Vortex Cantilever

<u>الجرارة (</u>) SERIES 1100

Quality Design Features Assure Long, Trouble-Free Service



WIDE RANGE OF APPLICATIONS:

- Coal Fine and Slurry
- Waste Paper Stock
- Clay and Water
- Iron Ore Slurry
- Process Water
- Black Liquor

CAPABILITIES:

- Capacities to 1600 GPM
- Heads to 170 Feet
- Temperature to 400°F
- Pump Length to 6 Feet
- Shaft Diameter to 5"
- Construction: Cast Iron, 316 Stainless Steel, Alloy 20, CD4MC
- Solids up to 4" Diameter Spheres

CONSTRUCTION:

Standard

- All iron
- Fully recessed impeller
- High thrust, double row thrust bearing
- Stress-proof steel shaft
- Round, square or oval cover plates
- External impeller adjustment
- Flanged suction and discharge on all sizes

Options

- Stainless steel fitted
- All stainless steel
- Alloy 20
- Heavy wall discharge pipe
- Special floor plate sizes and
- configurations • Control panels
- Control panels
 Level controls
- V-Belt Drives

Vortex Design provides an unrestricted flow since the impeller is not normally in contact with the solids being pumped.

All cantilever pumps are hydraulically selected and engineered at the factory

1100

VERIFIC PUMP COMPANY

1.Flexible Coupling

2. External Impeller Adjustment

High performance maintained without dismantling pump

3. Bearings

All bearings are located above the floor plate. Moisture-proof enclosure with (2) grease seals, purge type grease lubrication. Extra heavy construction incorporating long bearing span for increased shaft rigidity and long pump life.

4. Direct or Belt Drives

Direct drive with standard Nema "C" face motor- Belt drive with standard "T" frame motor mounting also available

5.Shafting

Rugged alloy accurately machined with taper to precision tolerances

6. Column

Heavy duty steel with welded flanges.

7. Shaft Sleeve (optional)

Protects shaft from abrasive particles at the throttle area.

8. Positive Machined Fits

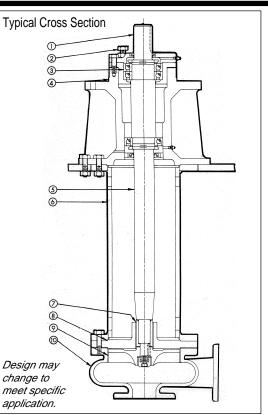
Rabbet fit to assure positive alignment throughout pump construction.

9. Impeller

Fully recessed vortex design eliminates clogging when handling large or fibrous solids. Eductor vanes reduce pressure and solid particle buildup behind the impeller.

10. Casing

Vortex-type concentric design. Extra heavy wall thickness for corrosion allowance. Designed to allow passage of large solids.



Materials of Construction

Part Description	All Iron	316 Stainless Fitted	All 316 Stainless	Alloy 20
Support Head	Steel or Cast iron	Steel or Cast Iron	Steel or Cast Iron	Steel or Cast Iron
Thrust Bearing Housing, Bearing Cap	Steel	Steel	Steel	Steel
Thrust Bearing, Radial Bearing	Steel	Steel	Steel	Steel
Lip Seals	Nitrile	Nitrile	Nitrile	Nitrile
Shaft	Steel C1144	Stainless Steel AISI-316	Stainless Steel AISI-316	Alloy 20
Shaft Sleeve (optional)	Stainless Steel AISI-316	Stainless Steel AISI-316	Stainless Steel AISI-316	Alloy 20
Impeller Nut	Stainless Steel AISI-316	Stainless Steel AISI-316	Stainless Steel AISI-316	Alloy 20
Case Adaptor	Steel	Steel	Stainless Steel AISI-316	Alloy 20
Impeller	Cast Iron Class-30	Stainless Steel AISI-316	Stainless Steel AISI-316	Alloy 20
Casing	Cast Iron Class 30	Cast Iron Class 30	Stainless Steel AISI-316	Alloy 20
Column, Discharge Pipe, Discharge Elbow	Steel	Steel	Stainless Steel AISI-316	Alloy 20

Superior Features

VERIFU PUMP COMPANY Performance Curves

Series 1100 Composite Chart 200r 150 4×4×13 100 **9**0 1750 RPM 80 4×4×10 8×6×10 1750 RPM 1750 - 2×2×10 1750 RPM 70 Total Dynamic Head (ft.) 60 3×3×10 4x4×13 1750 50 -1180 RPM RPM 40 30 3×3×10-1180 RPM 25 -8×6×10 1180 RPM 20 15 4×4×10 1180 RPM 8×6×10 885 RPM 10∟ 10 15 25 40 50 100 150 200 300 400 500 1000 1500 1750 **U.S. Gallons Per Minute** Refer to Series 900 for Specific Vortex Performance Curves Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU CUSTOMER NO. CUSTOMER ___ PROJECT ENGINEER CONTRACTOR CONDITIONS: GPM TDH HP EFF% IMP. DIA

Series 1100 Vortex Cantilever Pumps - 3

1100

RPM