

# FLOOD EMERGENCY

Fast and effective solutions for flood and emergency situations



**EUROMAST  
FIRE PUMPS**  
[www.fire-pumps.eu](http://www.fire-pumps.eu)

WE CARE ABOUT YOUR WATERING.



# TEAMING UP TO BE SAFER.

**The emergency sector is a constant challenge.** We interpret this literally by challenging ourselves everyday in the design of machines that guarantee a higher standard of safety and performance.

That's why our **Multifunctional Motor Pump Units**, our **Lighting Towers** and our **Generating Sets**, are used by the **Civil Defense and Fire Brigades** all over the world for their efficiency, durability and reliability. A wide range of highly customizable products are our guarantee for your safety.



#### INNOVATIVE PRODUCTS

- research & development
- design & patent



#### MADE ON YOUR NEEDS

- highly customized solutions and tailor made products



## MAIN PRODUCTS AND SOLUTIONS



### FLOOD EMERGENCY TRAILER

high performance multifunctional pump unit



### WATER TRANSFER DIESEL PUMPS

high volume drainage units



### SELF-PRIMING DIESEL PUMPS

custom solutions for different type of flow



### CORNELL SELF-PRIMING DIESEL PUMPS

highest flow and efficiency pumps in the market



### RIVERSCREEN™

dependable water supply self-cleaning operation



### SPECIAL PROJECTS

fully customized solutions for user needs



# EMERGENCY TRAILER. THE MULTIFUNCTIONAL ANSWER TO THE MOST DEMANDING SITUATIONS.



The patented multifunctional pump unit flood Emergency can be used simultaneously as a Generator, a lighting tower and a pump with the ability to vary the flow rates and pressures through an inverter. Emergency trailer guarantees water drainage with pumps from 100 to 500 m<sup>3</sup>/h.

Generating set come as standard in **SUPER SILENT** version, is available with power from 10 to 200 kVA and is completed with LED lights lighting tower. Emergency trailer is an highly customizable equipment that improve final user interventions.





## TECHNICAL SPECS



**GENERATOR POWER**  
 From 10 up to 200 kVA



**CAPACITY**  
 From 100 up to 500 m<sup>3</sup>/h



**RESIDUAL POWER**  
 From 5 up to 200 kVA



**MAXIMUM DRAFTING DEPTH**  
 Up to 30 m

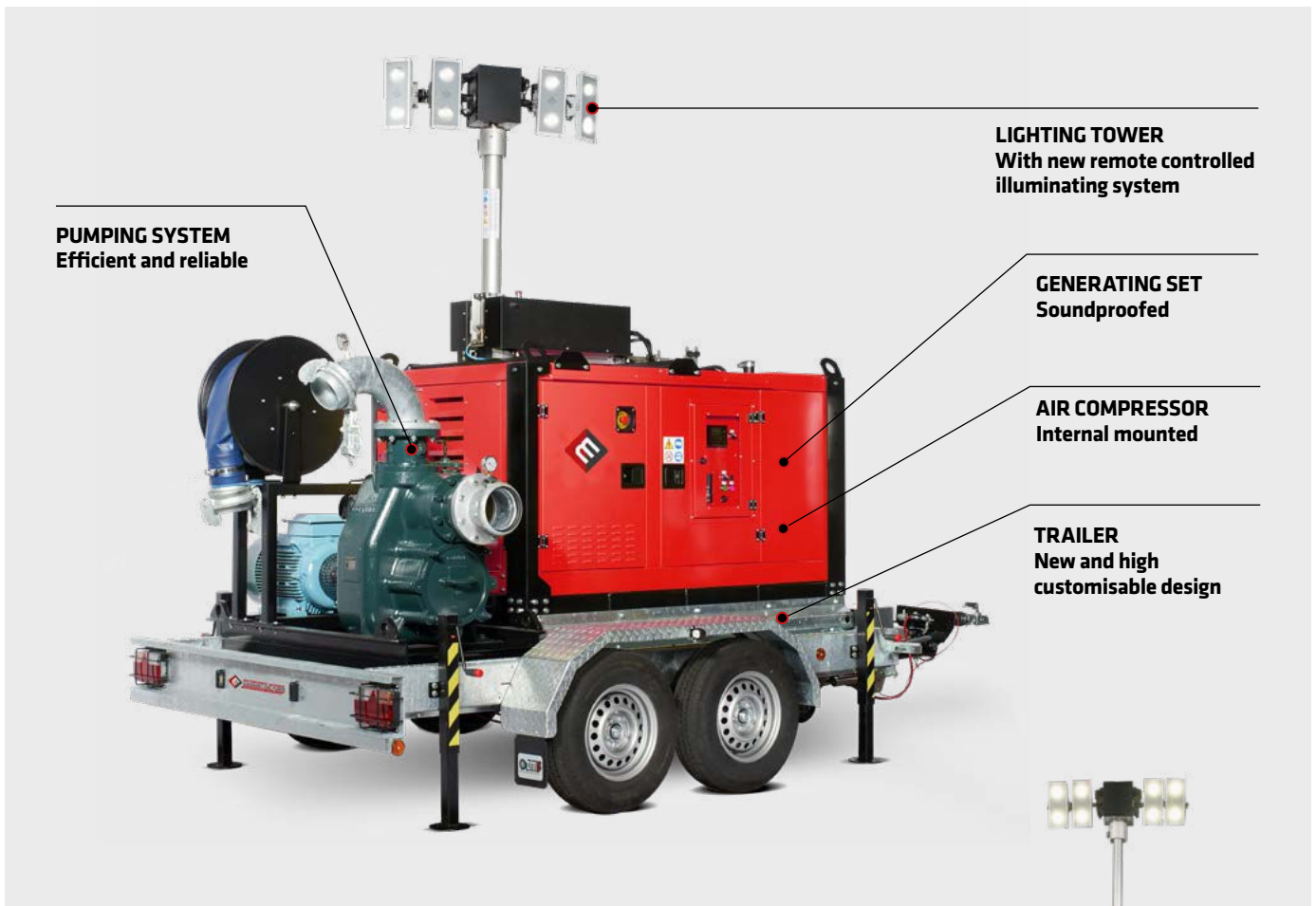


**WORKING PRESSURE**  
 From 2 à 16 bar



**PUMP DIAMETER**  
 From 100 mm (4")

# FIRE BRIGADES TRAILER HIGH EFFICIENCY TO FIGHT CRITICAL FLOODING EMERGENCIES



**PUMPING SYSTEM**  
Efficient and reliable

**LIGHTING TOWER**  
With new remote controlled  
illuminating system

**GENERATING SET**  
Soundproofed

**AIR COMPRESSOR**  
Internal mounted

**TRAILER**  
New and high  
customisable design

## TECHNICAL SPECS



**PRESSURE**  
From 2 to 16 bar



**CAPACITY**  
From 100 up to 500 m<sup>3</sup>/h



**GENERATOR**  
From 10 up to 200 kVA



**RESIDUAL POWER**  
From 10 up to 200 kVA



**SUCTION DIAMETER**  
À partir de 100 mm (4")



**SUCTION DEPTH**  
Up to 8 mètres





# FIRE BRIGADES TRAILER. PERFORMANCE AND RELIABILITY TAKEN TO A NEW LEVEL.



## TECHNICAL SPECS



**PRESSURE**  
From 6 à 13 bar



**CAPACITY**  
Up to 250 m<sup>3</sup>/h



**RESIDUAL POWER**  
From 10 à 200 kVA



**SUCTION DEPTH**  
Up to 30 mètres



**SUCTION DIAMETER**  
From 100 mm (4")



# CORNELL PUMPS. EFFICIENT BY DESIGN.



When you need the impossible, we have the right solution, with high volume motor pump unit you can reach up to 8.600 m<sup>3</sup>/h at very high pressures. Quality and efficiency is guarantee by Cornell brand.

There are many features unique, such as **Cycloseal**, **Run-Dry®** and **Redi-Prime®**, that enable Cornell pumps to handle the most demanding applications. These features, along with **efficiencies up to 89%**, are the reasons why Cornell is the benchmark in the water transfer pumps industry.



## LESS WEAR

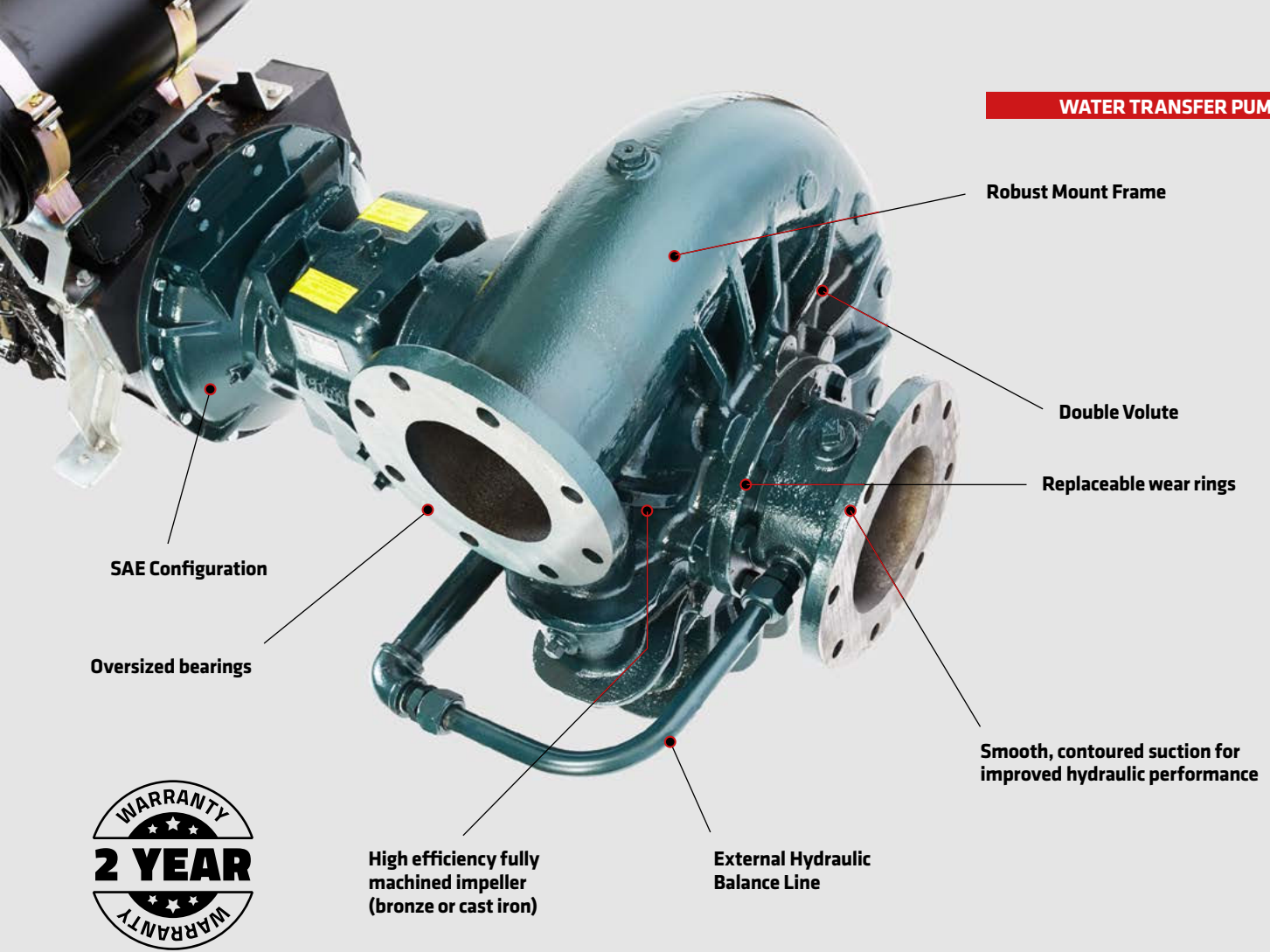
- less maintenance
- less parts
- less downtime



## EFFICIENCY

- less fuel consumption
- oversized shaft & bearings
- easily replaceable wear parts





Robust Mount Frame

Double Volute

Replaceable wear rings

Smooth, contoured suction for improved hydraulic performance

External Hydraulic Balance Line

High efficiency fully machined impeller (bronze or cast iron)

SAE Configuration

Oversized bearings



## TOP QUALITY MATERIALS

Toutes les pompes d'irrigation Cornell sont construites avec des matériaux de première qualité. Les pompes d'irrigation Cornell sont en fonte, en bronze ou de construction entièrement en acier. Des matériaux optionnels sont disponibles pour les applications abrasives ou caustiques. Les caractéristiques standard comprennent des roues équilibrées, des arbres résistants, des chemises d'arbre remplaçables et des bagues d'usure remplaçables.

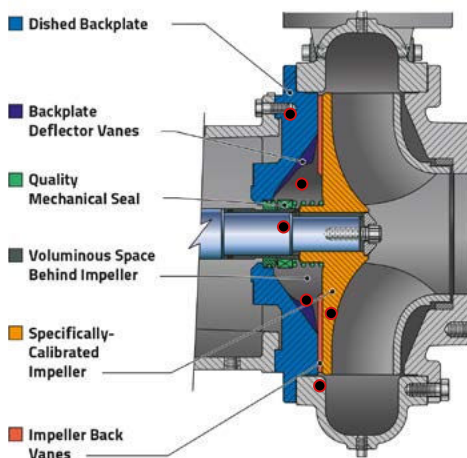
## ENERGY EFFICIENCY

Features unique to Cornell pumps, such as Cycloseal, Run-Dry®, and Redi-Prime®, allow Cornell pumps to handle the most demanding applications. These features, coupled with efficiencies up to 89%, are why Cornell is considered the benchmark in water transfer pumps.



## FEATURES & BENEFITS

- ✔ Replaceable wear rings Double volute
- ✔ Various mounting configurations
- ✔ Robust Mount Frame
- ✔ Shower curtain shield on close-coupled models
- ✔ Oversized bearings
- ✔ High efficiency
- ✔ Fully-machined impellers
- ✔ Efficiencies up to 89%
- ✔ Heavy walled castings
- ✔ External balance line
- ✔ Two-year warranty

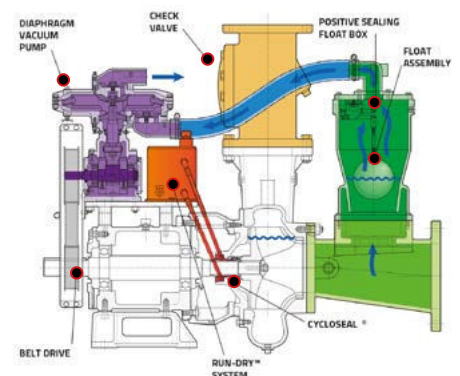


### CYCLOSEAL® DESIGN: ADVANTAGES IN WATER TRANSFER

- **EXTENDED SEAL LIFE:** Cycloseal has proven itself in the toughest applications; in some cases more than tripling the normally-expected mechanical seal life.
- **SYSTEM SAVINGS:** The Cycloseal system requires no external water flush, filters, grease, piping or instrumentation normally associated with packing or double mechanical seals.
- **MAINTENANCE SAVINGS:** Longer seal life which translates into less pump down time and lower maintenance costs.
- **BETTER FOR ABRASIVES:** More resilient than standard mechanical seals, Cycloseal keeps solids away from the seal area for reduced seal wear.

### REDI-PRIME® SYSTEM

- Fully-automatic priming and repriming
- Handles air/liquid mixtures with ease
- Rapidly primes and re-priming completely unattended
- Environmentally safe priming system designed to prevent product leakage
- Check valve eliminates any liquid carry over





## AVAILABLE SOLUTIONS

### DURA-PRIME® PUMPS

Robust construction pumps are available in 3", 4" and 6" models and are ideal for rental and construction applications.



#### PUMP FLOW RATE

Up to 700 m<sup>3</sup>/h



#### PRESSURE

Up to 60 m



#### MAX SOLIDS

3" (76 mm)



### N-SOLIDS HANDLING PUMPS

Cornell offers over 60 models of heavy duty Solids Handling Pumps for the toughest slurry applications.



#### PUMP FLOW RATE

Up to 8.700 m<sup>3</sup>/h



#### PRESSURE

Up to 150 m



#### MAX SOLIDS

10" (260 mm)



### HIGH-HEAD PUMPS

Cornell's MX PUMPS provide heads up to 800', long service life, and industry-leading efficiency. Designed to handle high head applications



#### PUMP FLOW RATE

Up to 1.800 m<sup>3</sup>/h



#### PRESSURE

Up to 240 m



#### MAX SOLIDS

2,5" (60 mm)



### PUMPS FOR COARSE ABRASIVES

These pumps are specifically designed for coarse abrasive slurry applications such as sand, gravel, coal, manure, and mine dewatering.



#### PUMP FLOW RATE

Up to 2.000 m<sup>3</sup>/h



#### PRESSURE

Up to 185 m



#### Solides max

3" (76 mm)



# EMERGENCY MOTOR PUMPS. CUSTOM SOLUTION FOR ANY TYPE OF NEED.




High performance diesel engine pump units customizable for every kind of need, with flow rates from 30 to 1450 m<sup>3</sup>/h with variable pressures. Each model can be specially designed and made according to the customer's specific requirements. Available in 3 ranges: **PORTABLE**, **EASY** and **BIG**.



## TECHNICAL SPECS

 **PRESSURE**  
Up to 40 m

 **PUMP FLOW RATE**  
Up to 1450 m<sup>3</sup>/h

 **SOLIDES MAX**  
3" (76 mm)

 **DISCHARGE FLANGE**  
DN80 to DN300 - 3" to 12"

## APPLICATIONS

- ✓ Flood areas management
- ✓ Firefighting support
- ✓ Bypass pumping
- ✓ Water transfer
- ✓ River level control



## BASIC VERSIONS & CONFIGURATIONS

### PORTABLE



**PUMP FLOW RATE**  
Up to 150 m<sup>3</sup>/h



**VERSION**  
A / D



**PRESSURE**  
Up to 4 bar



**CONFIGURATION**  
1 / 2 / 5



### EASY



**PUMP FLOW RATE**  
Up to 350 m<sup>3</sup>/h



**VERSION**  
A / B / C / D



**PRESSURE**  
Up to 4 bar



**CONFIGURATION**  
1 / 2 / 3 / 4 / 5



### BIG



**PUMP FLOW RATE**  
Up to 1450 m<sup>3</sup>/h



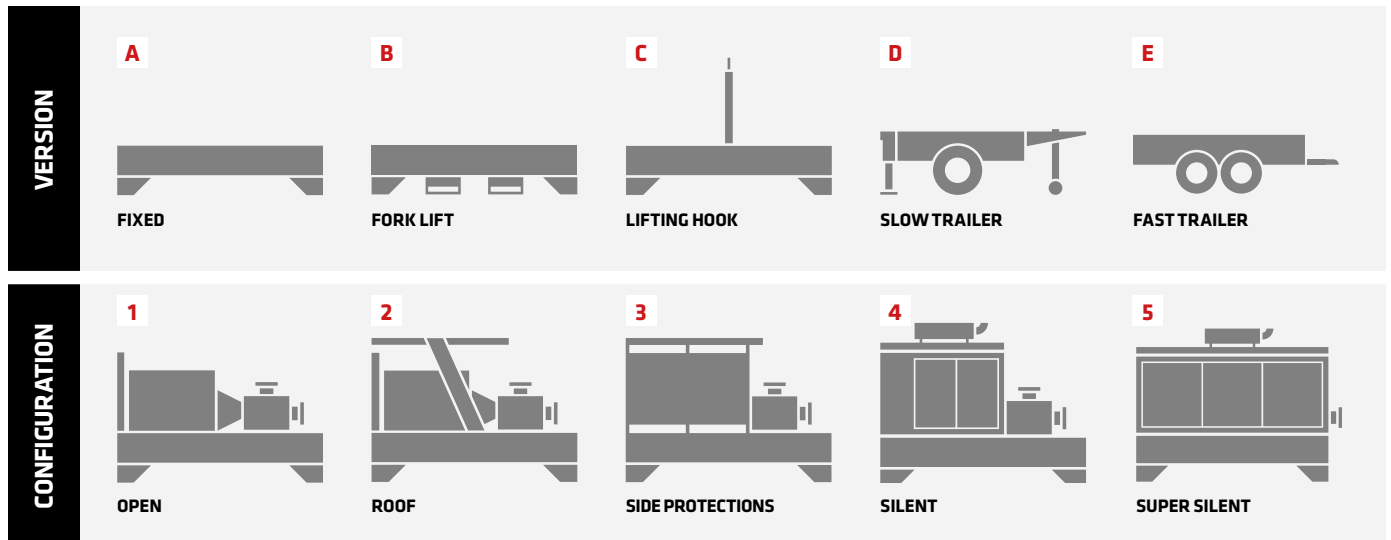
**VERSION**  
A / B / D



**PRESSURE**  
Up to 4 bar



**CONFIGURATION**  
1 / 2 / 3 / 4



# CORNELL STH & STX SERIES. EFFICIENT, DURABLE, INNOVATIVE.

The Cornell STX, STL & STH Self-Priming Lines are the newest products from Cornell Pump following a tradition of building world-class pumping equipment. The Self-Priming Pumps follow this tradition by the addition of the Cycloseal® sealing system, which will extend your seal life. Have an existing self-primer installed? Contact Euromacchine regarding the retrofit program, which allows the Cornell STX rotating assemblies to retrofit into your existing pump volute.



## STX SERIES

Better efficiency than competitors, while maintaining flange-to-flange interchangeability. More robust than standard selfprimers, the oversize bearing frame



**PUMP FLOW RATE**  
Up to 960 m<sup>3</sup>/h



**PRESSURE**  
Up to 205' (62 m)



**SOLIDES MAX**  
3" (76 mm)

## STH SERIES

High head without requiring a booster pump. With heads up to 253', excellent efficiencies and flow, the STH series is able to tackle the most demanding applications.



**PUMP FLOW RATE**  
Up to 460 m<sup>3</sup>/h



**PRESSURE**  
Up to 253' (77 m)



**SOLIDES MAX**  
10" (260 mm)



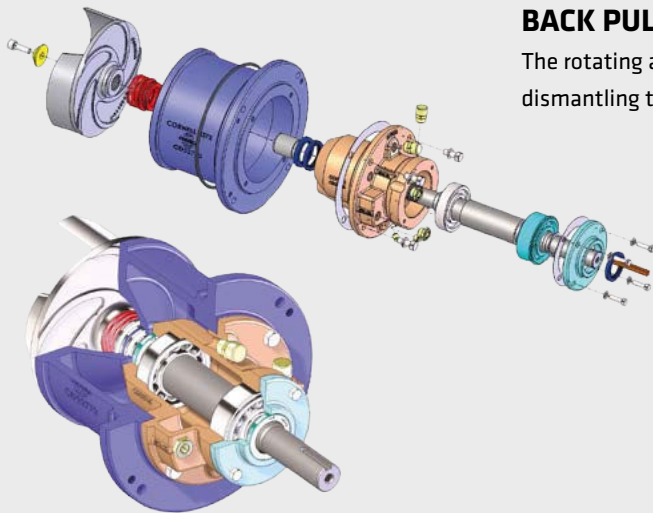
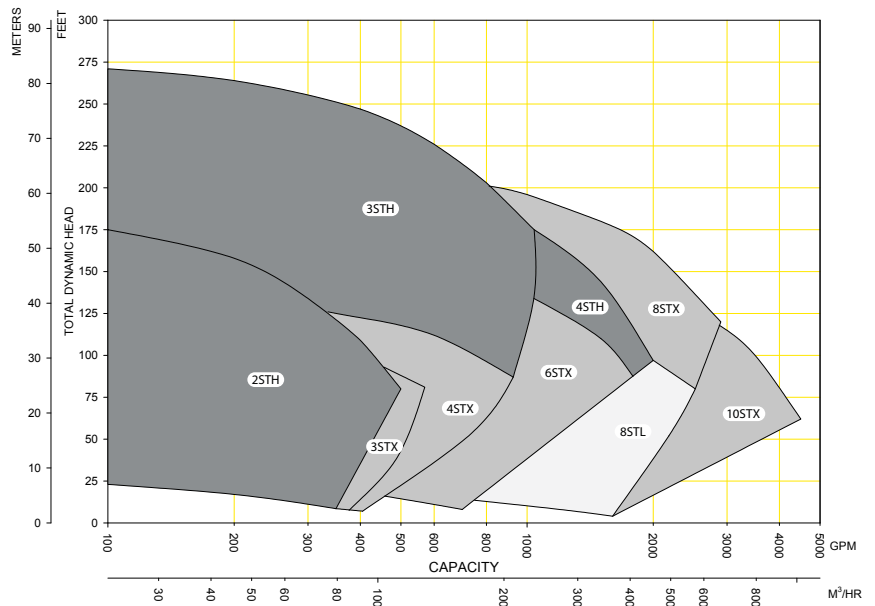


## MATERIALS OF CONSTRUCTION

- Ductile iron volute casing, backplate, and impeller
- 17-4PH stainless steel shafts
- Optional CD4MCu on 3STX, 4STX, and 6STX pump models

## FEATURES

- Cycloseal® grit removal system
- High efficiency design
- High RPM capacity for engine driven applications
- High head capacity
- Modular design
- ANSI, NPT, & DIN flanges available
- Five-year warranty



## BACK PULL-OUT DESIGN

The rotating assembly can be removed without dismantling the pump or disturbing the piping.

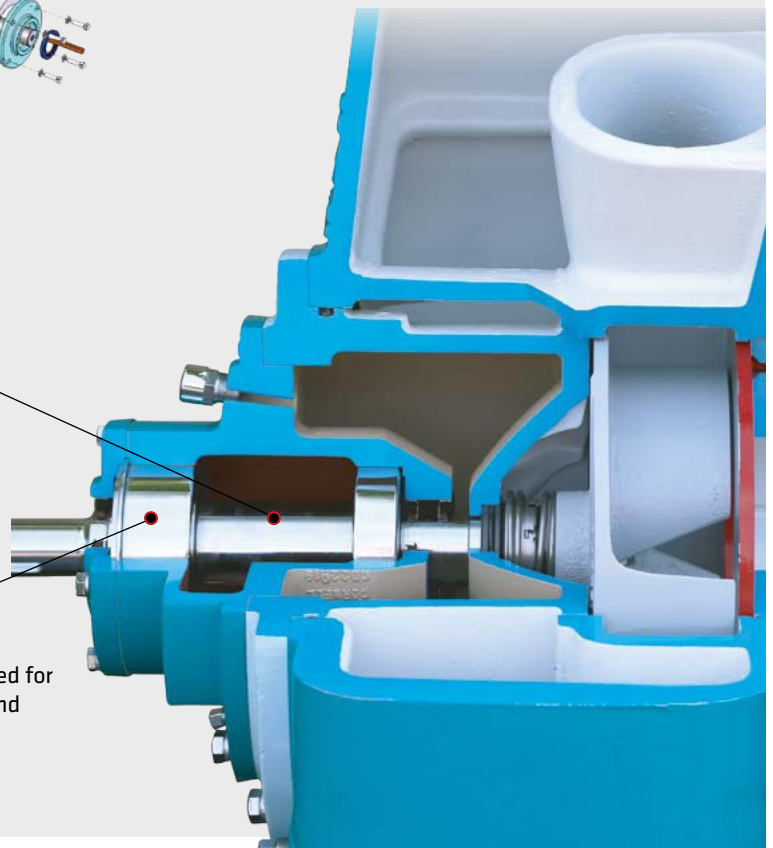


## ROTATING ASSEMBLY

Cornell's STX rotating assembly allows for retrofits of existing installations to upgrade your existing pump with Cornell Pump quality and features.

## HEAVY-DUTY BEARINGS

Heavy-duty thrust bearings with Separate Oil Reserve sized for V-belt drive loads. Separate oil filling plugs for bearings and mechanical seals with sight gauges.



# RIVERSCREEN™

## A DEPENDABLE WATER SUPPLY


### SELF-CLEANING OPERATION.




A rotating water-driven self-cleaning screen that dependably delivers good water from as little as 4 inches depth. The ideal solution for the operation depending upon river or canal water sources for pivot irrigation systems. **RIVERSCREEN is built for shallow water pumping - prevents sand problems.** Low maintenance operation. Standard on all Riverscreens is #10 304 stainless steel mesh (up to 120). Works great in livestock lagoons.



#### TECHNICAL SPECS

 **MIN. WATER DEPTH**  
from 4" (10 cm)

 **PUMP FLOW RATE**  
from 20 to 630 m<sup>3</sup>/h

 **FILTRATION**  
from 8 to 120 mesh

 **DIAMÈTRE D'ASPIRATION**  
from 4" to 12"

#### FEATURES

- ✔ Prevent sand problems
- ✔ Slow moving currents
- ✔ Low-pressure nozzles
- ✔ Fish friendly system







**GRAVITY FLOATING PUMP UNITS**



**WORKS GREAT IN LIVESTOCK LAGOONS**



**GRAVITY FLOW**



**Optional Lifting Boom**

- Galvanized for long life
- Heavy 6" upright main pipe
- Trussed boom for greater strength
- Brake winch for ease of operation
- Quick latch hook for easy hookup



**Optional Power Drive**

- Water Driven Power Drive: keeps drum turning even in slow moving current or still water. Only requires 6 GPM (23 l/min)
- Electric Power Driven (12/220V)
- Extra pontoon for long suction line





### GERMAN & DUTCH FIREBRIGADES

Emergency trailer units are normally used by Dutch and German. Firebrigades that we support since last ten years. In this case a Double Pump with submerge transfer and a Vertical booster pump.



**PUMP FLOW RATE**  
Up to 250 m<sup>3</sup>/h



**PRESSURE**  
Up to 14 bar



**GENERATOR POWER**  
Up to 200 kVA



**SUCTION LIFT**  
Up to -30 m



### SERBIAN CIVIL DEFENCE

A project consisting of 3 Lampo unit 60kVA with self priming pump 520 mc/h each and 3 high volume pump units 1300 m<sup>3</sup>/h maximum flow each.



**PUMP FLOW RATE**  
Up to 520 m<sup>3</sup>/h



**PRESSURE**  
Up to 3 bar



**GENERATOR POWER**  
Up to 200 kVA



**LIGHTNING TOWER**  
Up to 9 meters height

### RUSSIAN SEWAGE MUNICIPALITY

These trailed Cornell pump units for Russian sewage municipality are able to pump 920 mc/h each, featuring robust construction and efficient operation.



**PUMP FLOW RATE**  
Up to 920 m<sup>3</sup>/h



**PRESSURE**  
Up to 11 bar



**FUEL TANK**  
Up to 1000 L



**SOLID HANDLING**  
Up to 86 mm



### ITALIAN WATER MUNICIPALITY

High volume self priming and high solid handling pump unit 700 m<sup>3</sup>/h mounted in a strong structure double axle trailer to respond common requirements by the water municipality companies.



**PUMP FLOW RATE**  
Up to 1300 m<sup>3</sup>/h



**PRESSURE**  
Up to 3 bar



**TRAILER MASS**  
Up to 3000 Kg



**SOLID HANDLING**  
Up to 70 mm



### FIRE BRIGADE BOOSTER UNIT

Fully customized high pressure booster unit designed and built under Italian Firebrigades specification and request, able to supply up to 4 fire units at the same time.



**PUMP FLOW RATE**  
Up to 250 m<sup>3</sup>/h



**PRESSURE**  
Up to 10 bar



**FUEL TANK**  
Up to 650 L



**SPÉCIFICATIONS**  
Pas de radiateur



### OIL&GAS REFINERY PUMP

Robust construction pump unit with RENTAL configuration, equipped with a pump, suitable to handle aggressive liquids in the chemical and petrochemical industries.



**PUMP FLOW RATE**  
Up to 250 m<sup>3</sup>/h



**PRESSURE**  
Up to 8 bar



**FUEL TANK**  
Up to 1000 L



**CONFIGURATION**  
Rental version

### BRITISH ARMY PUMPING UNIT

Conçue et construite sous une surveillance stricte du département de l'armée britannique, cette unité a été réalisée pour alimenter les camps d'urgence en électricité, en lumière et en eau potable ; une pompe de transfert a été installée pour alimenter les unités résidentielles temporaires.



**PUMP FLOW RATE**  
Up to 250 m<sup>3</sup>/h



**PRESSURE**  
Up to 16 bar



**GENERATOR POWER**  
Up to 200 kVA



**WATER PUMP**  
Up to -30 m



### GERMAN SEWAGE MUNICIPALITY

High volume solid handling Cornell pump unit for municipal by-pass and repairment intervention, equipped with Redi-Prime® system to ensure a continuous operation priming of the pump.



**PUMP FLOW RATE**  
Up to 350 m<sup>3</sup>/h



**PRESSURE**  
Up to 14 bar



**SOLID HANDLING**  
Up to 76,2 mm



**PRYMING SYSTEM**  
Cornell Redi-Prime®



**EUROMAST Sarl**

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