# CORNELL PUMP COMPANY CD4MCU FOR CORROSIVE & ABRASIVE APPLICATIONS





# CD4MCu



# **FEATURES**



**CLEAN STEEL** 



BRINELL HARDNESS UP TO 285



INDUSTRY LEADING
TWO YEAR WARRANTY

# WHY CD4MCu

CD4MCu is duplex stainless steel that uses a two-phase metallurgy process, different from the single-phase metallurgy process found in common stainless steel grades like 316. This process combines the corrosion resistance of 300-series stainless steel with the strength and hardness of 400-series stainless steel. This results in stainless steel with equivalent or superior corrosion resistance to 316 SS but with twice the yield strength. CD4MCu allows pumps to be used in more abrasive applications with enhanced resistance to corrosive cracking and pitting. Cornell has made CD4MCu castings available in-store for 23 of its most popular pump models, which reduces production time. Cornell can expedite build of CD4MCu pumps with stock components.

# **CD4MCu BENEFITS**

- · Corrosion and pitting resistance
- · Higher strength than standard grades of stainless steel
- Improved ductility and weldability
- Better resistance to embrittlement

### **CORNELL PUMP BENEFITS**

- Fully automated priming and self-priming, dry-run pumps
- · Handles air/liquid mixtures with ease
- Patented Cycloseal®, Redi-Prime®, and Run-Dry™ options
- Cornell Competitive Advantage: Patented Engineering Features

# **PUMP MODELS AVAILABLE IN STOCK**

2.5H-F16 3HC-F16 2415MX-F18DB 3419MX-F18DB 3617MX-F18DB 4622MX-F18DB 6822MX-F18DB 81024MX- F12DB4NNTL-F5	4NNT-F16 4414T-F18DB 4817T-F18DB 4NHTB19-F18DB, 300# Discharge Flange 6NNT-F16 6612T-F16 6NHTA-F18DB	6NHTB19-F18DB, 300# Discharge Flange 8NNT-F18DB 8NHTA-F18DB 8NHG19-F18DB 8NHTH-F18DB 10NNT-F18DB 3413ZX 23137X	3410HZX 81017ZX 4617ZX 3408ZX 4613ZX 81015ZX 81013ZX 6815ZX
F12DB4NNTL-F5	6NHTB-F18DB	2313ZX	6813ZX

**RB SERIES COMING SOON!** 

# **APPLICATIONS**



FOOD PROCESSING



MINING



INDUSTRIAL PROCESS



MARINE



BRACKISH WATER



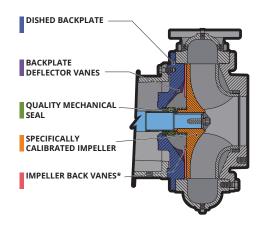
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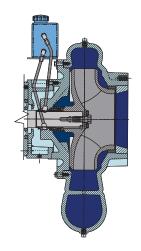


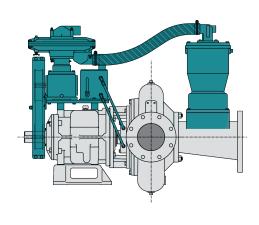
**FERTILIZER** 

OIL/GAS

# **OPTIONS**







# **CYCLOSEAL®**

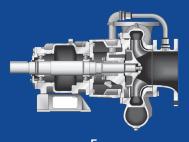
Cornell's Cycloseal is an ideal solution for water and wastewater applications. This patented technology is a self-contained single mechanical seal with a dished backplate, eliminating the need for an external flushing system or water flush line. The configuration includes stationary deflector vanes, contoured impeller back vanes, and a dished backplate that create pressure gradients, moving solids and vapor away from the seal faces. Cycloseal can last up to ten times longer than a typical mechanical seal.

### RUN-DRY™

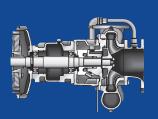
Cornell has developed the Run-Dry system to prevent pump damage during dry operating conditions. This system features an auxiliary gland and oil reservoir that keeps seal faces lubricated during priming, re-priming, or standby operation. The gland is connected to a lubricant reservoir, allowing continuous circulation and cooling of the lubricant and seal faces. The Run-Dry system is ideal for applications where dry operation is possible.

# **REDI-PRIME®**

Cornell's Redi-Prime pumps have oversized suctions that increase flow, decrease friction losses, and enhance suction lift. The priming system is environmentally friendly, featuring a positive sealing float box and a diaphragm vacuum pump that prevents water carry-over and contamination. The Redi-Prime system can be easily installed on most Cornell pumps, providing suction lifts of up to 28 feet, heads up to 800 feet, and flow rates surpassing 20,000 GPM.







**EM** Engine Mount



Close-Coupled



VM/VC/VF Close Coupled Coupled Frame Mount

# **MOUNTING CONFIGURATIONS**

Cornell offers a variety of mounting configurations for its irrigation pumps, catering to different needs. These include horizontal and vertical close-coupled pumps, vertical and horizontal frame-mounted pumps, and pumps that can be mounted directly to an engine using an SAE bell housing.

# CORNELL PUMP COMPANY

# **MARKET & PRODUCT LINE**



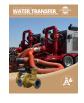
















**AGRICULTURE** 

**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®

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:

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

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