

DATASHEET SPECIFICATION



-  **MAX. FLOW**
1.240 m³/h
-  **MAX. HEAD**
40 meters
-  **CORNELL PUMP**
12NNT-RP-EM18DB
-  **DIESEL ENGINE**
DEUTZ TCD 3.6 L4
-  **SOLIDS DIAMETER**
4.00" – 101,6 mm
-  **PRIMING SYSTEM**
Redi Prime

EUROMACCHINE WATER TRANSFER APPLICATIONS

Water pumping is our natural environment. For this reason, we've been addressing always new pumping problems, delivering functional solutions which provide practical answers to any kind of pumping needs. Floods and emergencies, water transfer and slurry pumping. Our comprehensive range of high performance pump units are designed to be easy to use, prolong lifespan and reduce downtime & operational costs.

WATER TRANSFER SOLIDS HANDLING PUMPS

The 6NNT pump is designed with Cornell's renowned quality and durability. It features a 6" discharge, 6" suction, and enclosed impeller. Available with enterline or tangential volute. Pump body construction is Cast Iron ASTM A48 class 30 materials. Cornell's patented Cycloseal® design is standard, with a Type 1 or 2 single mechanical seal with Buna-N elastomers, stainless steel hardware and tungsten carbide vs. silicon carbide seal faces for abrasion resistance.

FEATURES & BENEFITS

- More than 40 countries covered by our support Team
- More than 12 languages spoken by our Team
- More than 15,000 codes available on stock
- 8 Assembly lines – Lean Manufacturing
- More than 40 years of experience
- Custom build available
- Testing Facility in internal control room

ALL SOLID HANDLING PUMP INCLUDES

- Heavy-duty bearing frame
- Patented Cycloseal design
- Heavy duty construction
- Wide flow and head ranges
- Cycloseal® mechanical seal system
- RunDry™ Indefinite run dry capability
- Redi-Prime® available for fully-automatic continuous priming



TIME SAVING

EFFICIENCY

- Less fuel consumption
- Oversized shaft & bearings
- Easily replaceable wear parts



RELIABILITY

LESS WEAR

- Less Maintenance
- Less Parts
- Less Downtime



CUSTOMIZATION

MADE ON YOUR NEEDS

- Customized solutions
- Taylor made products
- MADE IN ITALY

STANDARD TECHNICAL SPECIFICATION

PUMP

Brand	CORNELL PUMP	
Model	12NNT	
Version	Engine Mounted	
Suction size	300 mm	12"
Delivery size	300 mm	12"
Solid handling	101,6 mm	4.00"
Impeller	356 mm	14.02"
Min Flow	341 m ³ /h	1.500 GPM
MAX Flow	1.200 m ³ /h	5.280 GPM
MAX Head	40 m	100 ft
MAX Speed	1.900 rpm	
BEP Point	900 m ³ /h @ 24 m – 80,4%	
Shaft	2,50"	63,5 mm
Shaft Seal	Mechanical	
Pump Weight	1.048 kg	2.309 Lb

MATERIALS STANDARD

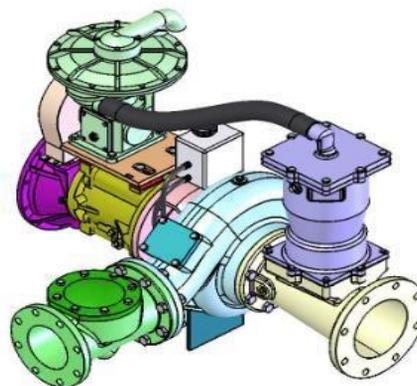
Volute	Cast iron
Impeller	Cast iron
Volute	Ductile iron
Shaft	17-4PH Stainless Steel
Shaft sleeve	416 Stainless Steel
Suction Cover	Cast iron
Mechanical seal	Tungsten Carbide vs. Silicon Carbide
Bearing frame	Cast iron

PRIMING SYSTEM

Brand	CORNELL PUMP
Model	REDI – PRIME
Air Handling	50 m ³ /h (85 CFM)
MAX Vacuum	8,5 m
Drive	Toothed belt – Continuous drive
Delivery	Non return valve

CORNELL PUMP:

12NNT



DIESEL ENGINE

Brand	DEUTZ
Model	TCD 3.6 L4
Power	90,0 kW / 122,4 HP @ 2,200 rpm
Aspiration	Turbocharged
Emission	Stage V
Displacement	3,6 liters
Cylinders	4 in line
Cooling system	Liquid
SAE – Fly Wheel	#3 – 11,5"
Torque	480 Nm @ 1,600 rpm

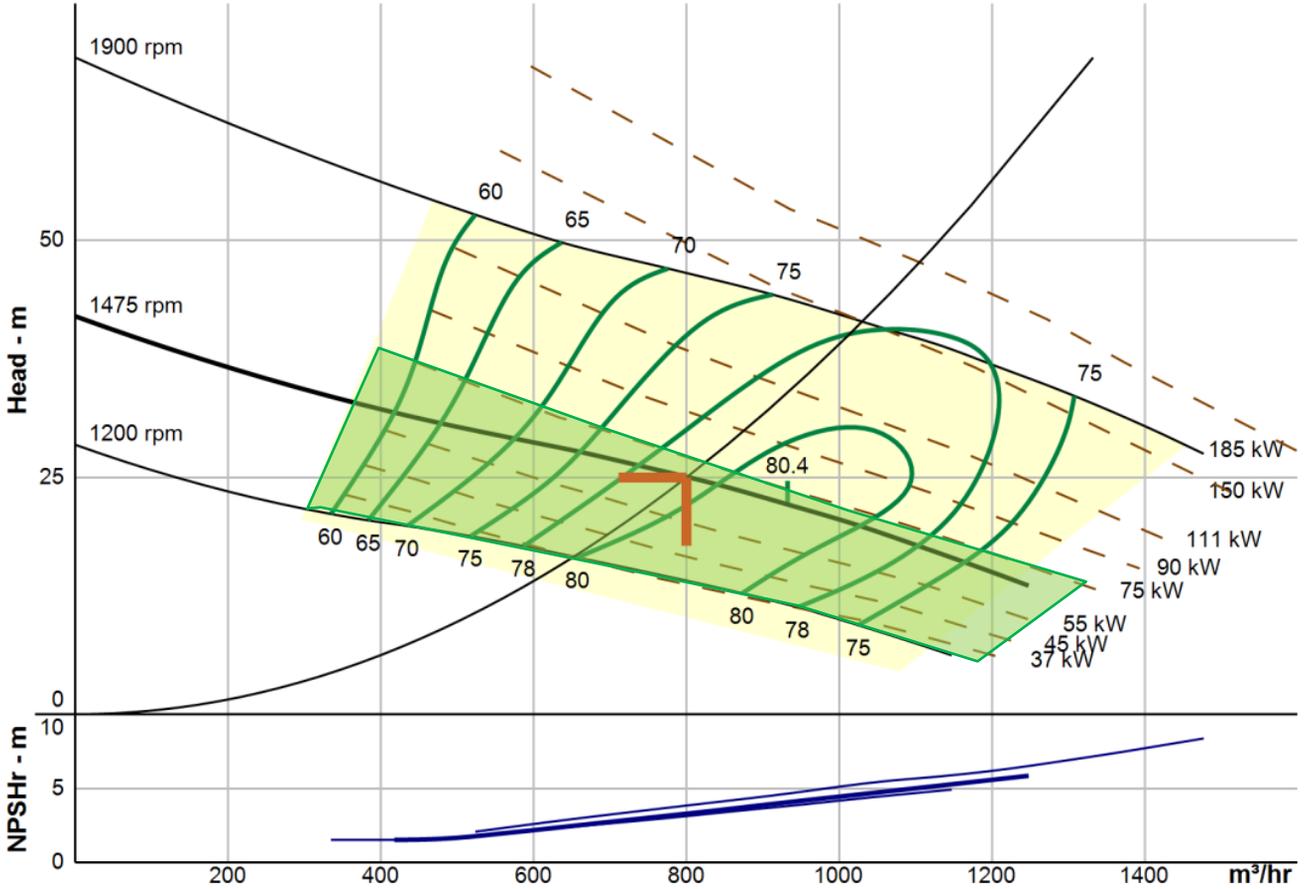
FUEL SYSTEM

Tank Type	Bunded – Double wall
Tank Capacity:	500 liters
Fuel Tank Cap:	1 x Ø80 mm – 3"

CONTROL PANEL

Brand	ComAp
Model:	Intelingen 500
Control:	Pump – Engine
Remote Control:	YES – GPS Location (with Intelingen 500)

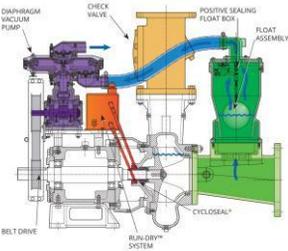
PUMP CURVE SELECTION



SUPER SILENT VERSION



FEATURES & BENEFITS

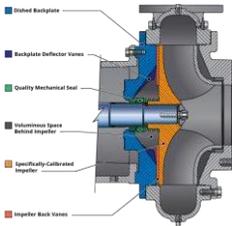
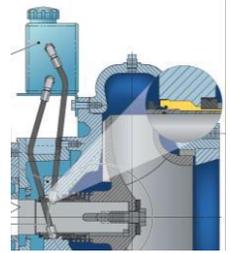


PRIMING SYSTEM REDI-PRIME:

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.

CORNELL RUN-DRY:

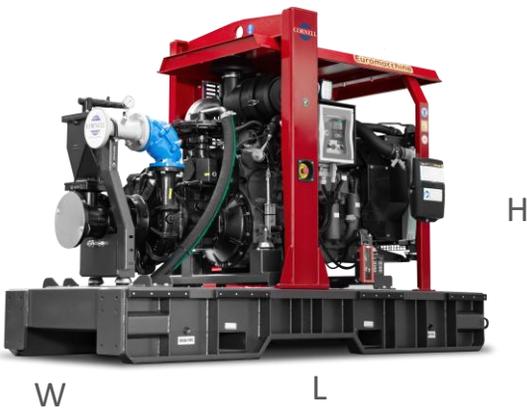
The Cornell Run Dry system is an inventive solution to provide continual lubrication of mechanical seals. Run-Dry provides a gland on the backside of the mechanical seal through which a lubricant can circulate providing lubrication and cooling to the hardened seal faces of the mechanical seal. The result is exceptional seal life regardless of operating conditions, from maximum flow to no flow – Run-Dry.



PROTECTION SYSTEM CYCLOSEAL:

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

DIMENSIONS & WEIGHT



Euromacchine Pump Academy is held by our technicians who share their experience and show the best way to analyze the problem and find the right solution.

For more information about courses, contact us by sending an e-mail to info@euromacchine.it.

DIMENSIONS & WEIGHT [CANOPY VERSION]

L x W x H	mm	3,100 x 1,150 x 1,750	
	inches	122,10 x 45,30 x 68,90	
Dry Weight		2,300 kg	5.060 lb