Nagle Pumps

Pump Selector

- Vertical Cantilever Pumps
- Vertical Submersible Pumps
- Heavy Duty Horizontal Pumps
- Accessories

Endurance Engineered Pumps For Maximum Service Life

Specializing in Pumps For Abusive Applications

www.RuthmanCompanies.com
For more than 70 years, Nagle Pumps have been the standard for excellence and reliability in Heavy-Duty Pumps for abrasive, corrosive and high temperature applications. A wide selection of designs, components and materials of construction (available in any abrasion, corrosion, or heat resistant material) allows Nagle to custom engineer each pump to meet your specific requirements. Nagle manufactures Vertical Cantilever, Wet and Dry Mounted, Submerged Bearing, Horizontal, and Submersible Pumps.

Endurance Engineered Features Include:

- Progressive casting wall thickness for maximum service life
- Single volute, single discharge to allow maximum solids passage which eliminates the need for hydraulic balancing, allowing dry running
- Cantilever Pump has no packing seals below the mounting plate
- All mated components register-fit to ensure concentricity and aid in reassembly of the pump
- Thru-bolt construction below the mounting plate provides easy maintenance
- Impeller wear adjustment is located above the sump cover on all vertical models and are easily accessible on horizontal models.
- On vertical pumps, open bypass design feature will tolerate pump shut-off
- Drive options include direct V-belt, right angle, and variable frequency
The TWO Vertical Cantilever

TWO Vertical Cantilever Shaft Wet Pit Pump

Nagle’s most popular pump is designed for wet pit installation with bottom suction or optional top suction. The TWO uses four tubular supports for pump frame stability and allows for open-shaft design. The TWO is recommended for handling heavy slurries up to 70% solids, molten salts, and metals up to 1500° F, with sizes 1” through 16”, capacities to over 10,000 gpm, and pressures to 130 psi.
CDO Dry-Mounted Cantilever Pump

The CDO employs a true cantilever shaft principal which has no submerged bearings, packing, or seals in contact with the pumpage. The CDO is available in both top and bottom suction. Sizes: 1.5” through 10”, capacities to 4000 gpm, and heads from 5’ to over 200’.

MWO Vertical Cantilever Shaft Pump

The MWO has no bearings, bushings, brushes, or rubbing parts below the mounting plate. The spacer area, which is located between the mounting plate and the motor, allows for minor overflow or washdown. Discharge sizes are 1” through 3”, with shaft settings up to 3’. A suction extension to increase the overall pump length is available. The MWO pumps are also available in a dry pit design.
SML/SMR/SMV Submersible Pump

These pumps feature a combination strainer and pump stand with a slurry type water end. Although designed to operate submerged, the SML/SMR/SMV models are also available in air operation, with shaft seal remaining wet at all times. The motor can be explosion-proof or standard enclosure, and is equipped with moisture sensing probes and full thermal protection in windings. SML/SMR sizes: 1” through 10”, with capacities to 4,000 gpm. SMV sizes: 2” through 6”, with capacities up to 2000 gpm.

YWS Vertical Submerged Bearing Pump

The YWS has easy maintenance features, including split yoke bearing assemblies (see inset), and lubrication of the lower bearing(s) from above the floor plate. Several types of lubrication are available. Tailpipes can be added to the bottom suction of this unit, permitting the use of a shorter setting. Sizes: 1” through 16”, with capacities to over 10,000 gpm, and pressures up to 130 psi.
These models have a rugged heavy-duty design with only three wearing parts: casing, suction plate and impeller. They can be used above or below the liquid level as a second stage booster unit (see Priming Inductor, page 7). The enclosed shaft/cartridge bearing assembly protects bearings from contamination or pumpage blow-by. The Nagle FCH Horizontal has several options, including a dynamic seal assembly and optional vertical mounting (see model FDV-H above). Sizes: 1” through 16”, with capacities to over 10,000 gpm, and pressures up to 150 psi.

The KCR’s rugged heavy-duty design also has only three wearing parts: casing, suction plate, and impeller. The KCR can also be used above or below the liquid level as a second stage booster unit (see Priming Inductor, page 7). An enclosed shaft/cartridge bearing assembly protects bearings from contamination or pumpage blow-by. The Nagle KCR Horizontal has several options, including a dynamic seal assembly on some sizes, and a suction inducer to handle heavy media. Sizes: 1” through 16”, with capacities to over 10,000 gpm, and pressures up to 150 psi.
Priming Inductor
This device primes pumping systems where the pump is stationed above liquid level. If left on, the inductor functions mainly as a booster pump, increasing the head developed by the pump, and the capacity of the system. Operation is possible even when the entrance pipe is well covered over with solids. A wide selection of materials of construction allows Nagle to meet your requirements. Sizes: 1.5" through 12".

Agitator
This accessory provides excellent sump agitation to keep the suction from clogging. This option will insure proper operation when exposed to heavy concentrations of solids. The agitator can be used on Nagle’s vertical cantilever, submerged bearing, and submersible units. The material of construction is selected specifically for the Nagle customer’s particular application.

Discharge Elbow
With long and standard radius types with smooth flow lines, Discharge Elbows are endurance engineered to minimize wear and tear, or need for replacement. A wide selection of materials are available to accommodate the Nagle customer’s specific requirements. Sizes: 1" through 16".
Custom Engineering
For Cost Efficient Pumping Solutions

Nagle Pumps has thousands of installations in Power, Chemical, Petrochemical, Steel, Water Treatment, Foundry, Ceramic, Metalworking, and other Process Industries. All these attest to the Nagle philosophy of “Endurance Engineering”...a Commitment to the design and manufacture of pumps which provide the longest service life with minimum maintenance.

Nagle Pumps Typical Applications

Power
- Ash Removal
- Ash Sluice
- Coal Handling
- Coal Pile Runoff
- Pond Return Water
- Scrubber Water

Petroleum
- Coke Breeze
- Separator Pumps
- Filter Feed

Chemical
- Corrosive Pumping
- Molten Salts
- Ammonium Nitrate
- Waste Disposal
- Metal Process

Steel
- Scale Removal
- Slag Quench
- Coal or Coke Slurry

Sand / Gravel
- Dredging
- Dewatering
- Wash/Prep Pumps

High Temperature
- Molten Salts
- Ammonium Nitrate
- Molten Sulphur
- Molten Lead

Other Industries
- Sewage
- Ceramic
- Paper
- Sugar
- Phosphate

Contact Nagle:
1249 Center Ave., Chicago Heights, IL 60411
Telephone: 708-754-2940
Email: Sales@NaglePumps.com
www.NaglePumps.com