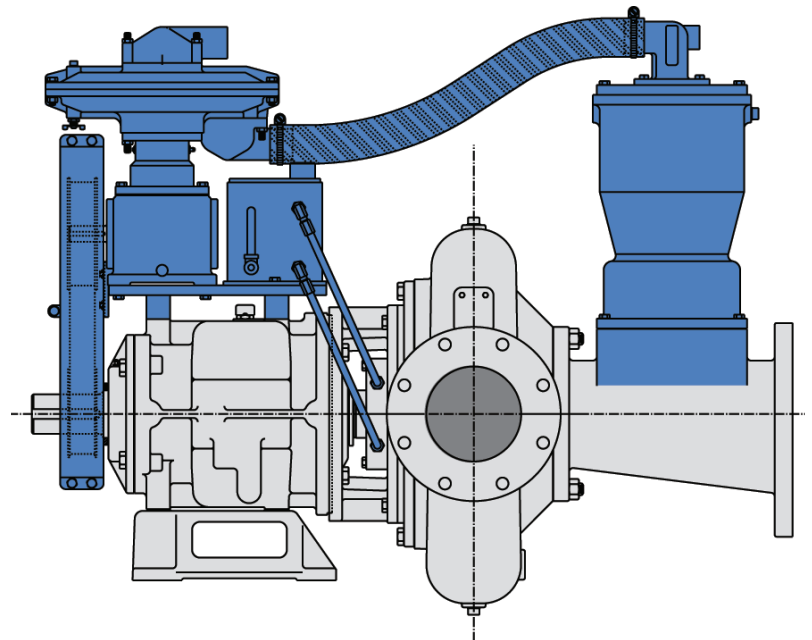
In situations where pump must run dry for several hours, or where the pump may suddenly lose prime without being shut off, the Run-Dry feature is a must.



### REDI-PRIME®

Cornell's patented priming and repriming system allows your pumps to work properly, unattended. Redi-Prime pumps are designed with oversized suction to provide more flow, reduce suction friction losses, and handle air liquid mixtures with ease. The widest range of dry repriming pumps in the industry, Redi-Prime is available on virtually all of Cornell's Solids Handling and Clear Liquids pumps, from 1.25" to 30" discharge. Valued by customers around the world, Redi-Prime provides a distinct advantage to your application.

Redi-Prime is fully automatic and doesn't require a manual shut-off valve to ensure there is no water "carry-over" to the diaphragm vacuum pump.





# CYCLOSEAL® APPLICATIONS

CORNELL'S CYCLOSEAL SYSTEM IS USABLE IN ALL THESE MARKETS:



AGRICULTURE



FOOD PROCESS



INDUSTRIAL



REFRIGERATION



MINING



MUNICIPAL



OIL & GAS

## SLURRY IN THE TEST LAB

**VOLUTE SCOURED—BUT CYCLOSEAL® BACK PLATE/ MECHANICAL SEAL STILL HAS PRIMER ON IT!**

In preparing to launch the SP Series of slurry pumps, Cornell conducted tests of a 3SP pump in our test lab. The 3" pump was subjected to over 1,500 hours of testing, with a 30 percent sand mixture. The slurry mixture was switched every 50 hours to maintain sharp edges on the sand.

The pump functioned flawlessly. The volute, impeller, and expeller were all scoured by the mixture. The volute shows signs of indentation, and the sand polished up the inside of the casing almost to a mirror-like shine. The impeller shows definite signs of wear—with jagged edges appearing on the outer vanes.

The Cycloseal® mechanical seal system worked so well at keeping abrasives from damaging the seal, that the factory primer can still be seen on the part. Cycloseal® is Cornell's patented design, featuring unique deflector vanes that works with the expeller to create a cyclo-action. This action removes solids and abrasive material from the seal area while purging air and gas pockets – extending seal life and eliminating any need for venting or water flush.

Cycloseal® lasts typically three times longer than a standard seal—making the SP, SM, and MP Slurry Series more cost effective and useful to users in remote locations, or other areas where replacing the seal would be difficult. The longer seal life also translates into less pump down time and lower maintenance costs. The Cycloseal® system requires no external water flush, filters, grease cups, piping or instrumentation normally associated with packing or double mechanical seals.



*Impeller scoured by the sand mixture*



*ON LEFT: Volute shows signs of severe wear.*

*ON RIGHT: Cycloseal® backplate still has primer on it.*



## MARKET AND PRODUCT LINE



AGRICULTURE



FOOD PROCESS



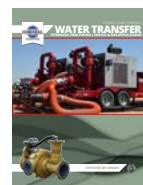
INDUSTRIAL



MINING



MUNICIPAL



WATER  
TRANSFER



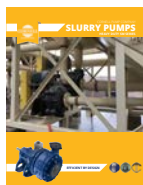
REFRIGERATION



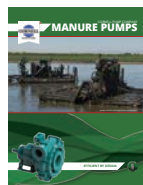
CONSTRUCTION



SLURRY



SLURRY SM



MANURE



CUTTERS



SELF PRIMING



HIGH FLOW



MX SERIES



N SERIES



CYCLONE™



EDGE™



HYDRAULIC  
SUBS



IMMERSIBLE



CD4MCU



RUN-DRY™



PRIMING  
SYSTEMS



CYCLOSEAL®

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**  
©2019 CORNELL PUMP COMPANY



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

AUTHORIZED CORNELL PUMP DISTRIBUTOR

# Exceptions to Specifications

**We meet or exceed all specs with the exception of the following deviations:**

- Our battery is 950 CCA vs 990 spec'd
- Dealer to supply liquid filled vacuum gauge – a port is supplied on the pump housing to accommodate gauge
- Our fenders are not diamond plate
- Testing – no factory test report shall be provided



## TERMS AND CONDITIONS OF SALE

January 2016

These terms and conditions, the attendant quotation or acknowledgment, and all documents incorporated by reference therein, bind UE Manufacturing LLC, which issued the quotation or acknowledgment for the sale of goods ("Goods") to be provided hereunder (hereinafter "Seller") and the buyer (hereinafter "Buyer") and constitute the entire agreement ("Agreement") between Buyer and Seller regarding such sale. By accepting the Goods, the Buyer agrees to these terms and conditions and further understands that Seller is only agreeing to provide the Goods at the price stated, based on the terms and conditions contained herein.

These terms and conditions supersede all previous terms and conditions, understandings, quotations, and purchase orders entered into between Seller and the Buyer, whether oral or written, shall govern all transactions between the Buyer and Seller. Any contrary terms and conditions issued by Buyer in any form whatsoever are expressly rejected by Seller.

A. **TERMS OF PAYMENT:** Subject to the approval of the Seller's credit department, terms are Ex Works Seller's Oklahoma City, Oklahoma, facility, net due upon notice of intent to ship. Unless otherwise agreed in writing between the parties, Buyer shall pay the Seller for the Goods and any related services provided hereunder within thirty (30) days of receipt of the Seller's invoice therefor. In the event that Buyer disputes any portion of such invoice, Buyer shall pay the undisputed portion as provided herein. If any payment owed to Seller hereunder is not paid when due, it shall bear interest, at a rate to be determined by Seller which shall not exceed the maximum rate permitted by law, from the date of which it is due until it is paid. Seller shall have the right, among other remedies, either to terminate the Agreement or to suspend further deliveries under this and/or other agreements with Buyer in the event Buyer fails to make any payments hereunder when due. Buyer shall be liable for all expenses attendant to collection of past due amounts, including attorney's fees.

B. **PRICES:** Unless otherwise specified by Seller, Seller's price for the Goods shall remain in effect for thirty (30) days after the date of Seller's quotation or acceptance of the order for the Goods, whichever occurs first, provided an unconditional, complete authorization for the immediate manufacture and shipment of the Goods pursuant to Seller's standard order processing procedures is received and accepted by Seller within such time period. If such authorization is not received by Seller within such thirty (30) day period, Seller shall have the right to change the price for the Goods to the Seller's price in effect for the Goods at the time the order is released for final manufacture.

Notwithstanding any of the forgoing to the contrary, the price for the Goods sold by the Seller, but manufactured by others, shall be Seller's price in effect at the time of shipment to the Buyer.

C. **DELIVERY AND DOCUMENTATION:** All shipping dates are approximate and are based upon Seller's prompt receipt of all necessary information from Buyer to properly process the order. Seller shall provide Buyer with the Goods/data/documentation which is specifically identified in the quotation. If additional Goods/ documentation or

nonstandard items are to be provided by Seller, they shall be provided to Buyer at Seller's price then in effect.

D. **TITLE AND RISK OF LOSS:** Title to the Goods supplied hereunder, and to any and all accessories thereto and substitutions thereof, shall remain with Seller as a security interest until Buyer has completed payment of the purchase price, plus accrued interest, if any, and fully performed all of the terms and conditions hereof. The risk of loss or destruction of, or damages to, the Goods shall be with Buyer upon delivery of the Goods to Buyer, in accordance with the delivery terms of this Agreement.

E. **EXCUSE FOR PERFORMANCE:** Seller shall not be liable for delays in performance or for non-performance due to acts of God, war, riot, fire, labor trouble, unavailability of material or components, explosion, accident, compliance with governmental requests, laws, regulations, orders actions, or unforeseen circumstances or causes beyond Seller's reasonable control.

F. **TERMINATION AND SUSPENSION BY BUYER:** Buyer may terminate or suspend its order for any or all of the Goods covered by the Agreement provided that Buyer gives Seller reasonable advance written notice of such termination or suspension. Buyer shall then pay to the Seller a net amount equal to (1) actual costs incurred by the Seller including, but not limited to, the purchase of materials, equipment, and services to be used in the Goods; plus (2) labor costs incurred by the Seller in manufacturing the Goods, to be determined using the Seller's standard, fully burdened rates (which shall include general and administrative costs, but which shall not include any profit); plus (3) reasonable costs incurred by the Seller to cancel any orders for materials and equipment to be used in the Goods; plus (4) fifteen percent (15%) of the total of items (1) through (3) above to account for the Seller's profit; minus (5) the net salvage value of any materials and equipment purchased by the Seller to be used in the Goods after subtracting the Seller's reasonable costs to salvage such materials and equipment.

G. **LIMITED WARRANTY:** Seller warrants that Goods provided by Seller hereunder will be free from defect in material or workmanship under normal use and service for the period contained in any applicable manufacturer's warranty and, if there is no applicable manufacturer's warranty, then for twelve (12) months from the date on which the Goods is placed in service, but in no event to exceed eighteen (18) months from the date of shipment to Buyer. Seller further warrants that services provided by Seller hereunder will be performed in a workmanlike manner and that such services shall be free from defects in workmanship for a period of six (6) months from the date on which the services were completed.

Seller agrees to repair or replace, at its option, any Goods which prove to be defective within the applicable warranty period, and to correct any defect in services discovered by Buyer within the applicable warranty period. Buyer shall promptly notify Seller in writing of any defect in the Goods found during the warranty period and Seller shall have the right to make an investigation of the reported defect before corrective action is undertaken. Seller shall have the option to repair, replace or correct

any defect in the field or at its facilities. Buyer shall bear all costs incurred by Seller to enable it to gain access to a defect in the Goods in order to repair, replace or correct same. Seller's warranty does not cover: (i) conditions which, in the reasonable judgment of the Seller, arise from misuse, overloading, negligence, alteration, accident or lack of performance of necessary maintenance services; (ii) claims which, in the reasonable judgment of the Seller, arise from Goods not provided by Seller; or (iii) claims for consequential damages, including, but not limited to, loss of use, loss of revenue or profit and loss of or damage to Buyer's property. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

- H. **LIMITATION OF REMEDY AND LIABILITY:** Seller shall not be liable for damages caused by delay in performance. Buyer agrees that in no event shall Seller's liability to Buyer and/or its customers extend to include incidental, consequential or punitive damages. The term "consequential damages" shall include but not be limited to, loss of anticipated profits, loss of use, loss of revenue and cost of capital. Seller shall not be responsible to service any Goods which are functioning within Seller's published specification, and the limited warranty set forth herein shall not apply when any Goods are originally installed by someone other than an authorized representative of Seller, or if service is required due to Buyer's failure to operate or maintain the Goods according to the operator's manual or where services is required because the Goods are subjected to misuse, abuse or alteration, or are repaired by someone other than an authorized representative of Seller. Notwithstanding any other provision hereof to the contrary, Seller's total, cumulative liability arising out of or related to the performance or non-performance of this Agreement shall be limited to the amount of the Agreement price stated herein, and Buyer shall hold harmless and indemnify Seller from and against all liability in excess of such limitation.
- I. **INSTALLATION:** Buyer shall be responsible for receiving, storing, installing, starting up and maintaining all Goods. Seller shall provide a quotation for services to assist Buyer if these functions are requested.
- J. **TAXES:** Any tax or governmental charge or increase in same hereafter becoming effective increasing the cost to Seller of producing, selling, or delivering the Goods or of procuring material used therein, and any tax now in effect or increase in same payable by the Seller because of the manufacture, sale, or delivery of the Goods, may at Seller's option, be added to the price herein specified.
- K. **BUYER SUPPLIED DATA:** To the extent that Seller has relied upon any specification, information, representation of operating conditions or other data supplied in writing by Buyer to Seller in the selection of design of the Goods and the preparation of Seller's quotation, and in the event that actual operating conditions or other conditions differ from those represented by Buyer and relied upon by Seller, any warranties or other provisions contained herein which are affected by such conditions shall be null and void, unless otherwise mutually agreed upon in writing.
- L. **EXPORT COMPLIANCE:**
- (i) **General.** The parties understand and acknowledge that each is committed to compliance with all laws and regulations of any country in which it is located, which are applicable to its business and operations, and to

conducting its business affairs according to the highest standards of integrity. Each party certifies that it has performed and will perform all of its duties under this Agreement in accordance with such applicable laws and regulations, and that it will do nothing to cause the other to be in violation thereof. Each party will furnish the other party in a timely manner, all information reasonably requested in order to comply with such applicable laws and regulations. In addition, each party agrees to comply with the laws and regulations of any country where the other party is located to the extent applicable to the performance of its duties under this Agreement. Notwithstanding the foregoing, Seller can only comply with such laws to the extent they are not inconsistent with U.S. law.

- (ii) **Compliance with Export Controls.** The parties acknowledge that any Goods, technology, software, information or data subject to this Agreement may be subject to U.S. export controls including but not limited to the Export Administration Regulations ("EAR") 15 CFR Part 730-774, U.S. International Traffic in Arms Regulations, as codified at 22 C.F.R., Parts 120 through 130 ("ITAR"), U.S. Nuclear Regulatory Commission Regulations (NRC) on the Import and Export of Nuclear Equipment and Material, as codified at 10 C.F.R. Part 110, and/or U.S. Department of Energy (DOE) Regulations on Assistance to Foreign Atomic Energy Activities, as codified at 10 C.F.R. Part 810, and may be subject to other regulations as deemed applicable (the "Export Control Regulations"). The parties further acknowledge that export authorizations may be required from the Bureau of Industry and Security (BIS), Defense Directorate of Trade Controls ("DDTC"), NRC, DOE or other applicable U.S. government agencies (such U.S. government agencies collectively, "Export Control Agencies") prior to exporting any Goods, products, non-public domain technical data or services subject to the Export Control Regulations. The parties agree to comply with all applicable Export Control Regulations and any specific limitations and provisos imposed by Export Control Agencies on licenses, agreements or other authorizations particular to any transaction between the parties.

The parties acknowledge that any Goods, technology, software, information or data exported under this Agreement remain subject to the U.S. Export Regulations after such export. Buyer agrees that it will not authorize further disclosure, export, re-export or retransfer any such Goods, product, software, non-public domain technical data or service to a third country, to any national (regardless of whether such national is an employee, consultant or independent contractor of either of the parties) of a third country or to any entity not specifically authorized by applicable U.S. Export Control Agencies pursuant to an export license, agreement or other export control document.

- M. **GENERAL PROVISIONS:** (a) Buyer shall not assign its rights or obligations under the Agreement without Seller's prior written consent. (b) There are no understandings, agreements or representation, express or implied not specified in the Agreement. (c) No action, regardless of form, arising out of transactions under the Agreement, may be brought by either party more than two (2) years after the cause of action has accrued. (d) Any modification of these terms and conditions must be set forth in a written instrument signed by a duly authorized representative of Seller. (e) The Agreement is formed and shall be construed, performed and enforced under the laws of the state of Oklahoma.