

Ruthman Companies

Ruthman Companies was co-founded in 1912 by brothers Alois and Edward Ruthman as the “Ruthman Machinery Company.” Based in Cincinnati, the company serviced the steamboats that traveled the Ohio River.

In 1924, Alois conceived the first sealless centrifugal pump, coining the term ‘coolant pump.’ The brothers named this new pump “Gusher,” giving birth to what is now Ruthman Companies’ flagship brand, Gusher Pumps.



Thomas R. Ruthman
Owner & President



Thomas G. Ruthman
Executive Vice President

Over the decades, the Ruthman Company expanded further within the U.S. and worldwide under the leadership of Thomas R. Ruthman, President, and his son Thomas G. Ruthman, Executive Vice President.

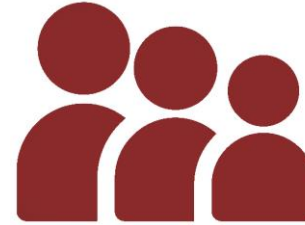
The company continues to expand capabilities with new products and engineering services lead by a dynamic global leadership team.



Ruthman Today

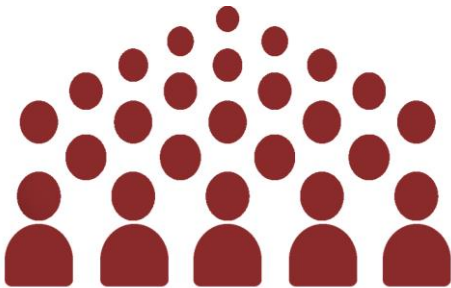


Corporate Headquarters
in **Cincinnati, OH** metro area



100% Family Owned

Three generations of working with
you to meet **your toughest pump
engineering challenges**



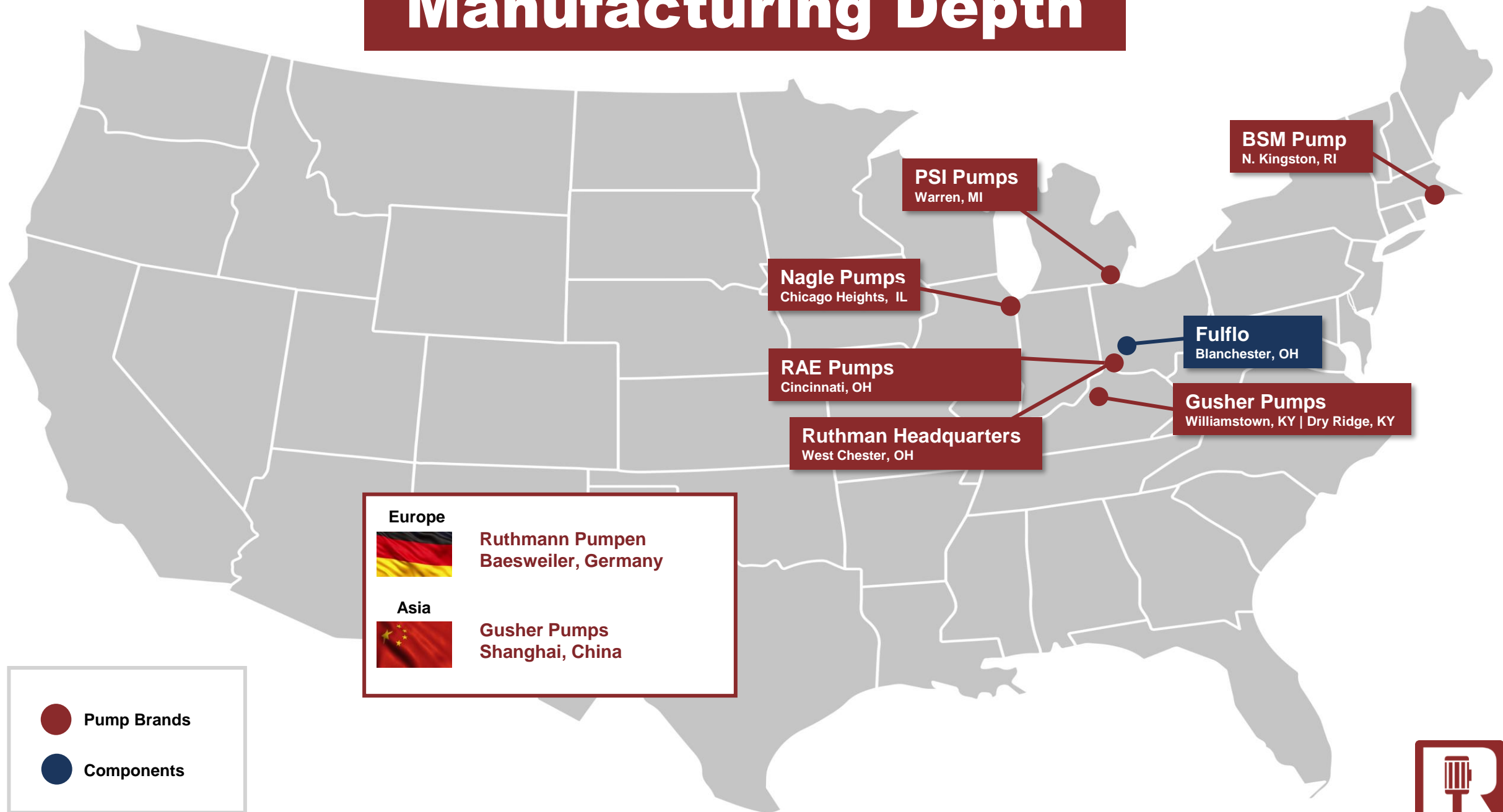
200+
employees worldwide



Manufactured in the **United States**,
with **17 production and service
facilities** in **3 countries**






Manufacturing Depth



All U.S. Locations



-  Pump Manufacturing
-  Distribution & Service
-  Components



Engineering Pump Solutions™

A promise we keep.

Investing in people with passion and expertise is at the heart of our company culture.

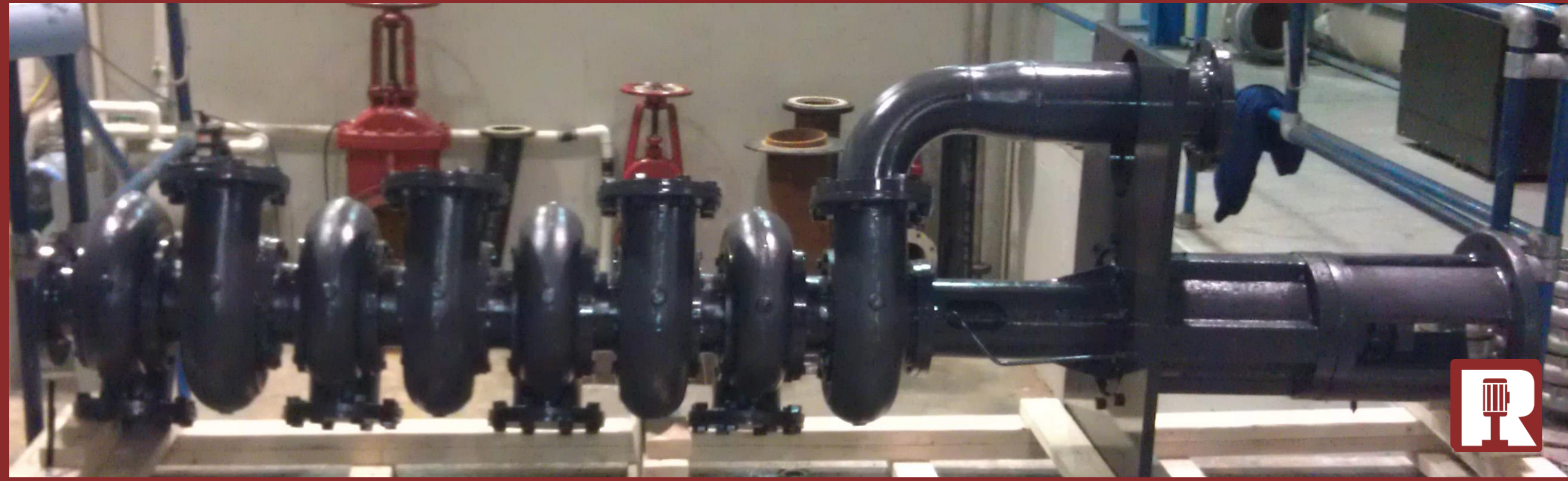


Engineering Pump Solutions™

- Technical Experts with a significant base of knowledge, experience and tools to meet your toughest pump challenges
- We help solve problems by:
 1. Determining areas of concern
 2. Defining objectives with your needs in mind
 3. Identifying and offering alternatives to resolve problems
 4. Managing subsequent improvement projects
- Knowledge and expertise can be easily accessed through many distributors and engineering experts worldwide

Engineering Pump Solutions™

We take the time to create unique designs that solve problems!



Engineering Pump Solutions™

Millions of dollars of on-hand Inventory reduces lead times and keeps your production moving!

- Stock Pumps
- Custom Pumps
- Repairs



Ruthman Pump Product Family

Click on a Pump to learn more.

Slurry & Sludge Pumps



DIN & ANSI Pumps



Self Priming Pumps



Chopper Pumps



Molten Metal Pumps



Vertical Pumps



Multistage Pumps



Screw Pumps



Coolant Pumps



Hydraulic Relief Valves



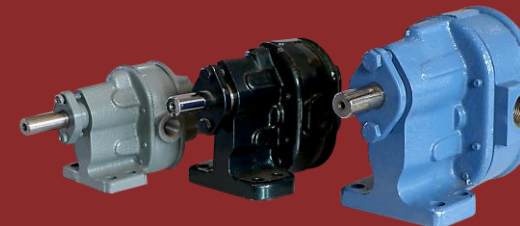
Stamped Stainless Multistage Pumps



Industrial & Municipal Vertical Turbine Pumps



Gear Pumps



Ruthman Products By Brand

Gusher™ Pumps

Nagle™ Pumps

Fulflo™

Hydraulic Bypass Relief Valves

PSI™ Pumps

Ruthmann Pumpen

RAE Pumps™

**Deming® Vertical
Turbine Pumps**

**Gusher™ Pumps
Shanghai**

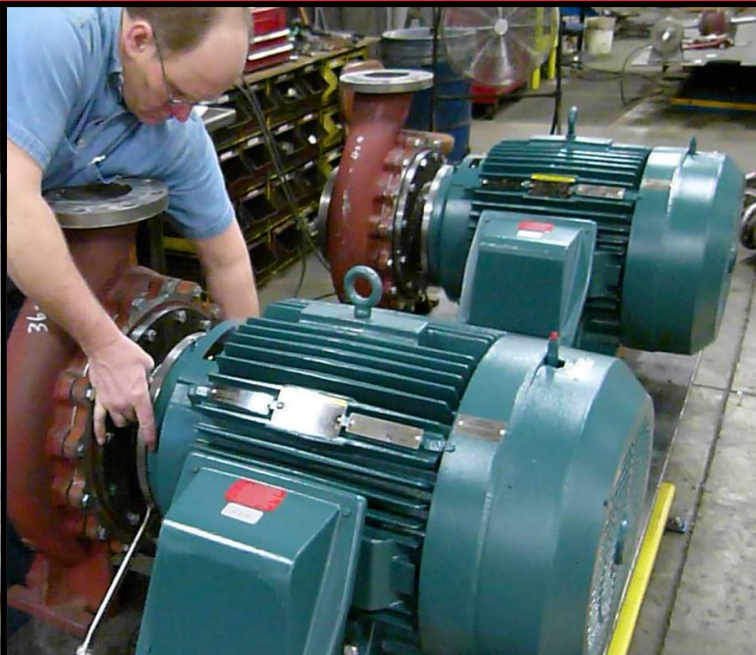
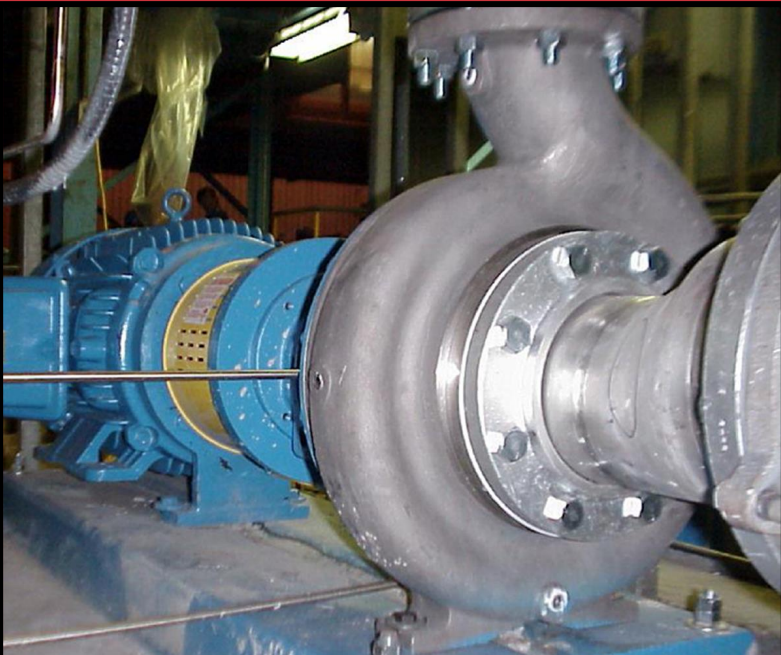
BSM™ Pumps

**Click on a brand
to learn more.**





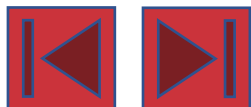
115 Industrial Road
Williamstown, Kentucky



A leader in design and manufacturing centrifugal pumps
with more than 14,000 products.

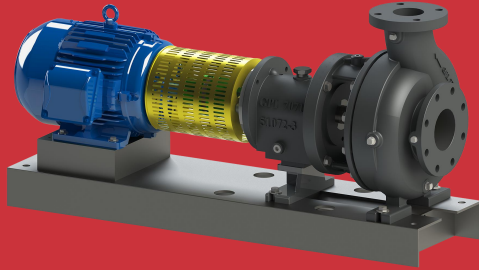


HYDRAULIC
INSTITUTE
SERVICE TO THE
PUMP INDUSTRY



Gusher Pumps

Click on a Category to learn more.



Horizontal Pumps



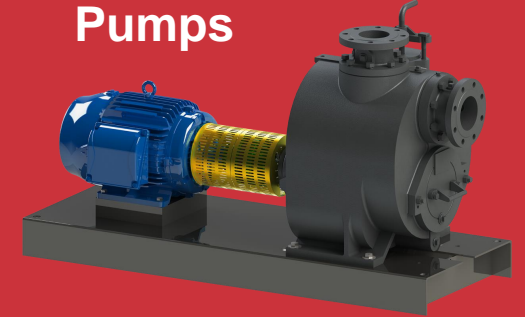
Multistage Pumps



Vertical Pumps



Coolant Pumps



Self Priming Pumps



Chopper Pumps



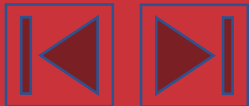
Vortex Non-Clog Pumps



Screw Pumps



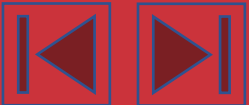
Pump Test Tank



Gusher Pumps

Application Examples:

- Central Coolant Systems
- Cooling Towers
- E-Coat/Elpo Paint
- Phosphate Systems
- Industrial Washers
- Spray Booth/Sludge Systems
- High Pressure Washers/Gun Drilling
- Welder Water
- Quench Systems
- Scale Pits
- Quarry
- Waste Treatment



Gusher Pumps

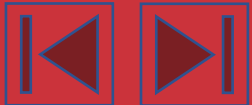
Why Vertical?

Design Features:

- No suction piping, strainers or valve
- No suction flex joints required
- No grouting or foundation required
- No alignment required
- No mechanical seals required
- Mechanical seal flush plans eliminated
- Less HP draw with no Mechanical Seal
- Less floor space required
- Less suction condition problems

Advantages:

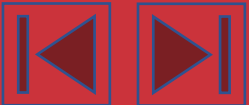
- Eliminates Mechanical Seal, thereby eliminating the most common point of failure
- Less downtime and lower labor costs than horizontal pumps



Gusher Pumps

7550 Series Vertical Centrifugal End Suction Pump

- Designed to give heavy duty pumping service in a wide range of industrial applications
- Cantilever design eliminates the Mechanical Seal and the resulting associated problems of a seal
- Each phase of its production has been carefully controlled to ensure long life and minimum maintenance



Gusher Pumps

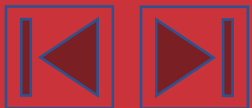
7550 Series Vertical Centrifugal End Suction Pump

Features:

- Capacities up to 4000 GPM
- Pressures up to 400' TDH
- Materials of Construction: Cast Iron, Stainless Steel
- Motor Mounting arrangement assures positive coupling alignment at all times.
- External impeller adjustment for ease in maintenance and continued high efficiency
- Heavy Duty Bearings
- OSHA compliant Coupling Guards

Options:

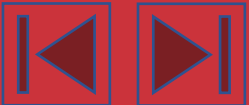
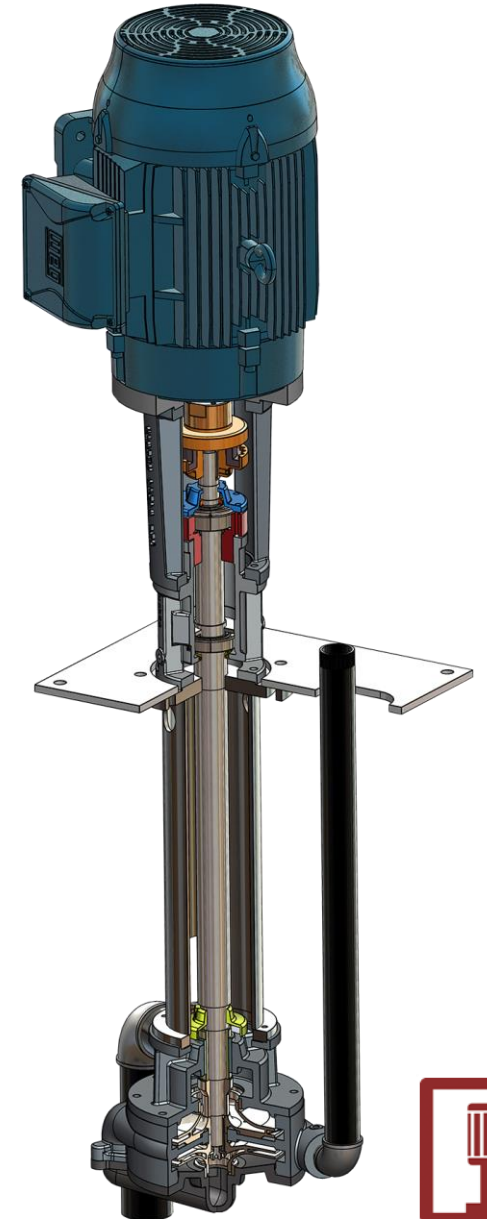
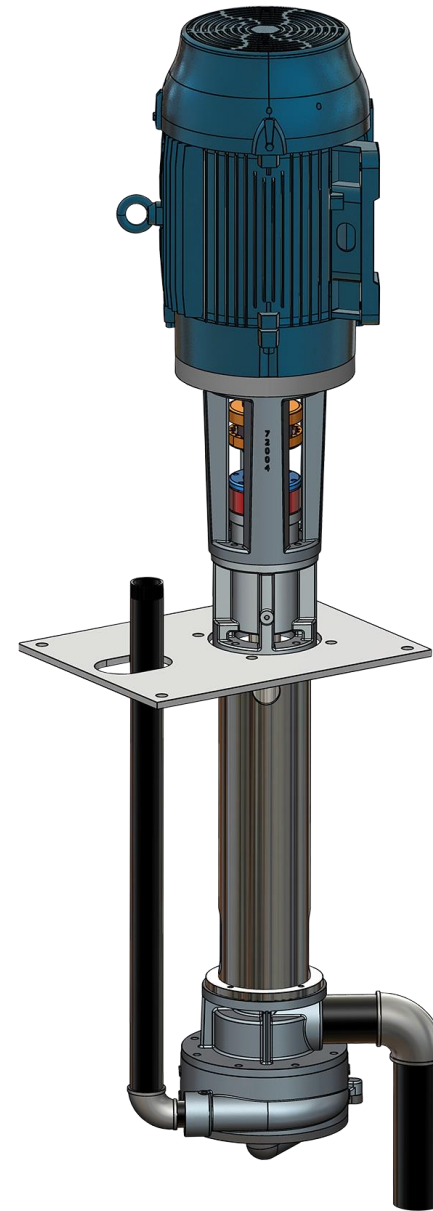
- Discharge Pipe extended through Mounting Plate
- Full Cantilever design
- Extended Lengths available up to 20 Feet
- CD4MCu and other alloys
- Jacketed Ball Bearing Housing for high temperature applications



Gusher Pumps

7550 Series Two Stage Vertical Centrifugal End Suction Pump

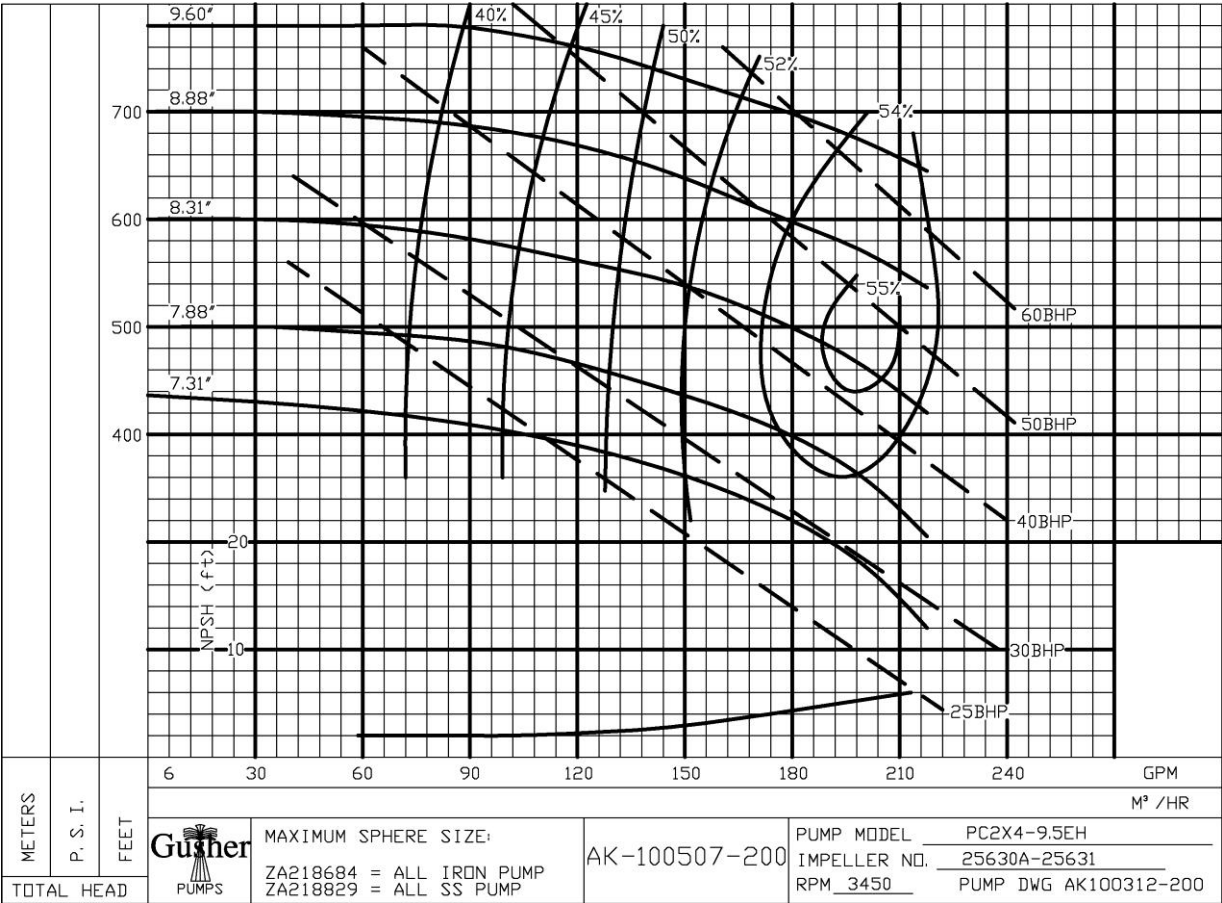
- Achieves higher pressure with smaller footprint than single stage 7550 Series
- Designed to give heavy duty pumping service in a wide range of industrial applications
- No mechanical seal required; eliminating common maintenance problems associated with seal failure
- Each phase of its production has been carefully controlled to ensure long life and minimum maintenance



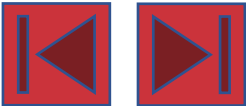
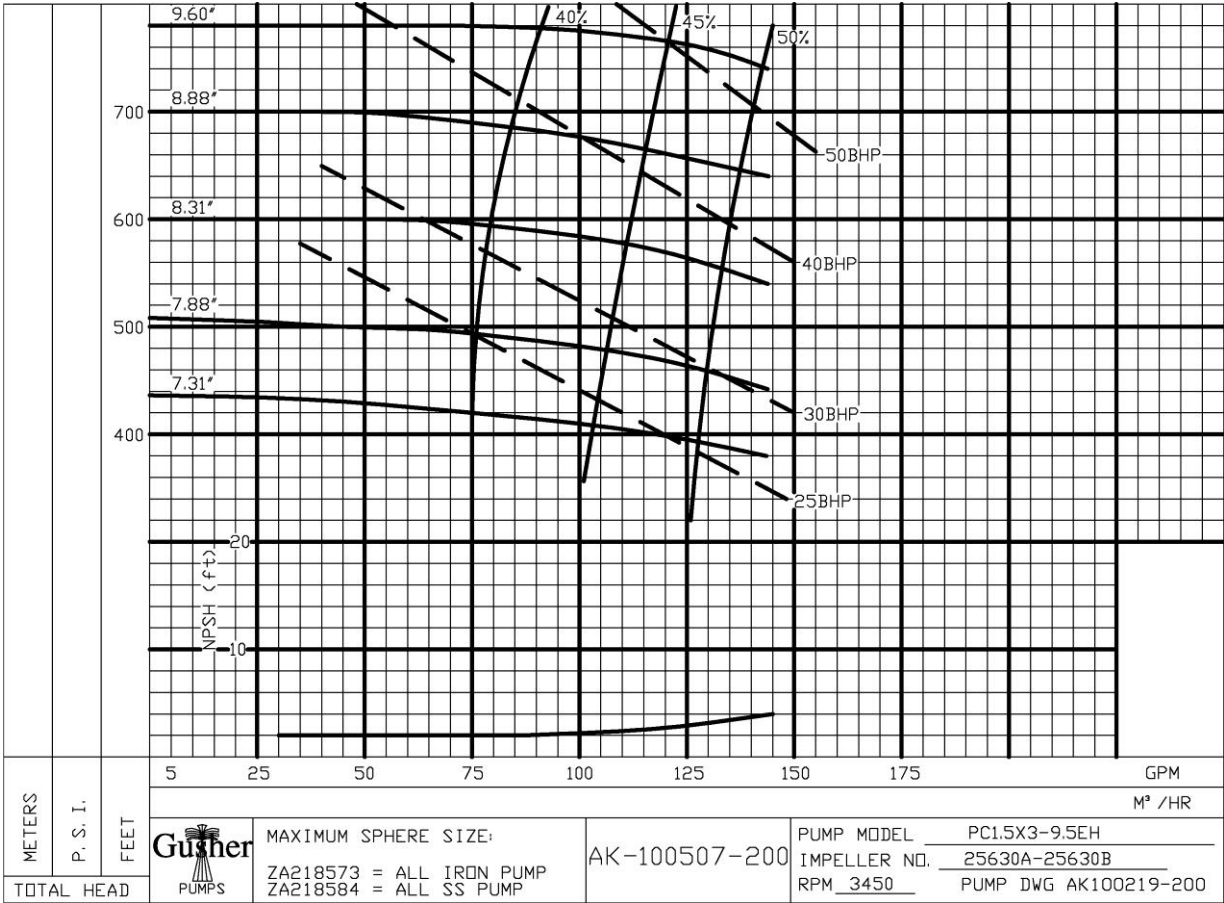
Gusher Pumps

7550 Series Two Stage Vertical Centrifugal End Suction Pump

2x4-9.5



1.5x3-9.5

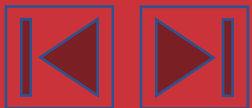


Gusher Pumps

7550 Series Two Stage Vertical Centrifugal End Suction Pump

Features:

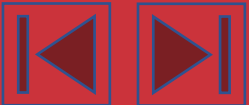
- Capacities up to 200 GPM
- Pressures up to 400' TDH
- Materials of Construction: Cast Iron, Stainless Steel (CD4MCu and other alloys available)
- Motor Mounting arrangement assures positive coupling alignment
- External impeller adjustment for ease in maintenance and high efficiency
- Heavy Duty Bearings (Jacketed Ball Bearing Housing available for high temperature applications)
- OSHA compliant Coupling Guards
- Optional Discharge Pipe extended through Mounting Plate
- Extended Lengths available up to 20 Feet



Gusher Pumps

7600 Series Vertical Top Pull Out Centrifugal End Suction Pump

- The 7600 series has been designed to minimize maintenance downtime.
- If maintenance is required, the top pull out design allows the rotating element to be removed without disturbing the mounting plate or piping
- All models come with maintenance free automatic coupling alignment

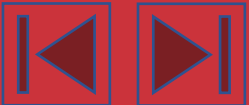


Gusher Pumps

Enclosed Column Centrifugal Pump

Features:

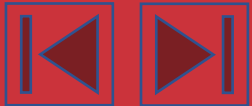
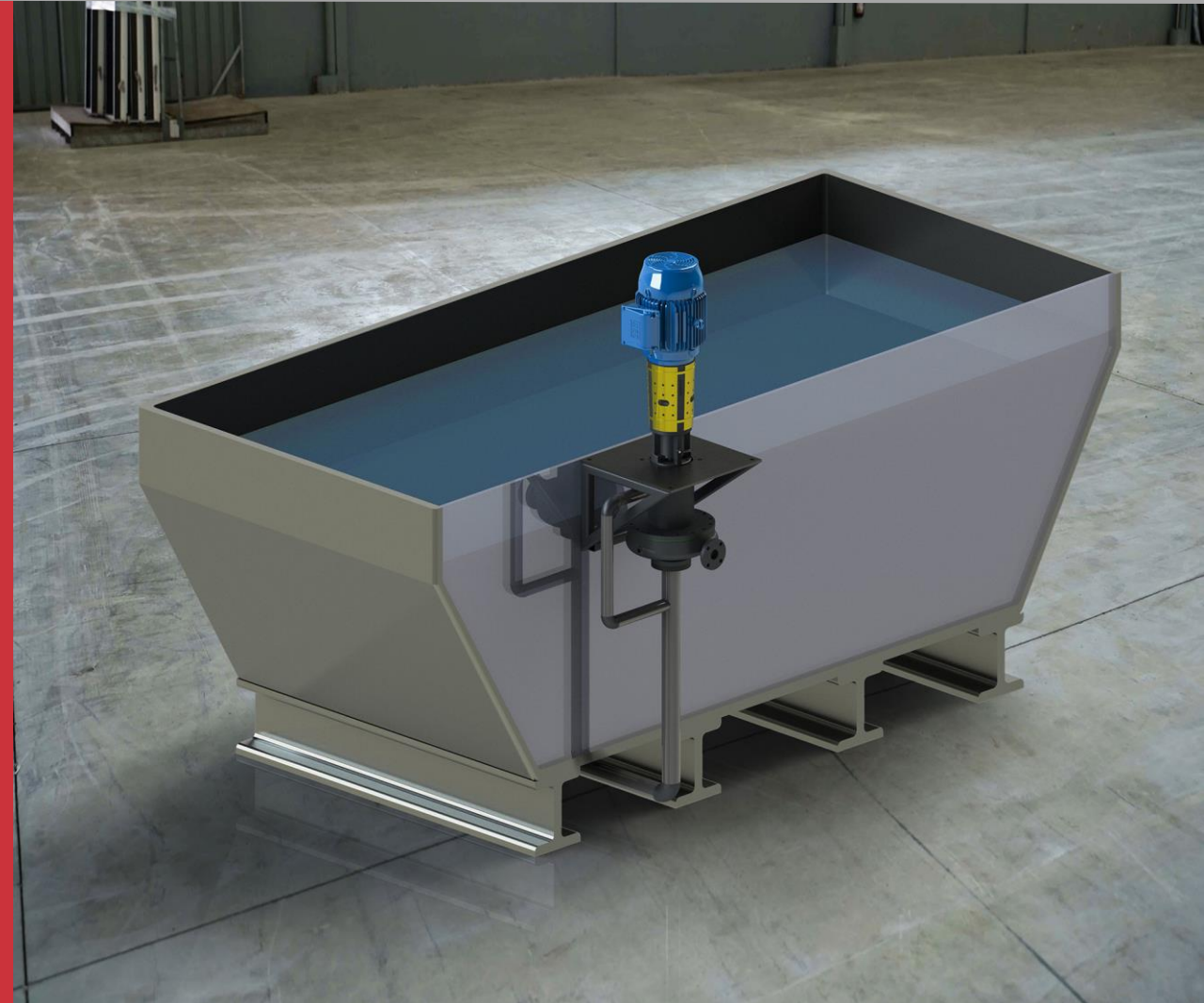
- Enclosed column for external tank mounting
 - Suction line is piped to inlet.
 - Mounting Plate below bearing housing must be above maximum liquid level.
 - Pump housing must be below liquid level at start up.
 - Overflow hose or pipe is connected back to tank.
- Eliminates mechanical seal failure problems

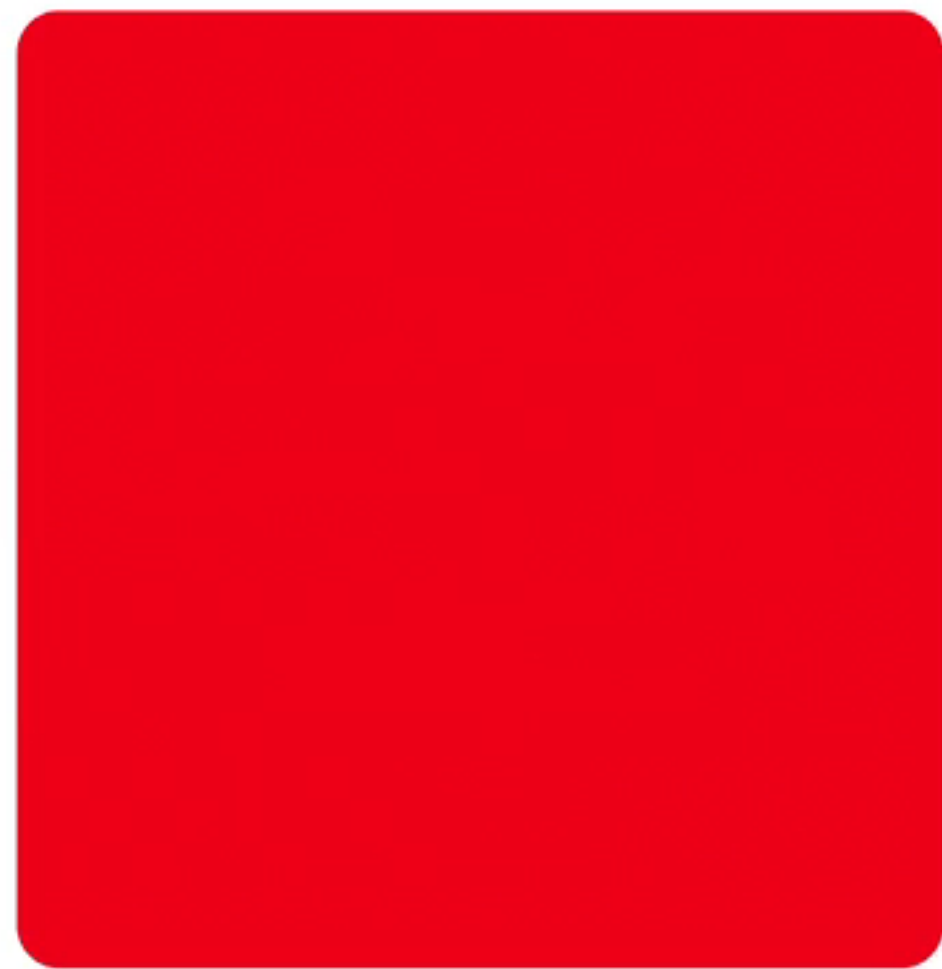


Gusher Pumps

Enclosed Column Centrifugal Pump

Typical tank installation

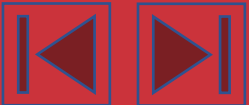




Gusher Pumps

Vortex Non-Clog Series Pumps

- Designed to handle large solids and fibrous materials without clogging.
- The design allows throttling to a low flow rate that is unacceptable with typical centrifugal pump designs.
- The design creates significantly lower radial loads on shafts and bearings than typical centrifugal pump designs.
- The complete Vortex Non-Clog line is designed to pump various liquids and oils containing up to 30% entrained air
- Extreme Volute wall thickness extends life in abrasive applications.



Gusher Pumps

Chopper Pumps

- Eliminate heavy solids by chopping them prior to pumping, preventing clogs.
- Handles paint overspray sludge, chip breakers, and other solids.



The Gusher
CHOPPER



The Gusher CHOPPERATOR



Gusher Vertical Heavy Duty Pumps

General Series Options:



Barrelmount Style

Allows for easy alignment.

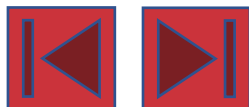
Jacketed Ball Bearing Housing

For high temperature applications.



OSHA Approved Coupling Guards

Gusher provides guards around rotating parts.



Discharge Pipe Extending through Mounting Plate

Available in different materials and configurations.



Extended Lengths

We can build a pump to fit your tank.



12 inch



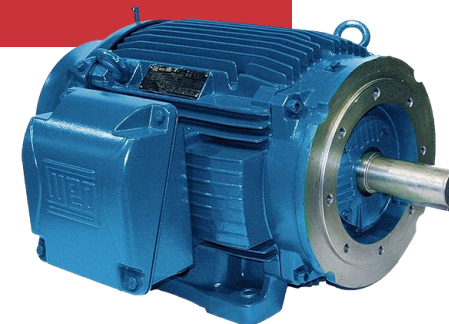
6 inch



4 inch



3 inch



C-Face Electric Motors

Maintains consistent alignment when used with Gusher's Barrelmount Style Pump.



Couplings

Easy to install and eliminates the need for lubrication allowing dependable and quiet operation.

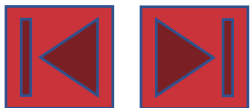


7550/7600 Series

Arguably, the best single stage vertical pump on the market

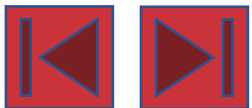
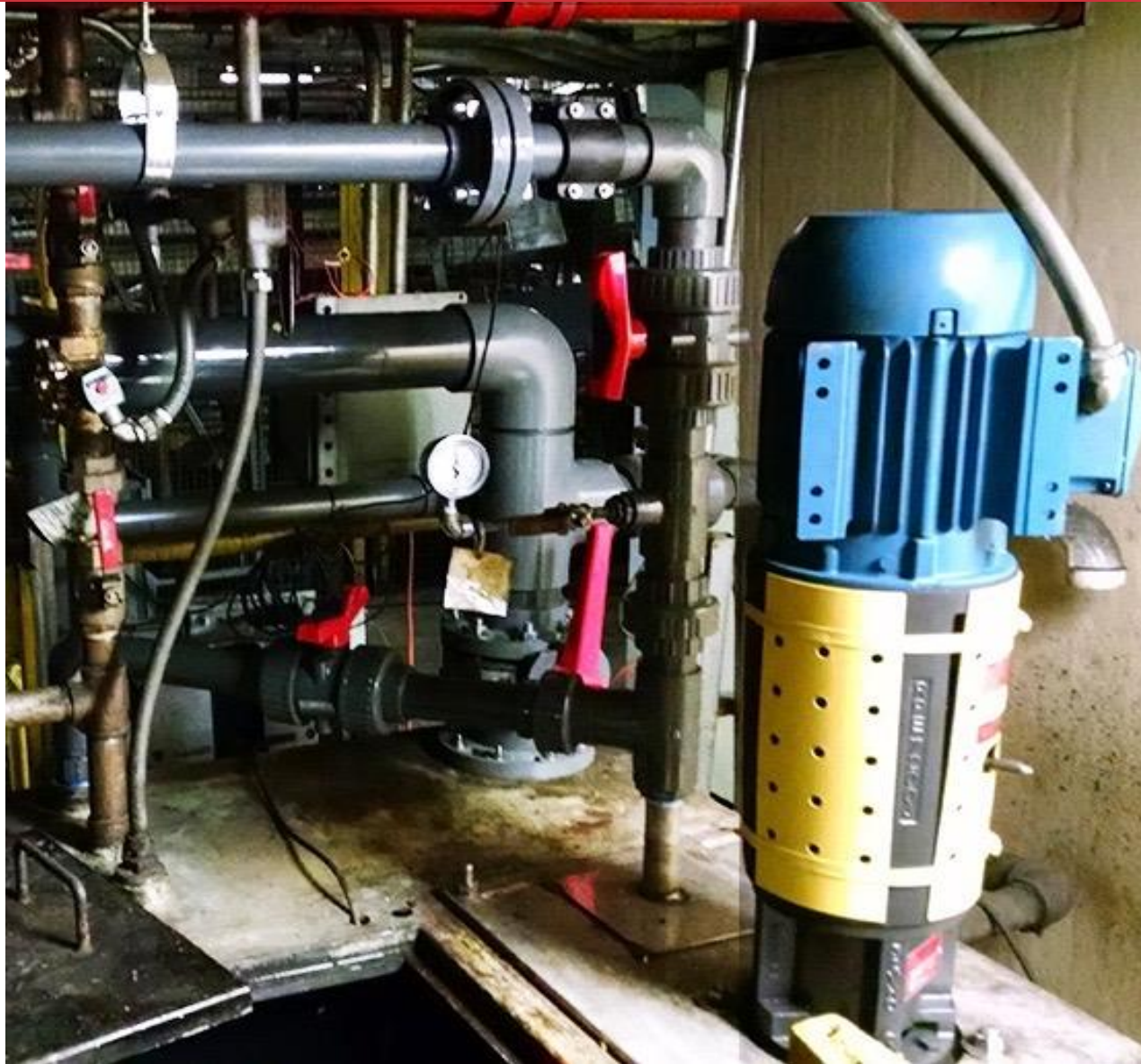
Advantages over Kerr, Carver, Deming, Goulds Verti-Flo

- Oversized shafting
- Tapered, hydraulically and dynamically balanced impeller
- Carbon or TC bushings
- Wiper vanes on back side of impeller reduces downthrust
- Standard spool pieces for standard lengths, eliminates concentricity and misalignment concerns
- Full cantilever option
- Optional oversize bushing and special slinger for paint
- Optional high temperature construction
- Optional materials – 28 chrome and CD4MCu
- Can do in tangential housing
- Top pull out design is superior to competition
- Can offer special mounting plates and pipe location
- Variations in:
 - Standard 7550
 - Top pull out
 - Vortex/recessed impellers
 - Enclosed column for mounting outside a tank
 - Chopper



Gusher Pumps

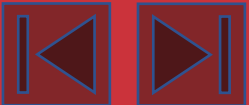
Gusher 1.25x1.5-9
SEL+12-CDM-B-DP
installed in an **Anolyte
Tank** at **Toyota Motor
Manufacturing, Kentucky.**



Gusher Pumps

7800 & SEV Series Vertical End Suction Pumps

- The 7800 Vertical Series includes our vertical close-coupled and SEV pumps.
- Their heavy-duty one-piece shaft construction has no seals, bushings, or metal contact below the mounting plate.
- No metal-to-metal contact helps ensure a maintenance-free life



Gusher Pumps

7800 & SEV Series Vertical End Suction Pumps

Features:

- Capacities up to 400 GPM
- Pressures up to 180' TDH
- Back pull out design
- Renewable sleeves and bushings
- Run dry capability
- Heavy duty bearings

Options:

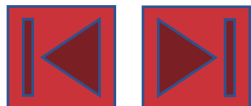
- Extended length
- Above the plate discharge
- Stainless Steel



7800 & SEV Series

Advantages over Wilo/Scot

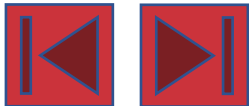
- **Significantly larger capacity range**
- **Design flexibility**
 - Extended length range
 - CDM option
 - Any size in stainless wetted construction
 - Some with pump out vanes
 - Recessed impeller option
 - Enclosed column option
 - Vertical discharge above plate
 - TC bushing option
 - Optional materials : Stainless, 28 Chrome, CD4MCu
 - Motors
 - Finned Bodies for better cooling and lower temperature contact points
 - Terminal block connections
 - 1.25 service factor
 - CSA approval
 - 575 Volt option
 - Dual 60 and 50 Hz rating



7800 & SEV Series

Advantages over Brinkman

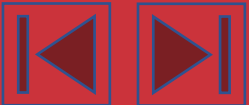
- **Significantly larger capacity range**
- **Superior Solid One Piece Shaft**
- **Design Flexibility**
 - Extended length range
 - CDM option
 - Any size in stainless wetted construction
 - Some with pump out vanes
 - Recessed impeller option
 - Enclosed column option
 - TC bushing option
 - Optional materials: Stainless, 28 Chrome, CD4MCu
 - Superior warranty consideration
 - Motors
 - Finned Bodies for better cooling and lower temperature contact points
 - Terminal block connections
 - 1.25 service factor
 - CSA approval
 - 575 Volt option
 - Dual 60 and 50 Hz rating



Gusher Pumps

High Pressure Centrifugal Multi-Stage Pumps

- Pressures of up to 400 PSI
- Some models also offer dual discharges, one for low volume and high pressure, and another for low pressure and high volume
- Horizontal and Vertical Multi-Stage Pumps are available



Gusher Pumps

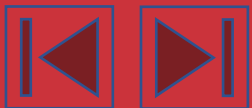
High Pressure Centrifugal Multi-Stage Pumps

Features:

- Pressures up to 400 PSI
- Pressurized system
- Up to 36" of immersion with intermediate bushing
- Built-in mounting flange
- Balanced mechanical seal
- Above mounting flange discharge
- NPT and 1" NPT discharge

Options:

- Vertical and horizontal configurations
- Mounted in 10-200 gallon reservoir
- Materials of construction: Rugged Grade 30 Cast Iron or 316 Stainless Steel
- Silicon Carbide Standard Tungsten Seal
- B.S.P.T. Discharge
- Custom options



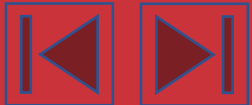
Gusher Pumps

Molten Metal Pumps

Handle liquid metals up to 1,200°
Fahrenheit

Applications:

- Lead
- Babbitt
- Magnesium
- Solder
- Tin
- Spelter
- Molten Salt



Gusher Pumps

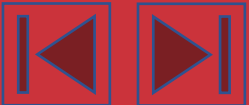
Below Plate Immersible Pumps

Applications:

- Machine Tool Hydraulic Coolant
- High Volume Transfer

Features | Options:

- Discharge parallel with shaft
- Multiple lengths available
- Available in cast iron or plastic impellers
- Fan-cooled and custom motors available
- Available horsepower up to 1HP



Coolant Pumps

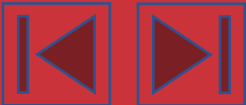


Gusher Pumps

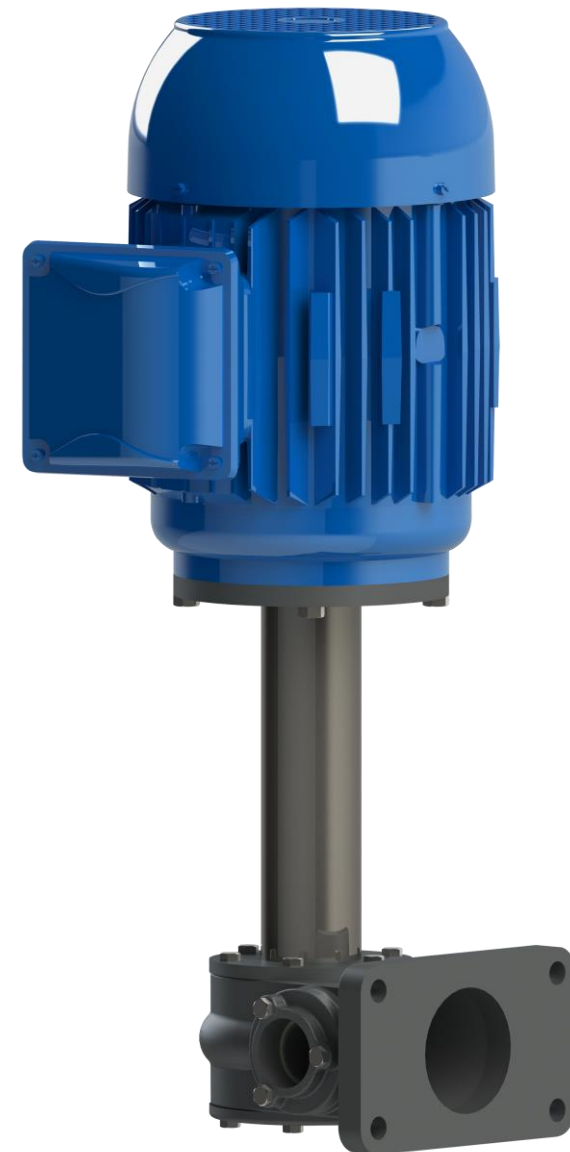
Flange Mount Seal Pumps

Features | Options:

- Pumps are normally used in applications where the reservoir is built into the machine base and where space is limited
- Capacities up to 650 GPM, up to 160' TDH
- Available in internal and external mountings
- Dry-running capabilities on most units
- Some models available in stainless steel
- Equipped with a self-adjusting seal, ideal for mounting at or below liquid level
- Can be converted into a pipe inlet type using intake adapter types



Coolant Pumps



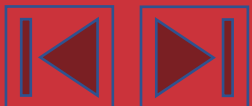
Gusher Pumps

Above Plate Discharge Coolant Pump

Features | Options:

- Economical
- Rugged single-shaft design
- Fits shallow sumps
- Lightweight aluminum design
- Single Phase or 3 Phase Motors available

Coolant Pumps



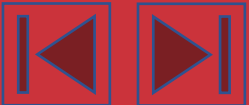
Gusher Pumps

11023 Immersible Pump

Features | Options:

- Rugged cast iron construction
- High-speed impeller
- One-piece shaft
- Available in variable lengths
- Low and high-speed motors available in Single Phase or 3 Phase $\frac{3}{4}$ to 15HP

Coolant Pumps



Gusher Pumps

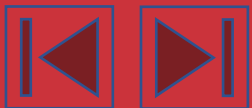
Machine Tool Tank Units

Features:

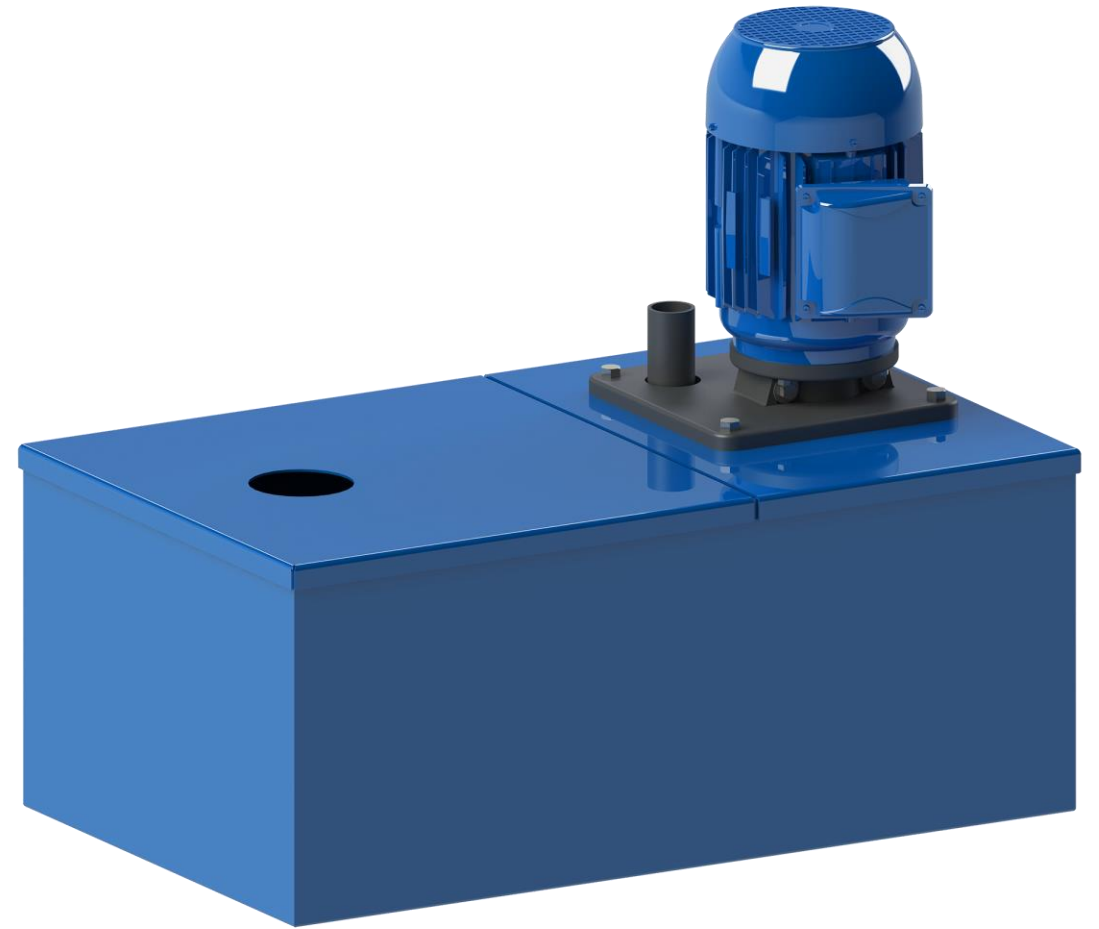
- Widely used for supplying coolant to machine tools not otherwise equipped with a coolant system
- Depending on size, tank units may be used as permanent, portable, or auxiliary coolant systems
- Engineered to be used with Gusher multi-stage immersion line and screw pumps

Options:

- Standard reservoir sizes from 4-200 gallons with pumps from 1/25 through 7 1/2HP
- Available with NEMA foot-mounted motors
- Baffles and Chip Baskets available
- Caster option for portability



Coolant Pumps

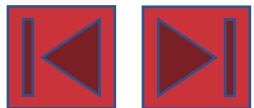


Gusher Pumps

Gusher Tank Units are essential
in **Ford's Sterling Rear Axle
Plant's Lapping Operation.**



Go Further

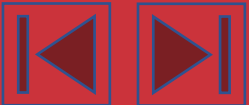


Gusher Pumps

Electric Immersion Pumps

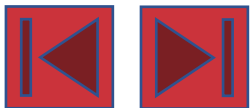
Features:

- Capacities up to 32 GPM
- Pressures up to 100' TDH
- Flow rates exceeding 15,000 GPM
- Automatic deflector sealing of pumpage
- Standard C-Face Motors
- Impellers are adjusted at the factory
- Plastic components for corrosion resistance
- Self-Seal design
- Permanently lubricated bearings
- DIN Mounting



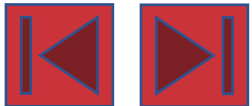
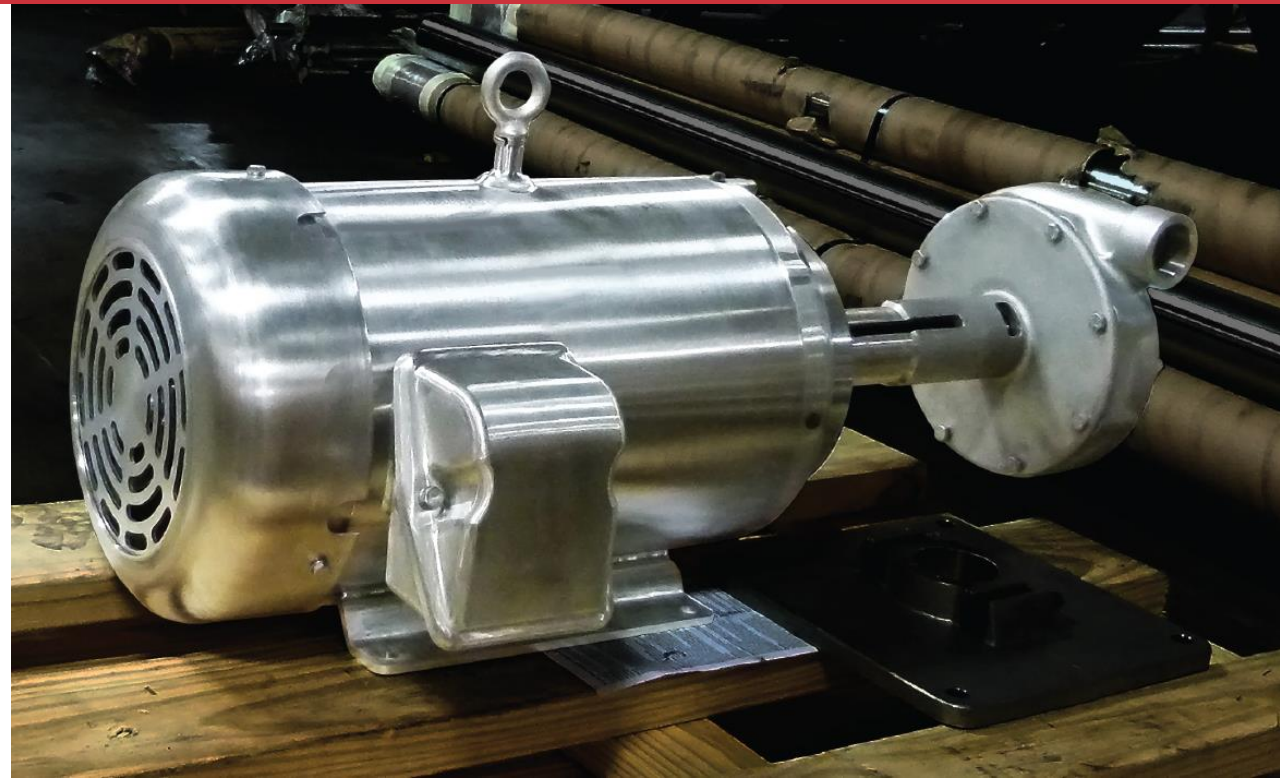
Gusher Pumps

Large order of Gusher Stainless Steel Seal-Less, above plate discharge pumps, shipping to a **General Motors' Paint Facility.**



Gusher Pumps

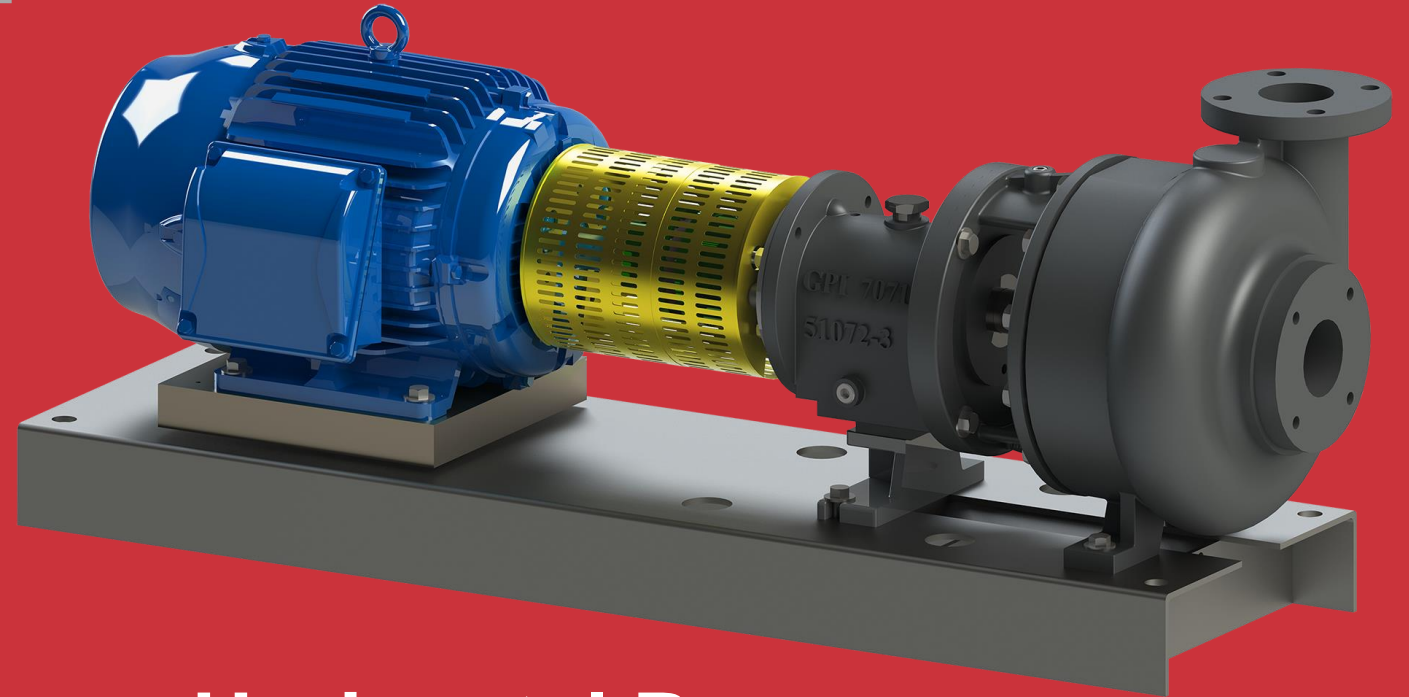
Special Gusher Stainless Steel, High Pressure Pump for the **Pharma Industry**



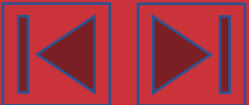
Gusher Pumps

Application Examples

- Paint Systems
- Filtration Systems
- Paper Pulp
- Automotive
- Aerospace
- Chemical Processing
- Municipal Systems
- Oil Drilling
- Liquid Transfer
- Pharmaceutical



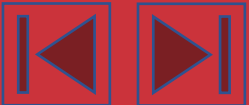
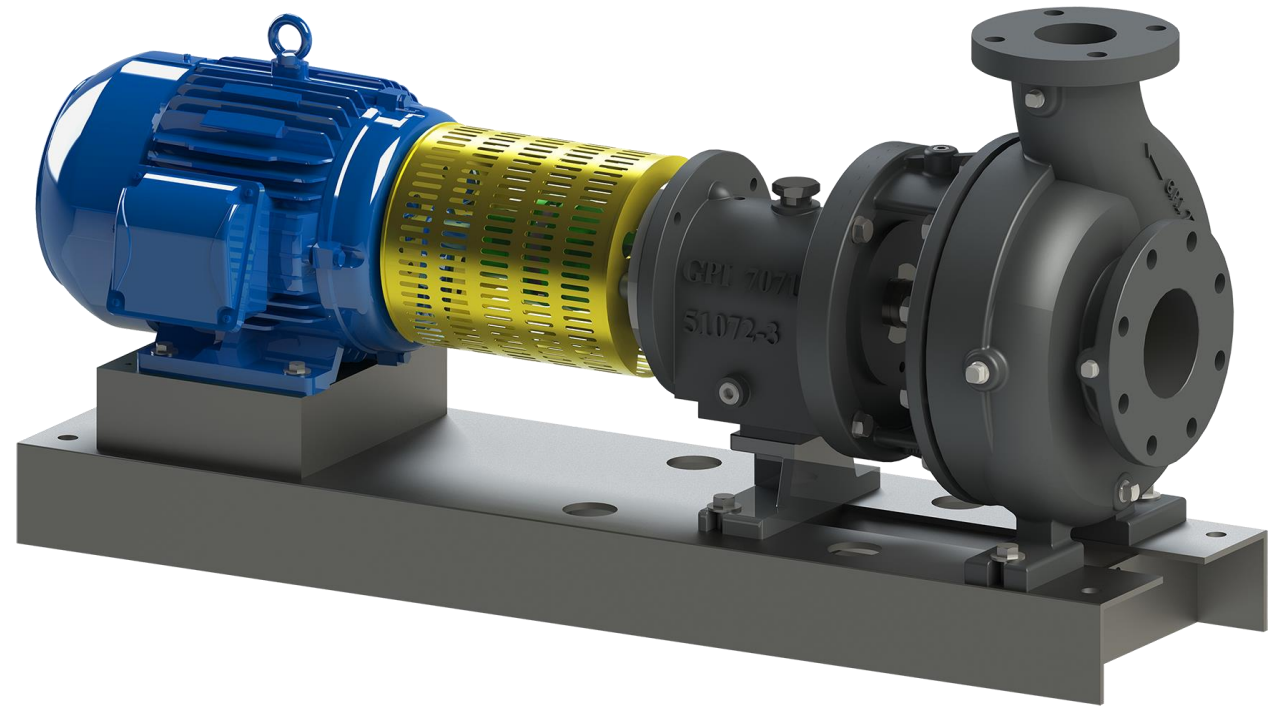
Horizontal Pumps



Gusher Pumps

7071 Series ANSI B 73.1 Specification Horizontal End Suction Pumps

- The 7071 Series is a horizontal, open impeller centrifugal pump that meets the specifications of ANSI B-73.1.
- The Series options include 3 power ends and 33 pump sizes.

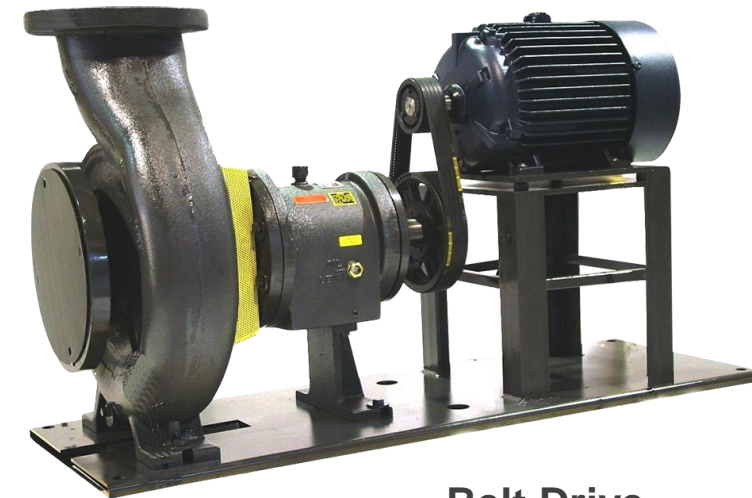
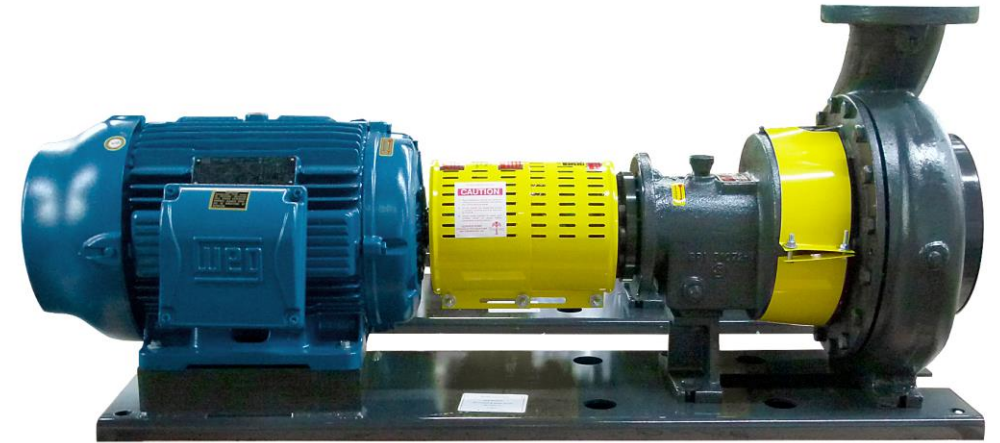


Gusher Pumps

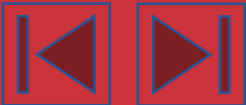
7071 Series ANSI B 73.1 Horizontal End Suction Pumps

Features:

- Capacities to 5000 GPM and Heads to 750 Feet
- Temperatures to 500° F (250° C)
- Pressures to 700' TDH
- Center Line Intake and Discharge
- ANSI 16.5 Flanges
- ANSI 73.1 Style Casing
- Heavy Duty Casings and Shaft
- External Impeller Adjustment – ‘like new’ clearance in just minutes
- 3 Power Frames:
 - S Frame (5 Pump Sizes)
 - M Frame (18 Pump Sizes)
 - L Frame (10 Pump Sizes)



Belt Drive
ANSI Pump

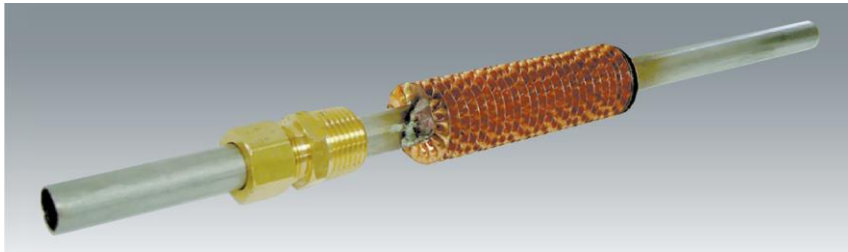


Gusher 7071 Series

Series Options:

Finned Cooler/Jacketed Bearing Housing

For high temperature applications. Back pull-out design for ease of maintenance.



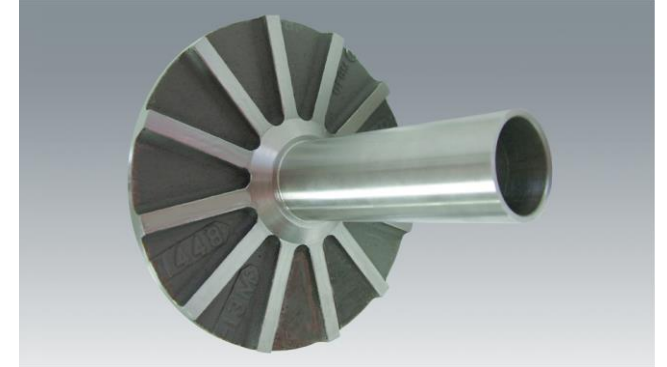
Safety - Coupling Guards

Guards around rotating parts



Repeller

Repeller-style sealing for abrasive applications



Base Plates supplied with jack bolts

Cast Iron



Fabricated Steel



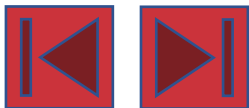
Standard Bore Stuffing Box

Accommodates seals in varied sizes and styles, such as cartridges, components, and packaging



In-line Adapter

Converts center line closed pump to an in-line.

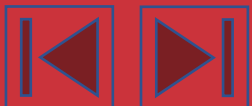


7071 ANSI Series

Advantages over Goulds, Flowserve, Summit and Griswold

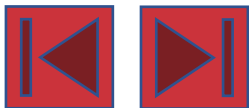
Overall, a very similar product offering

- Optional run dry RPE Seal Survivor
- In-line piping adapter
- C-Face Barrel motor mounting option.
- Optional materials – A20, CD4MCu, 28 Chrome
- Additional sizes to fill gaps in typical ANSI coverage:
 - 6x8-11 fits into 6x8-13
 - 4x5-7, 4x5-11, 5x6-9 etc.



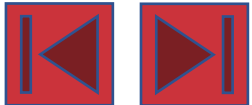
Gusher Pumps

Shown here are 2 of 6 Gusher 7071 Series Pumps now in use at a **Ford Engine Factory** in Chang Qing, China.



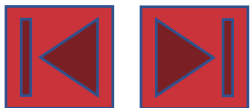
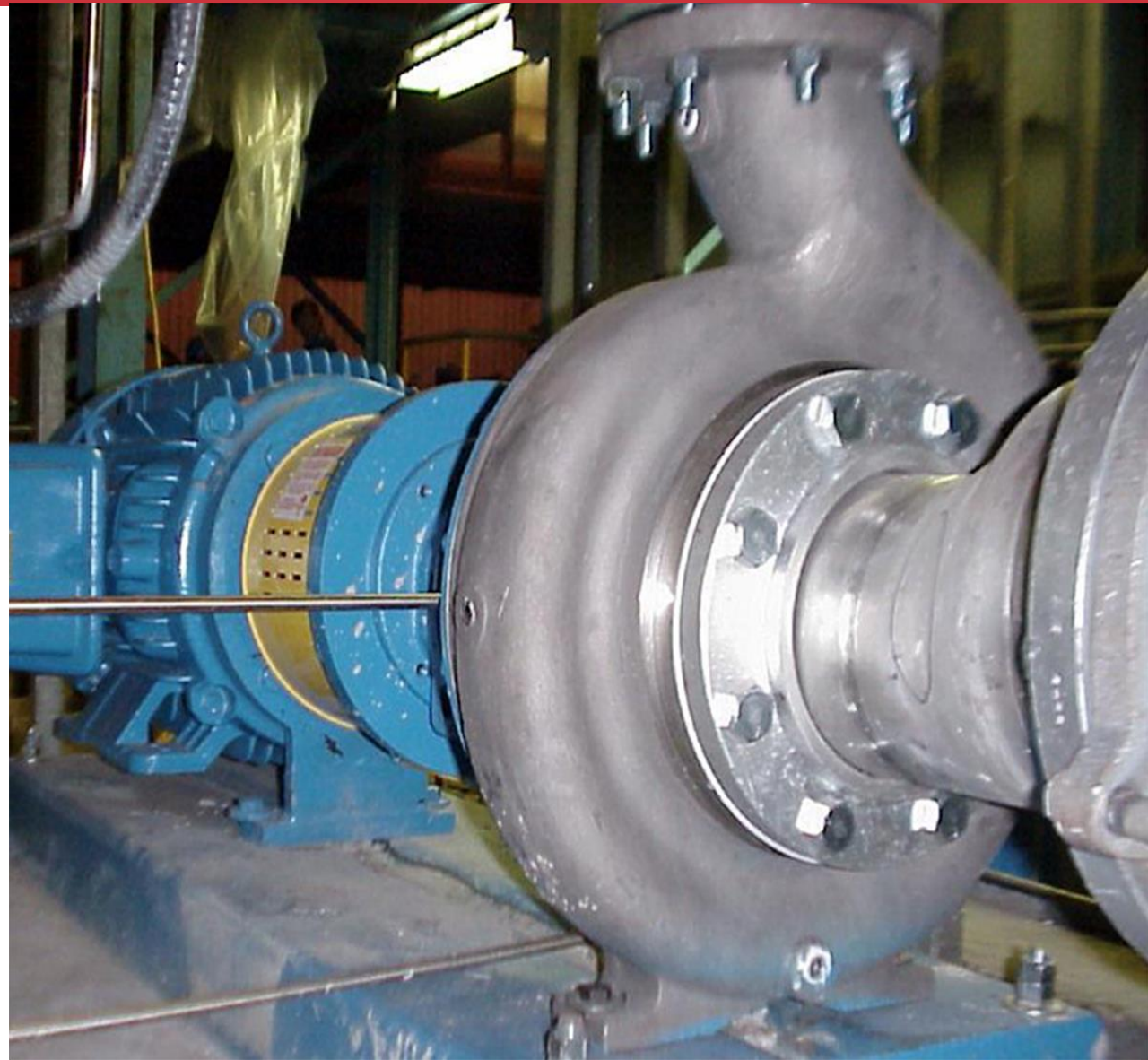
Gusher Pumps

These Gusher Horizontals perform flawlessly in a **challenging process environment.**



Gusher Pumps

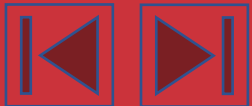
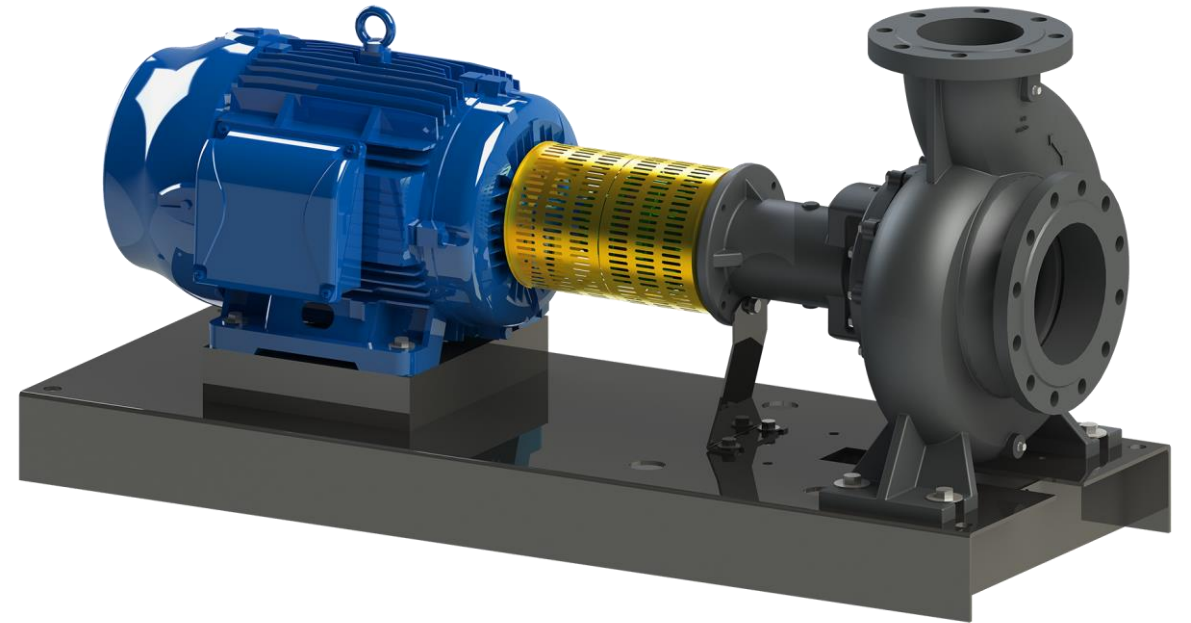
Gusher 7071 C-Face Barrel
Pump Installation for
Chrysler Canada.



Gusher Pumps

Block DIN Series

Block DIN pumps feature engineered part interchangeability ensuring quick conversion to the pump assembly matching your application.

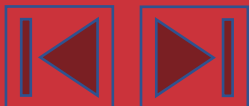


Gusher Pumps

Block DIN Series

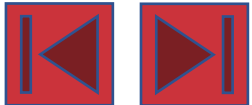
Features:

- Pump dimensions are designed to match the DIN 733 standard
- Standard ball bearing housing sizes the interchange with many pump models
- Inlet and outlet flanges are a raised face design, allowing for more positive sealing of flanges
- Internal pump hardware material is 316 stainless steel as standard
- Shaft sleeve material is 316 stainless steel as standard
- Side port volute drain featured for ease of pumpage removal during repair
- Volute inlet and outlet flanges are to PN16 as a standard; can be produced per customer specifications if required
- With just a change of the shaft sleeve and seal gland, the size of the mechanical seal can be changed
- Ball bearing housing castings are designed for use with oil, grease, or greased for life ball bearings
- Carbon wear ring material is standard



Gusher Pumps

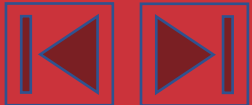
Gusher American made Block
DIN Pumps perform to **Rigid**
European Standards.



Gusher Pumps

7600H Series Horizontal Back Pull Out Centrifugal End Suction Pumps

- Back pull out design of the Gusher 7600H Series saves downtime and maintenance by providing easy removal of rotating assembly for fast repairs
- Pumps are available in long-coupled base mounted, and close-coupled configurations



Gusher Pumps

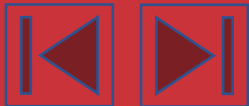
7600H Series Horizontal Back Pull Out Centrifugal End Suction Pumps

Features:

- Sizes range from 1-8" discharge
- Pressures up to 275' TDH @1750 RPM
- Capacities up to 2800 GPM
- Pump casings have one mounting dimension for all sizes
- Replaceable wear ring on enclosed impellers increase efficiency and stability of the pump

Options:

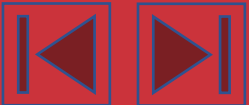
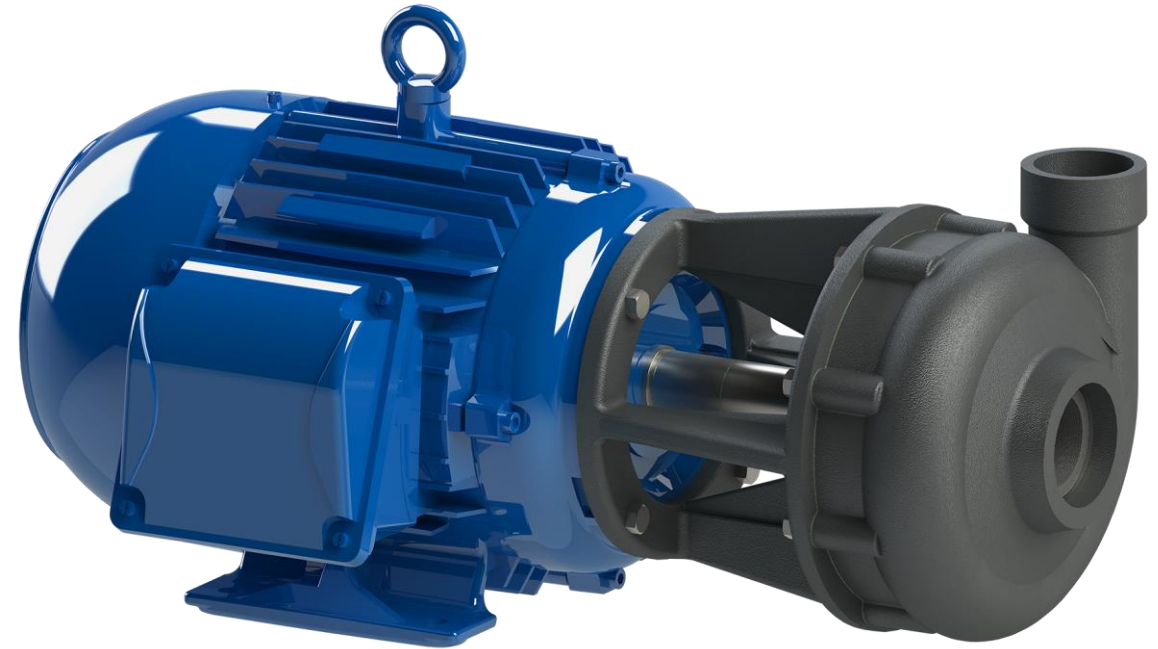
- Special seal materials available for critical applications



Gusher Pumps

7800 Series Horizontal End Suction Pumps

- The 7800 Horizontal Series includes our Self-priming Jet Pump, and Industrial Close-Coupled Pumps.
- Their heavy-duty one-piece shaft construction has no seals, bushings, or metal contact below the mounting plate.
- No metal-to-metal contact helps ensure a maintenance-free life.



Gusher Pumps

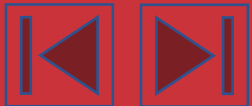
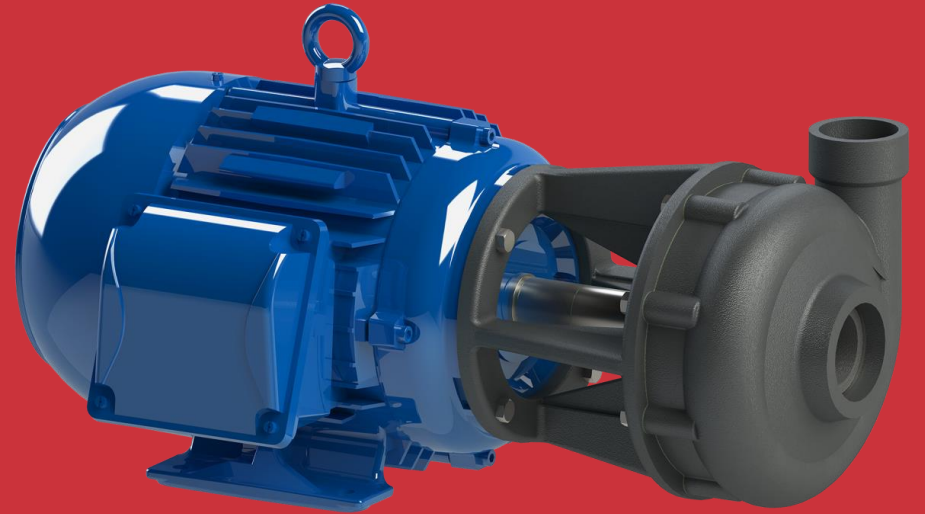
7800 Series Horizontal End Suction Pumps

Features:

- Capacities up to 400 GMP
- Up to 180' TDH
- Back pull out design
- Renewable sleeves and bushings
- Run dry capability
- Heavy duty bearings

Options:

- Extended length
- Above the Plate discharge
- Stainless Steel
- Tungsten Carbide Seal



Gusher Pumps

SC-CC Series General Service Industrial Pumps

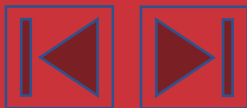
Features:

- Capacities to 400 GPM
- Up to 180' TDH
- Temperatures to 180° F (83° C)
- Back pull out design
- NEMA standard shaft motor
- Self-Setting mechanical seal
- Compact, space saving close-coupled design
- No pump/motor alignment required
- Motor enclosures: drip proof, TEFC, explosion proof
- Motor voltage specifications: 3/60/208-230/460,575V



Options:

- Materials of construction: Cast Iron, 316 Stainless Steel

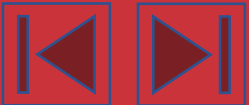
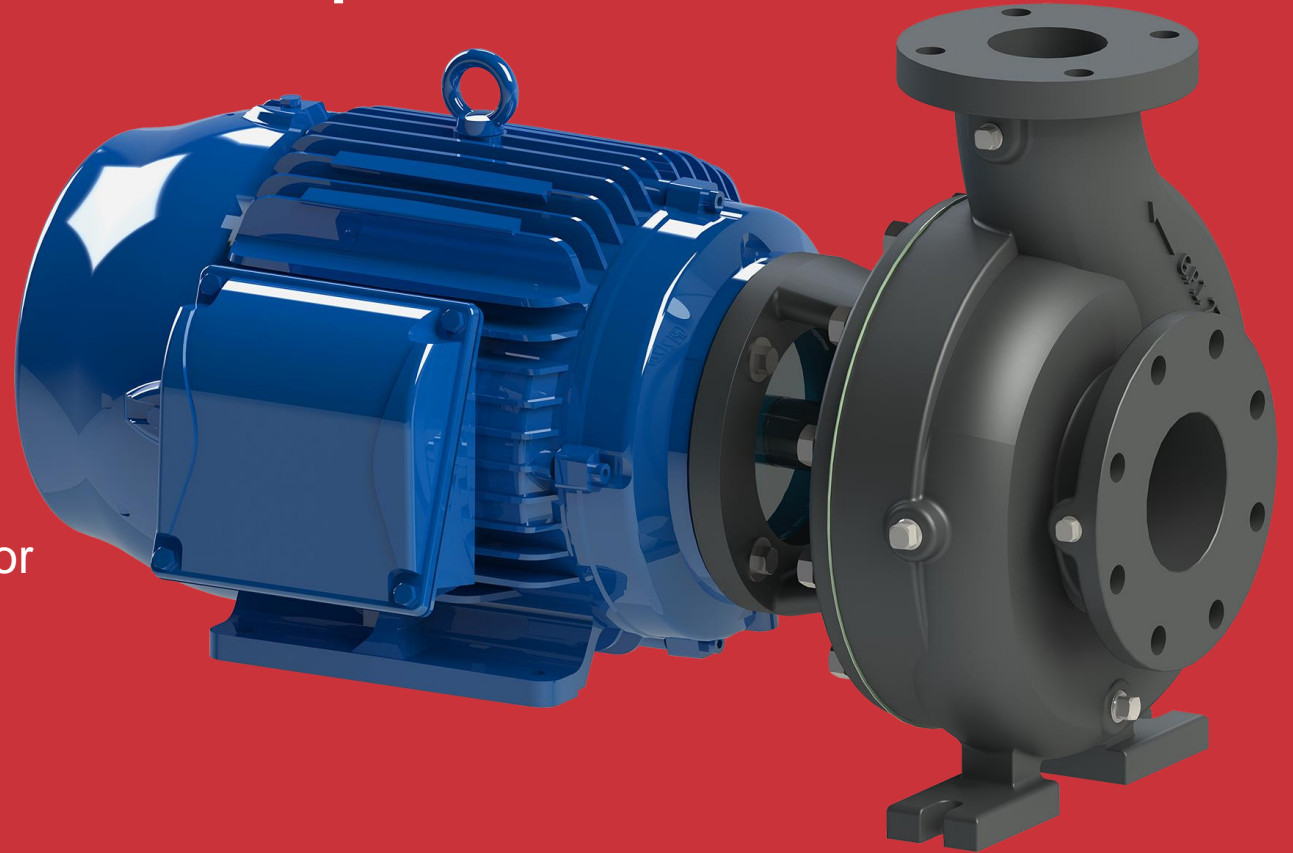


Gusher Pumps

CL-CC Series General Service Industrial Pumps

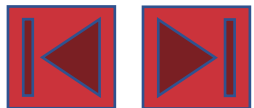
Features:

- Capacities to 5000 GPM
- Up to 700' TDH
- Temperatures to 250° F (121° C)
- Stainless Steel and Cast Iron Construction
- Foot mounted casing
- Back pull out design
- Wet ends can be adapted for standard JP Motor
- NEMA JPM Shaft Motor
- Self-setting mechanical seal
- Compact, space saving close coupled design
- No pump/motor alignment required
- ANSI dimensional casing



Gusher Pumps

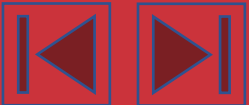
Gusher Horizontal Pumps
in Southern California at
an **Aerospace Fastener
Manufacturer.**



Gusher Pumps

Vortex Non-Clog Series Pumps

- Designed to handle large solids and fibrous materials without clogging. Even with low flows, the design allows throttling to a low performance range unacceptable to many centrifugal pumps.
- The complete Vortex Non-Clog line is designed to pump various liquids and oils containing up to 30% entrained air
- Will operate 23% below its first critical speed at any point of operation



Gusher Pumps

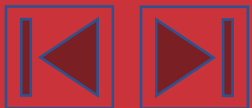
Vortex Non-Clog Series Pumps

Features:

- 8 Sizes ranging from 2x2-8 to 6x8-15
- Up to 400' TDH
- Capacities up to 2700 GPM
- Capable of handling solids up to 6"
- Power Frame Interchangeability:
 - Standard Gusher 7550 or 7600
- Entire range of Vortex Pumps are covered by only 3 power frame/bearing housing sizes with only 3 different sets of bearings

Options:

- Choice of casing and impeller materials including Cast Iron, Ductile Iron, 316 Stainless Steel, CD4Mcu or Alloy-20
- Choice of full or semi-cantilever design offers a blend of solids handling and higher than normal efficiencies in a recessed impeller design

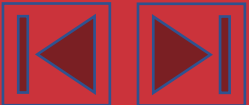
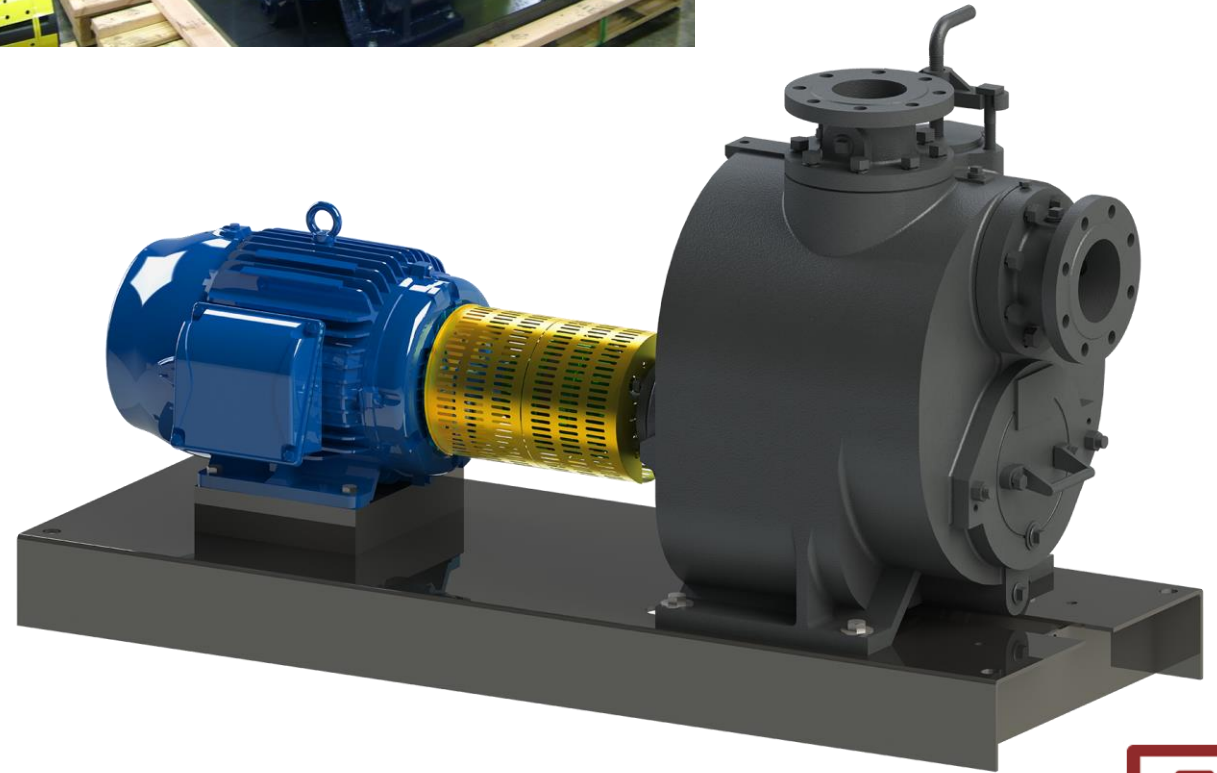


Gusher Pumps

8000 Series Centrifugal Self-Priming Pumps

Features:

- Heads up to 130 feet @ 1750 RPM
- Capacities to 1200 GPM
- 1" to 6" discharge
- Temperature up to 600° F (315° C)
- Clean out ports standard for fast removal of foreign objects
- Heavy duty construction wear plate standard



Gusher Pumps

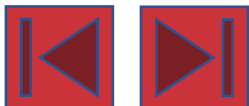
8000 Series Centrifugal Self-Priming Pumps

Features (cont):

- Back pull out for ease of maintenance
- Flapper valve standard
- Suction lifts to 20 feet
- Semi-open impellers
- Priming and air separation is accomplished within casing
- 316 Stainless Steel shaft sleeve and mechanical seal standard

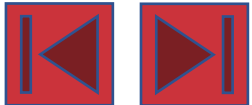
Options:

- Available with external impeller adjustment
- Available in Stainless Steel and Ductile Iron
- Gasoline or diesel engine driven style, base mounted style, and close-coupled style available



Gusher Pumps

Gusher Self-Priming Pumps
Installed at a **Massachusetts
Community College.**



Gusher Pumps

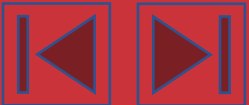
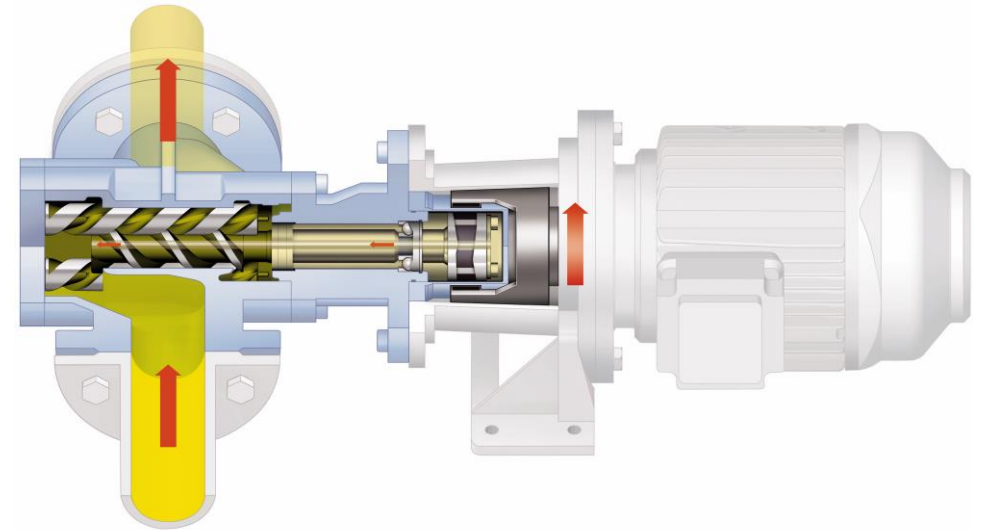
Screw Pumps for Cooling Lubricants

Features:

- Flow Rates: 1 to 160 GPM
- Max Pressure: 1750 PSIG
- Supply Pressure: 145 PSIG
- Case : EN-GJS-400
- Coatings: EN-GJS-400, polymer coating
- High pressure at low viscosity

Options:

- Can be designed for dry or wet-well installation (for vertical wet-well installation, a mounting plate is provided)



Gusher Pumps

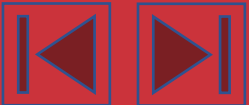
Large Pump Test Tank

Capabilities:

- Ability to test both Vertical and Horizontal Pumps in cold water
- Vertical Pumps up to 25 feet in length

Uses:

- Customer pump testing / problem solving
- New product development
- Quality control



Gusher Pumps

Pump Test Tank



Gusher Pump Large Test Tank, Dry Ridge KY



Gusher Pumps

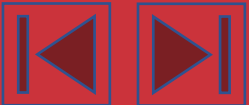
Small Pump Test Tank

Capabilities:

- Hot water testing up to 200° F for Vertical and Horizontal Pumps
- Pump in the video is a 2 x 2-11 Self-Priming Pump

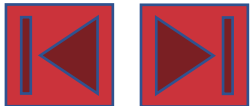
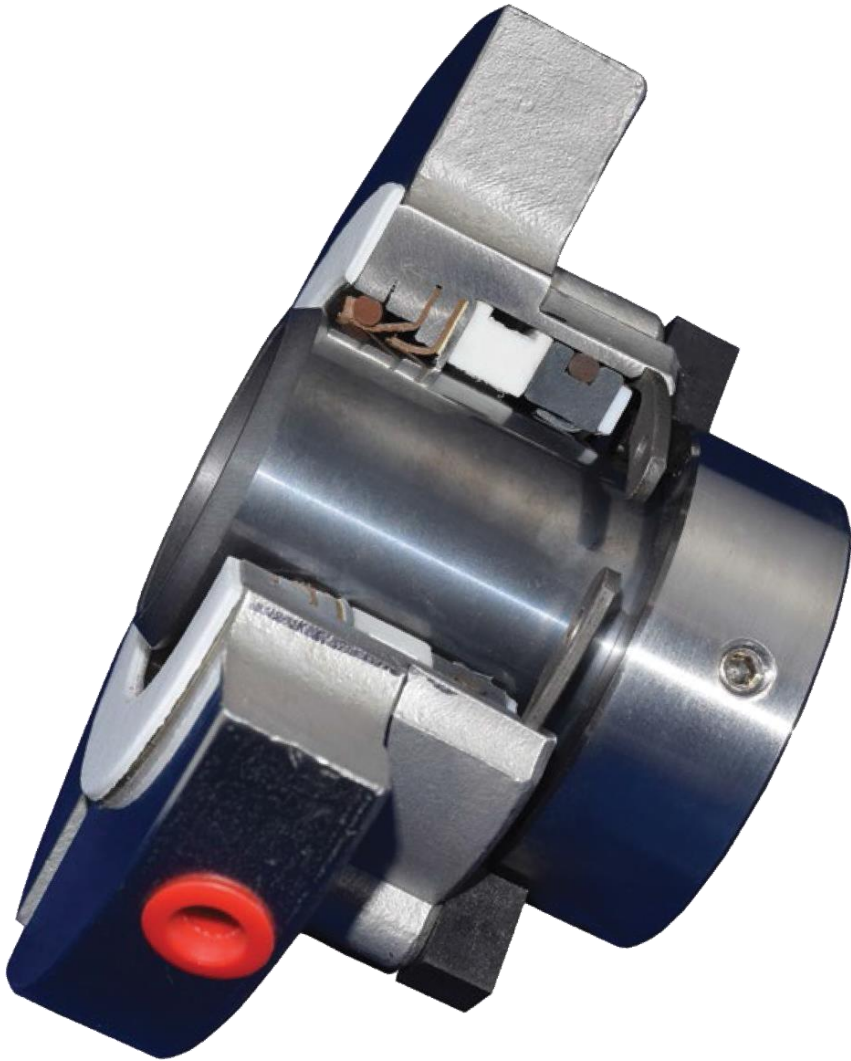


Gusher Pump Small Test Tank, Dry Ridge KY

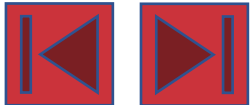
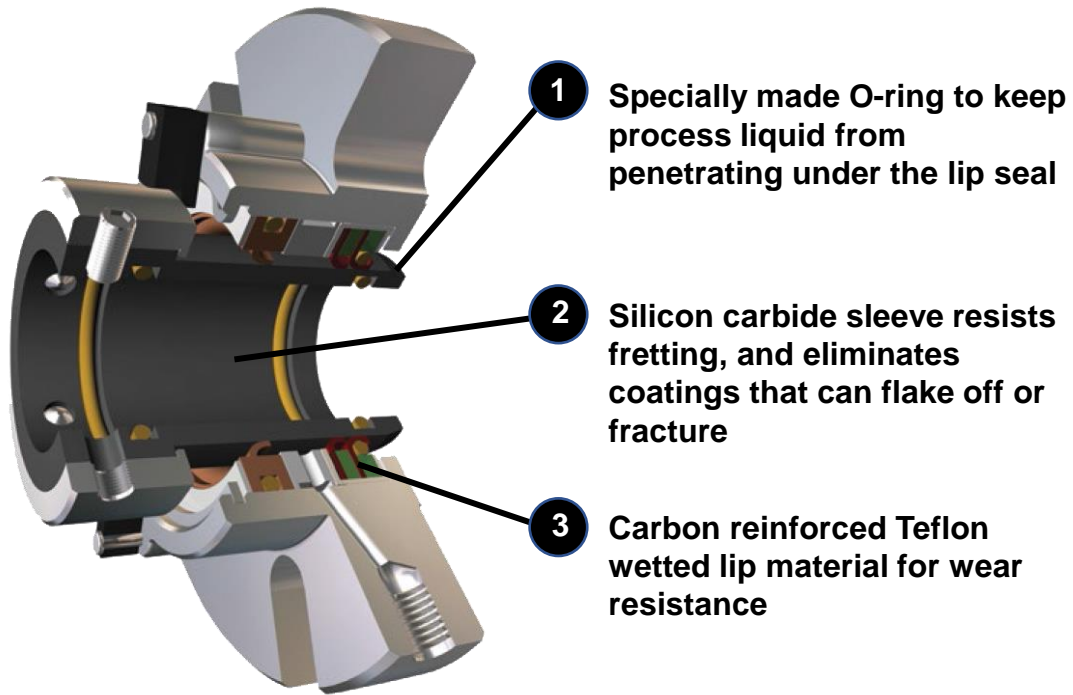


RPE Seal Survivor

- New Technology Seal performs in the most challenging situations
- Extremely durable for increased pump protection and reduced wear
- Ideal for Terminal Operations, Filling Lines, and Viscous Liquids



“Survival Technology Built In”

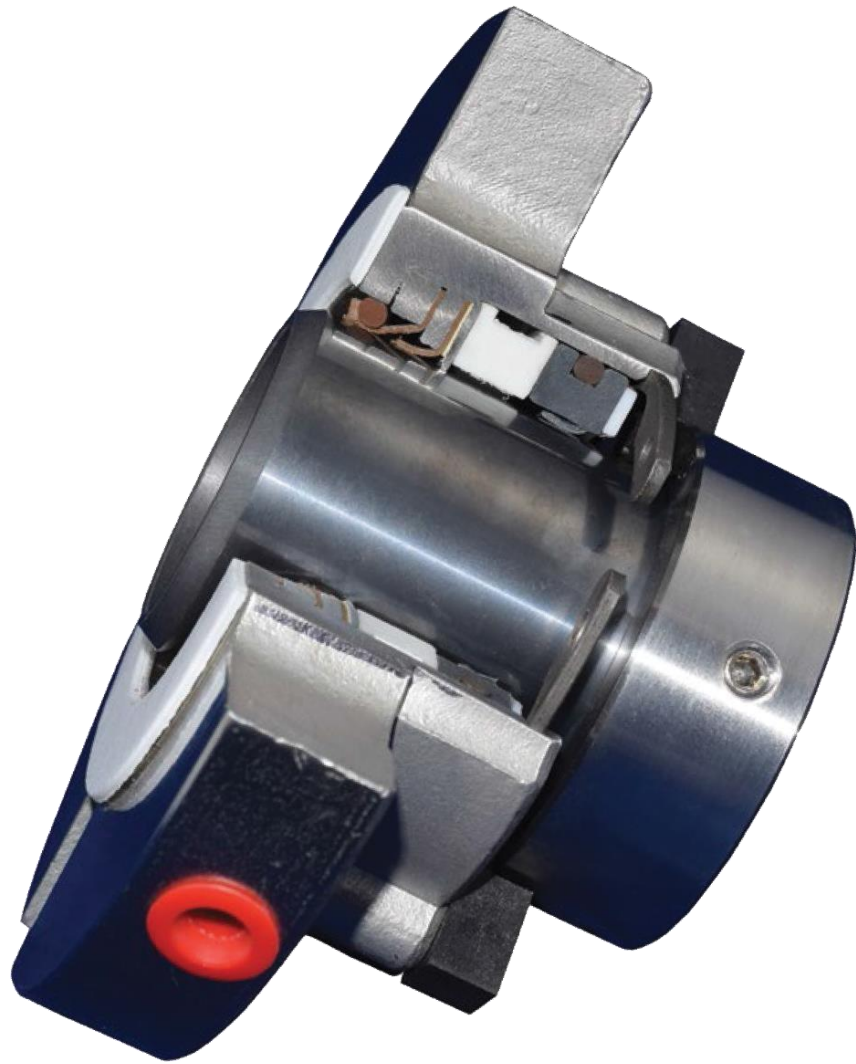


RPE Seal Survivor

Features:

- Tolerates extended dry run
- Resists hydraulic shock
- Versatility for thin to very thick liquids, including non-lubricating or gas-laden liquids
- No springs to clog and no dynamic O-rings to hang up
- Tolerates a high degree of pump run-out due to pump wear or misalignment

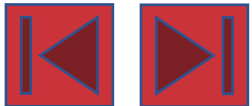




RPE Seal Survivor

Benefits:

- No leakage performance
- Reduced maintenance costs and downtime
- Long-lasting – typically 2 to 3 years between repairs for most services
- Easy to Install, operate, and maintain
- Replaces costly dual seals for viscous liquids






Gusher Pumps

Pump Selection Software

gusher.pump-flo.com

Gusher Pumps | Manufacturers of Quality Pumps | A Ruthman Company

Selection Criteria



QUALITY UNDER PRESSURE

Storefront > Criteria Account

[Calculators](#) [Advanced Criteria](#) [Manual Selection](#)

Search

Rated Design Point

Flow rate US gpm Change Units

Total head ft

Static head ft

BEP No Preference

Near miss % of head

Fluid & NPSH

Water @ 60 °F [Change Fluid](#)

NPSHa ft

Margin ratio

Types & Speeds

| Types | Speeds |
|----------|--------------|
| VTURBINE | 3600 1800 |

Product Info

Motors


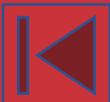
Standard NEMA


Enclosure TEFC

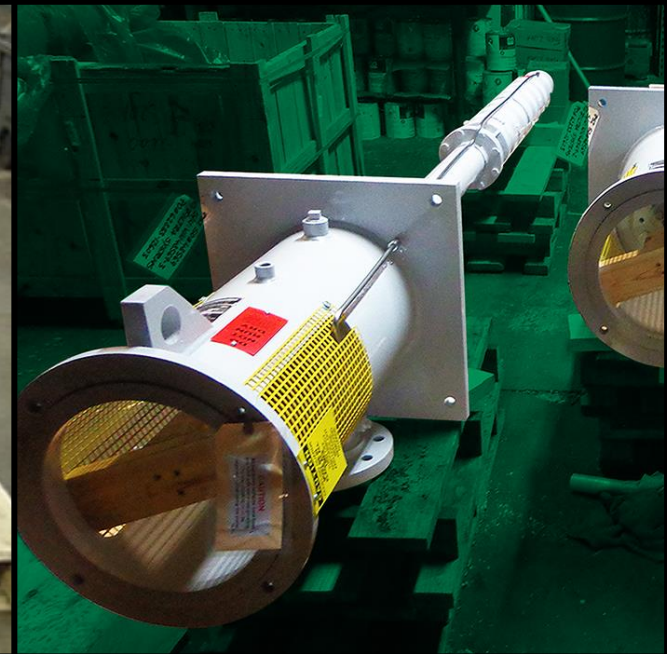
Sizing Criteria Max power on design curve

Search

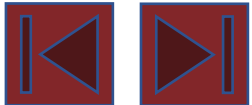
<http://www.gusher.com/pump-selection>







Industrial Vertical Turbine Pumps



PSI Pumps

Why Vertical?

Design Features:

- No suction piping, strainers or valve
- No suction flex joints required
- No grouting or foundation required
- No alignment required
- No mechanical seals required
- Mechanical seal flush plans eliminated
- Less HP draw, because no Mechanical Seal
- Less floor space required
- Less suction condition problems

Advantages:

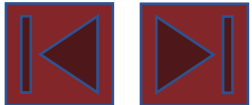
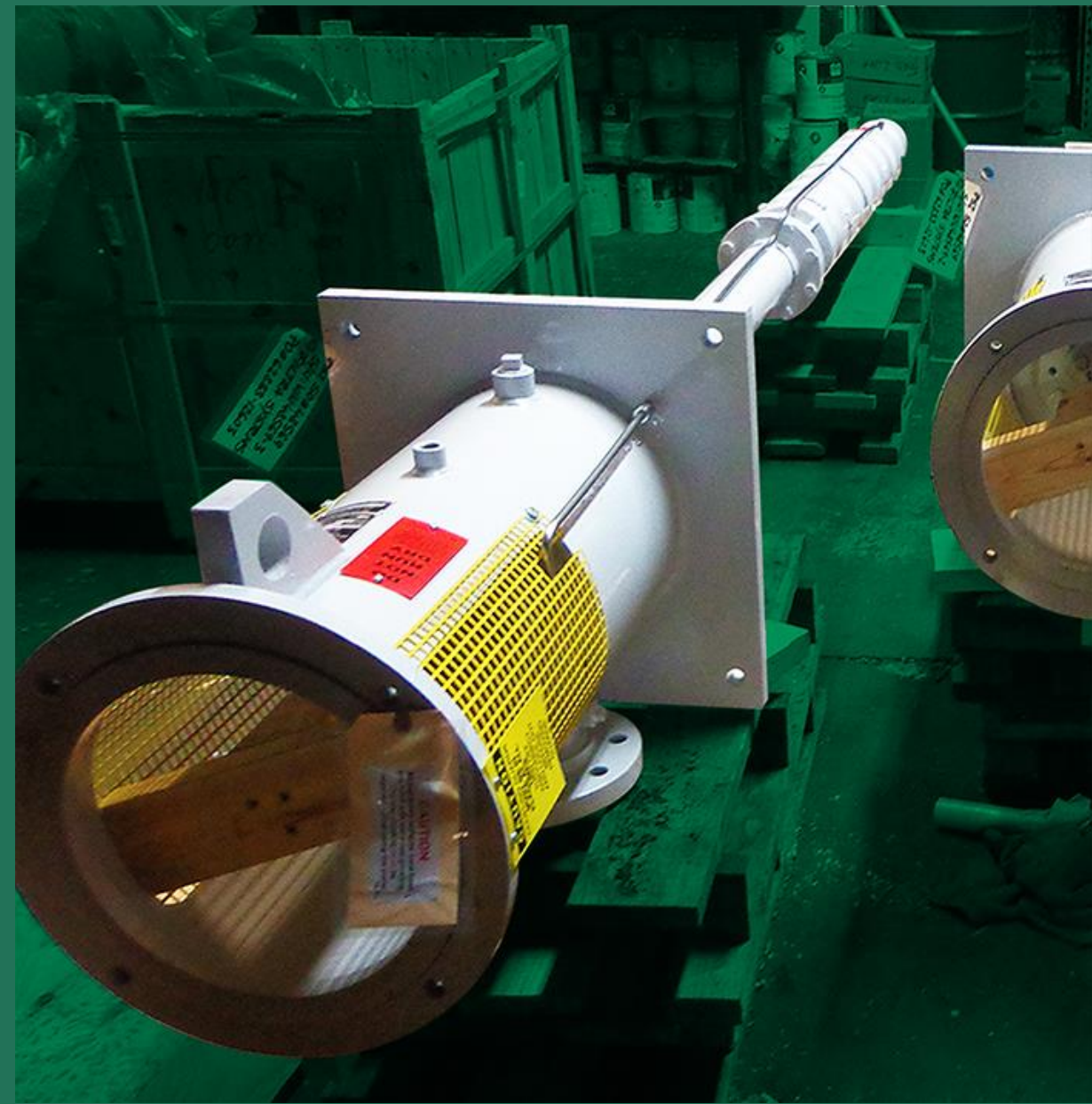
- Vertical design eliminates the Mechanical Seal, thereby eliminating the most common service item on most pumps
- Less downtime and lower labor costs to repair than horizontal pumps



PSI Pumps

Process Systems Vertical Turbine Pumps

- Proven 'sealless' design features enclosed impellers, enclosed line shaft, grease/oil lubrication, or a special 'Self-Seal.'
- Available with our Thrust Head® Discharge Head or Hi-Thrust Base, allowing utilization of normal thrust, C-face motors.
- No field adjustments are needed. Impellers are adjusted and set at the facility.



PSI Pumps

Process Systems Vertical Turbine Pumps

Example Applications:

- Central Coolant Systems
- Cooling Towers
- E-Coat/Elpo Paint
- Phosphate Systems
- Industrial Washers
- Spray Booth
- High Pressure Washers
- Sludge Systems
- Welder Water
- Quench Systems
- Scale Pits
- Quarry
- Waste Treatment
- Gun Drilling

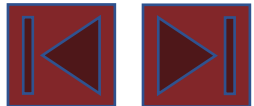
Wet Sump Installation



Central Coolant System



Dry Pit Installation

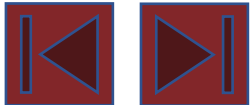


PSI Pumps

The 'Self-Seal Advantage'

Benefits:

- Provides seal-less performance to pressures exceeding 600 PSI
- Solution leakage, the associated OSHA exposure and environmental contamination are eliminated
- **Reduce potential hazards of High-Pressure Pumping with Mechanical Seals, such as:**
 - Momentary Suction Starvation
 - Water Hammer
 - Thermal Shock
 - Chemical Shock
 - Pump Shaft Run-Out
 - Critical Impeller Adjustment

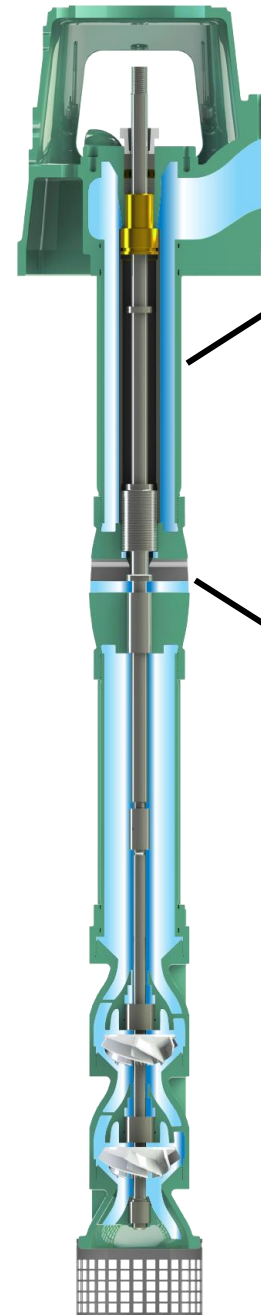


PSI Pumps

The 'Self-Seal Advantage'

How it Works:

- As the pumped solution passes from the bowl assembly up through the lower column assembly, it enters the Self Seal column case located 3' below the discharge head.
- A small amount of liquid is forced through the lower column case bearing and is vented back to the tank.



Two Self-Seal design features:

1 Enclosed Shaft:

- Enclosed Shaft within a tube and sealed with a non-rotating O-ring seal
- The shaft above the column case does not come in contact with the pumped solution

2 Solution By-Pass Ports:

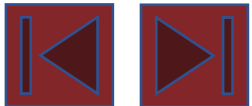
- The Self-Seal column case provides controlled leakage below the discharge head and back to the tank
- Solution leakage, the associated OSHA exposure and environmental contamination are eliminated



PSI Pumps

Protect-A-Pump™ Screen System

- Positive Pump & System Flow Protection
- Never Requires “Back Screen Removal”
- Single Operator Maintenance
- New & Retrofit Installations

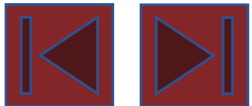


PSI Pumps

An installation of PSI vertical turbines for use in a **Ford Transmission Plant in Sharonville, Ohio and Dagenham, Essex UK Engine Plant.**

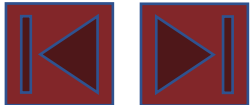


Go Further



PSI Pumps

PSI's vertical turbine pumps in an **industrial installation.**

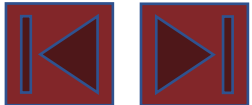




Manufactured by PSI
A RUTHMAN COMPANY

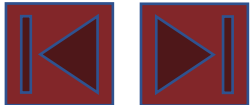
A Recognized Leader in Municipal Water Treatment

- Proven performance since the 1800s in all forms of water treatment
- Self-Seal Design is unique in municipal water treatment
- Responsive experts available when you need them – a phone call away when you need them most
- NSF certified for drinking water applications



Benefits:

- Provides seal-less performance to pressures exceeding 600 PSI
- Solution leakage, the associated OSHA exposure and environmental contamination are eliminated
- **Reduce potential hazards of High-Pressure Pumping with Mechanical Seals, such as:**
 - Momentary Suction Starvation
 - Water Hammer
 - Thermal Shock
 - Chemical Shock
 - Pump Shaft Run-Out
 - Critical Impeller Adjustment



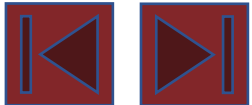
Deming®

Vertical Turbine Pumps

NSF International



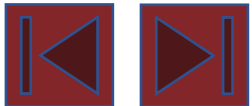
- NSF International develops public health standards and certification programs that help protect the world's food, water, consumer products and environment
- Founded in 1944, NSF International expanded services beyond sanitation and into global markets
- Ruthman's Deming® brand pumps are NSF Certified



Deming®

Vertical Turbine Pumps

Assembly of a
Deming® Vertical
Turbine Pump at the
**PSI Pump Plant in
Warren, Michigan**



Deming®

Vertical Turbine Pumps

Engineering Stories

Deming® Vertical Turbine Pump install at a Florida water treatment facility passes the “*Nickel Test!*”



Customer Challenge

Install a 152” pump with floor to ceiling clearance of only 90”.

Typical roof installation was not possible without causing structural damage.



Collaborative Solution

Ruthman designed a solution based on a 24” diameter, 200 HP Deming® Vertical Turbine Single Stage Pump.

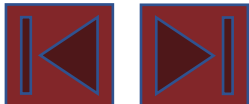
The pump was installed from the side of the building in three pieces.

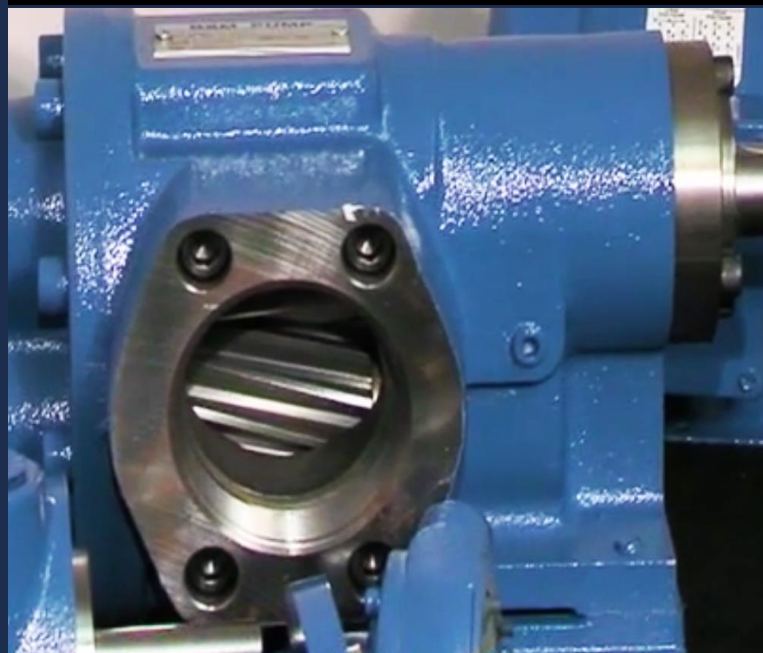


Customer Benefits

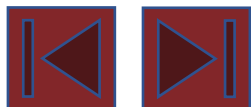
The installation was successful upon startup.

The pump ran so smoothly and quietly that “*you could set a nickel on it’s edge and it would not move!*”





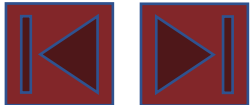
Rotary Gear Pumps available in Spur, Helical, and Herringbone Gear Designs.



BSM Pumps

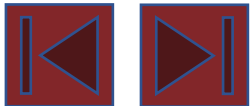
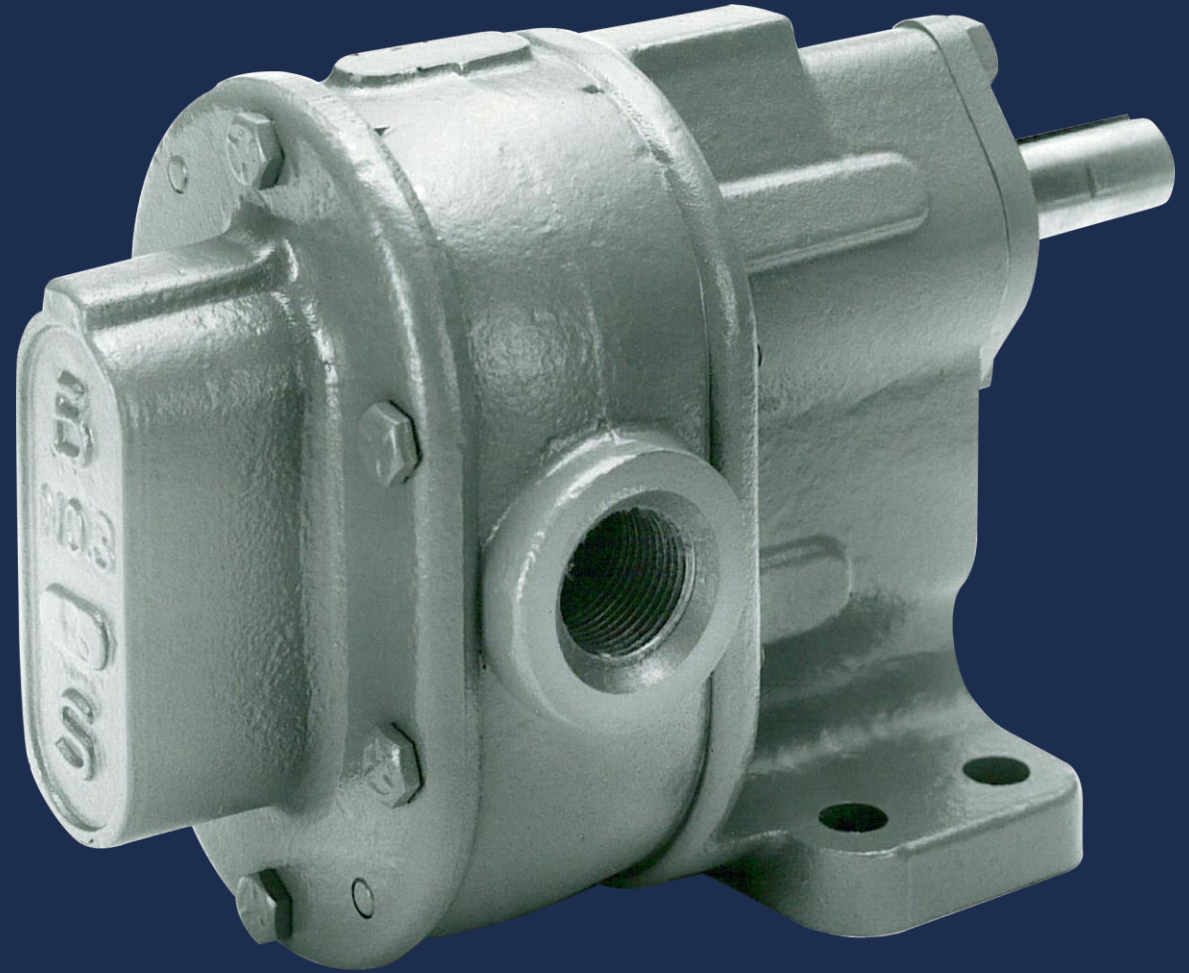


BSM Pumps are used in High Pressure Hydraulic Service, Oil Field and Pipeline Installations, and Gun Drilling Industries.



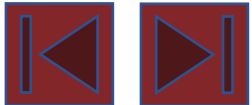
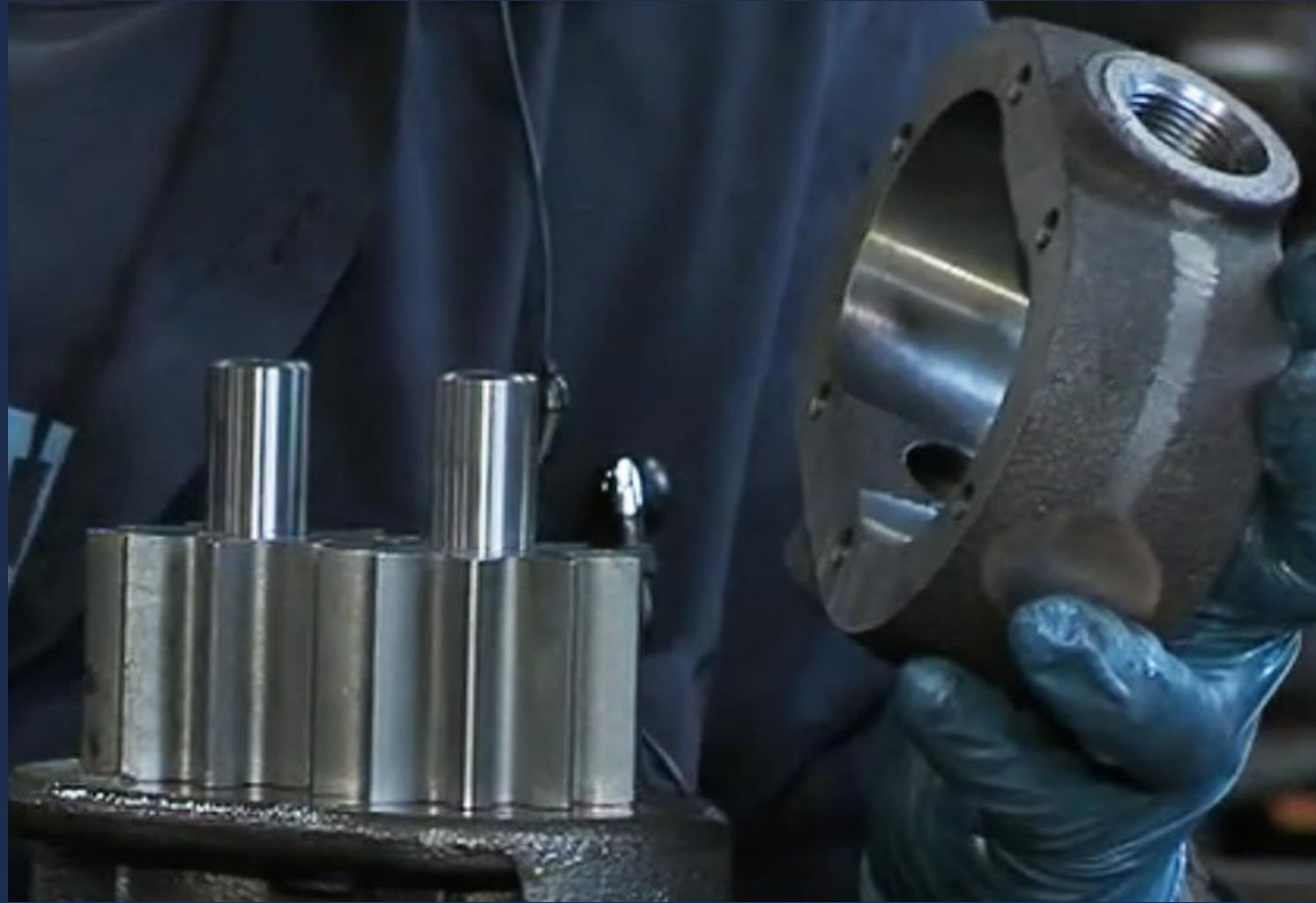
BSM Pumps

BSM Rotary Gear Pumps are the Best Choice for a variety of recirculating, mixing and transfer applications.



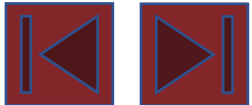
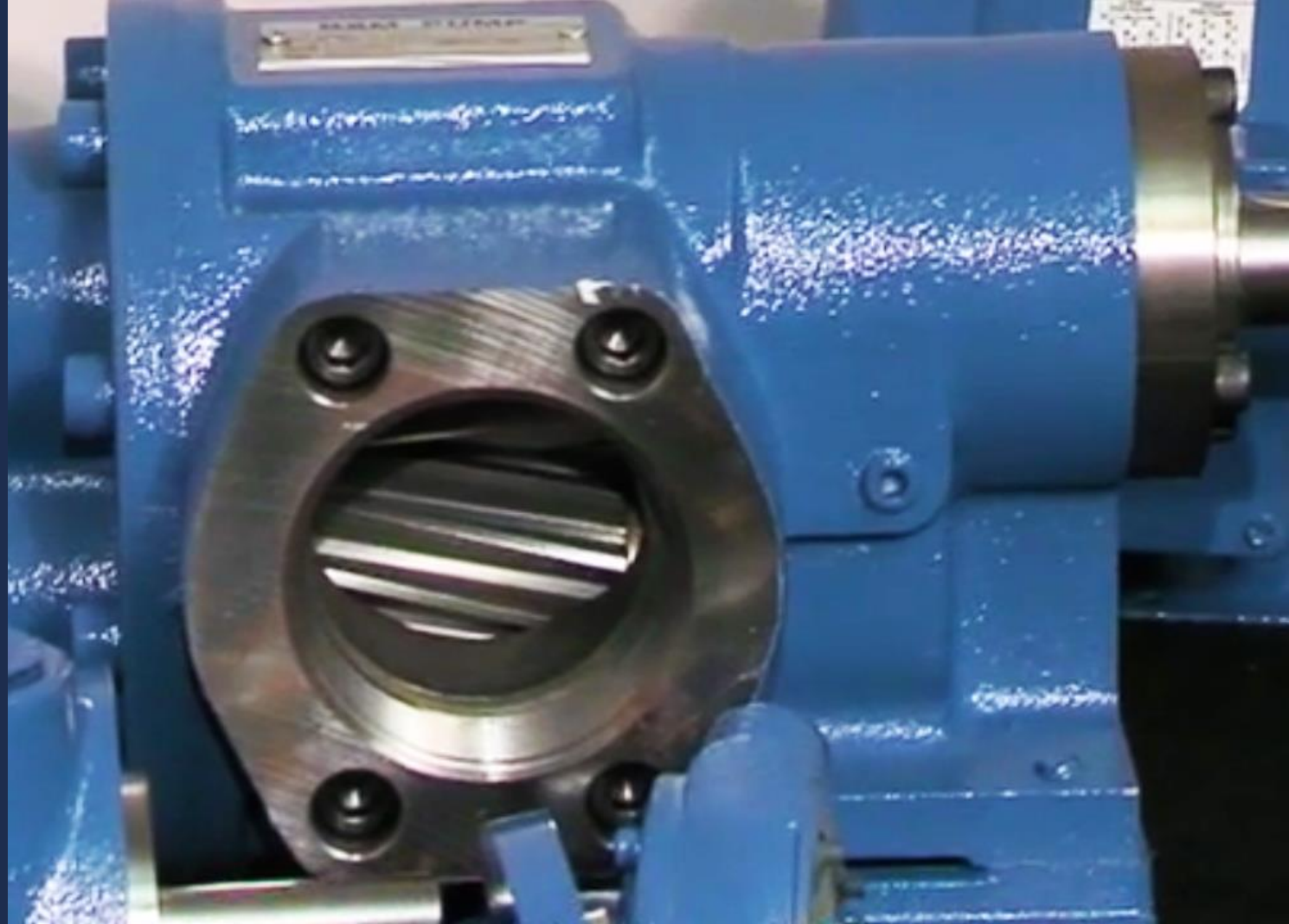
BSM Pumps

BSM Pumps are manufactured within such high tolerances that no gaskets are required.



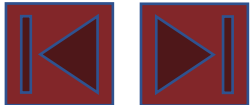
BSM Pumps

BSM Rotary Gear Pumps are self-priming and handle liquids ranging from Cooking Oil to Molten Lead.



BSM Pumps

BSM Gears and Shafts are manufactured from HQ heat treated steel. Gears shown in Spur, Helical and Herringbone designs.

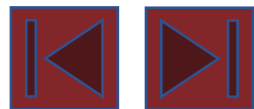




1249 Center Avenue
Chicago Heights, Illinois



Heavy Duty Pumps for the Most Abrasive Applications



Nagle Pumps

Typical Applications

Nagle Pumps has thousands of installations in Power, Chemical, Petrochemical, Steel, Water Treatment, Foundry, Ceramic, Metalworking and other process industries. All these will attest to the Nagle philosophy of "Endurance Engineering." A commitment to the design and manufacturing pumps which provide the longest service life with minimum maintenance.

Mining

- Heavy Media
- Crusher Water
- Tailings Removal
- Dredging
- Dewatering

Power

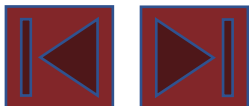
- Ash Removal
- Ash Sluice
- Coal Handling
- Coal Pile Runoff
- Pond Water Return
- Scrubber Water

High Temperature

- Molten Salts
- Ammonium Nitrate
- Molten Sulphur
- Molten Lead
- Concentrated Solar – Molten Salt

Other Industries

- Sewage
- Ceramic
- Paper
- Sugar
- Phosphate



Nagle Pumps

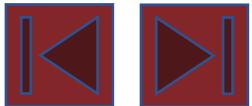
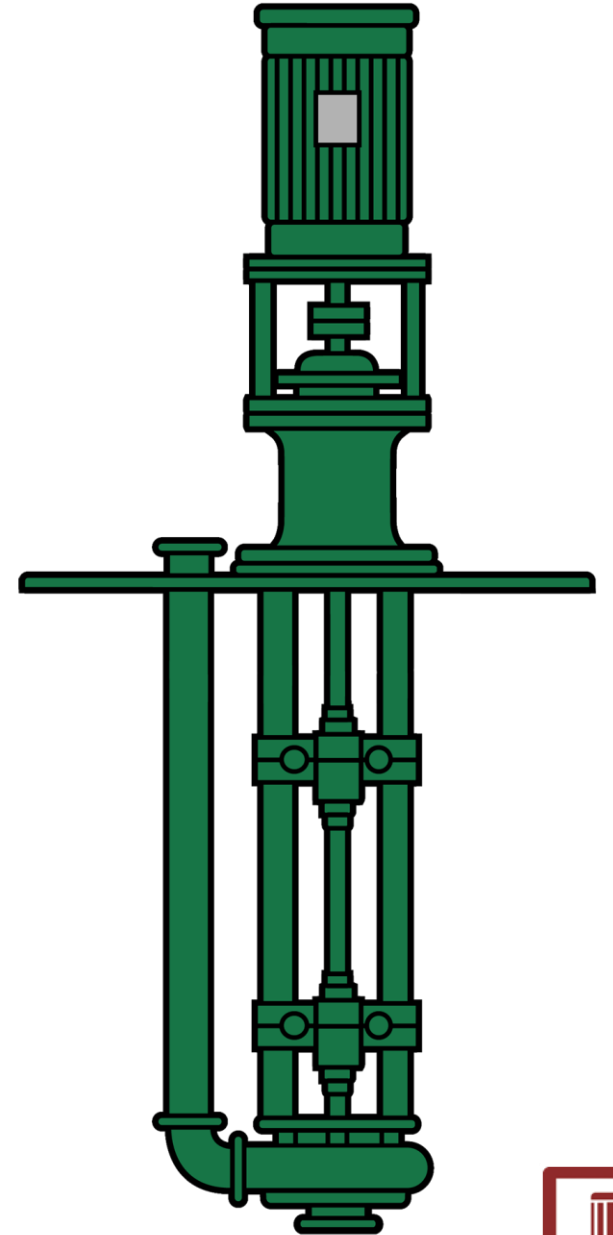
YWS Wet Pit Pump

Specifications

- Sizes: 1" to 16"
- Capacities: Up to 10,000 gpm
- Pressures: To 130 psi

Features

- Split yoke submerged bearings facilitate replacement without pump disassembly
- Single volute, single discharge casing with progressive wall thickness maximizes service life
- Above mounting plate impeller adjustment
- Pump bearings withstand maximum thrust loads and use standard thrust motors
- All mated components register fit to ensure concentricity and speed reassembly during pump maintenance



Nagle Pumps

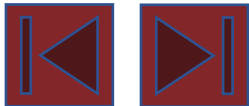
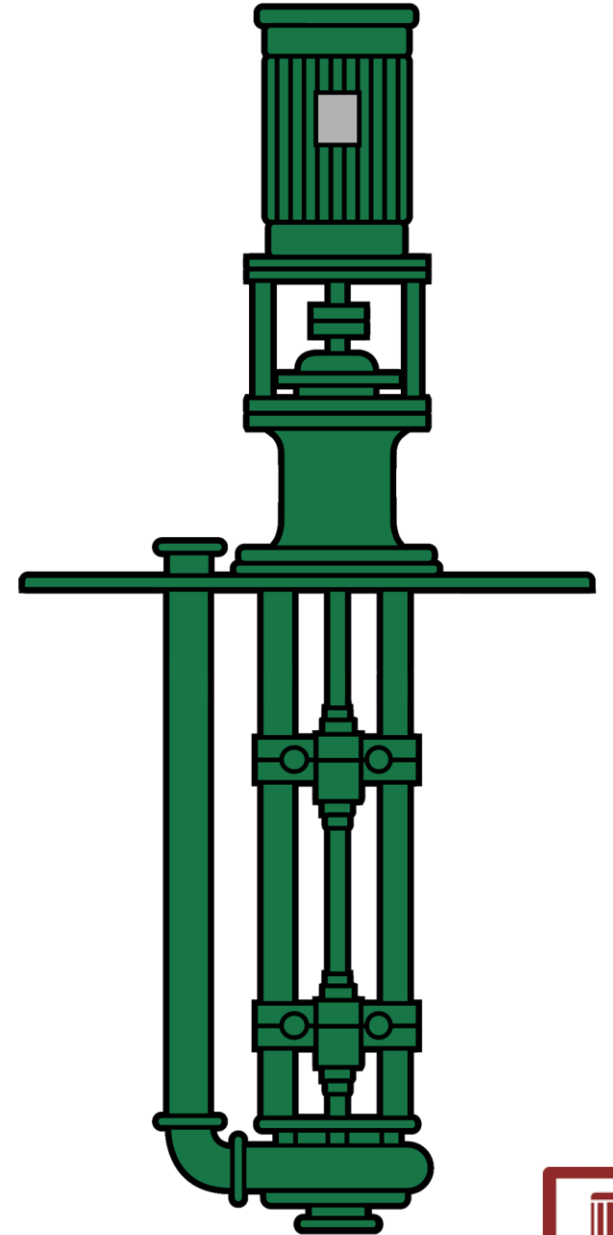
YWS Wet Pit Pump

Features (continued)

- All mated components register fit to ensure concentricity and speed reassembly during pump maintenance
- Standard discharge elbow and pipe eliminate proprietary parts
- Through bolt construction eliminates blind tapped holes and stud type construction

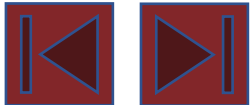
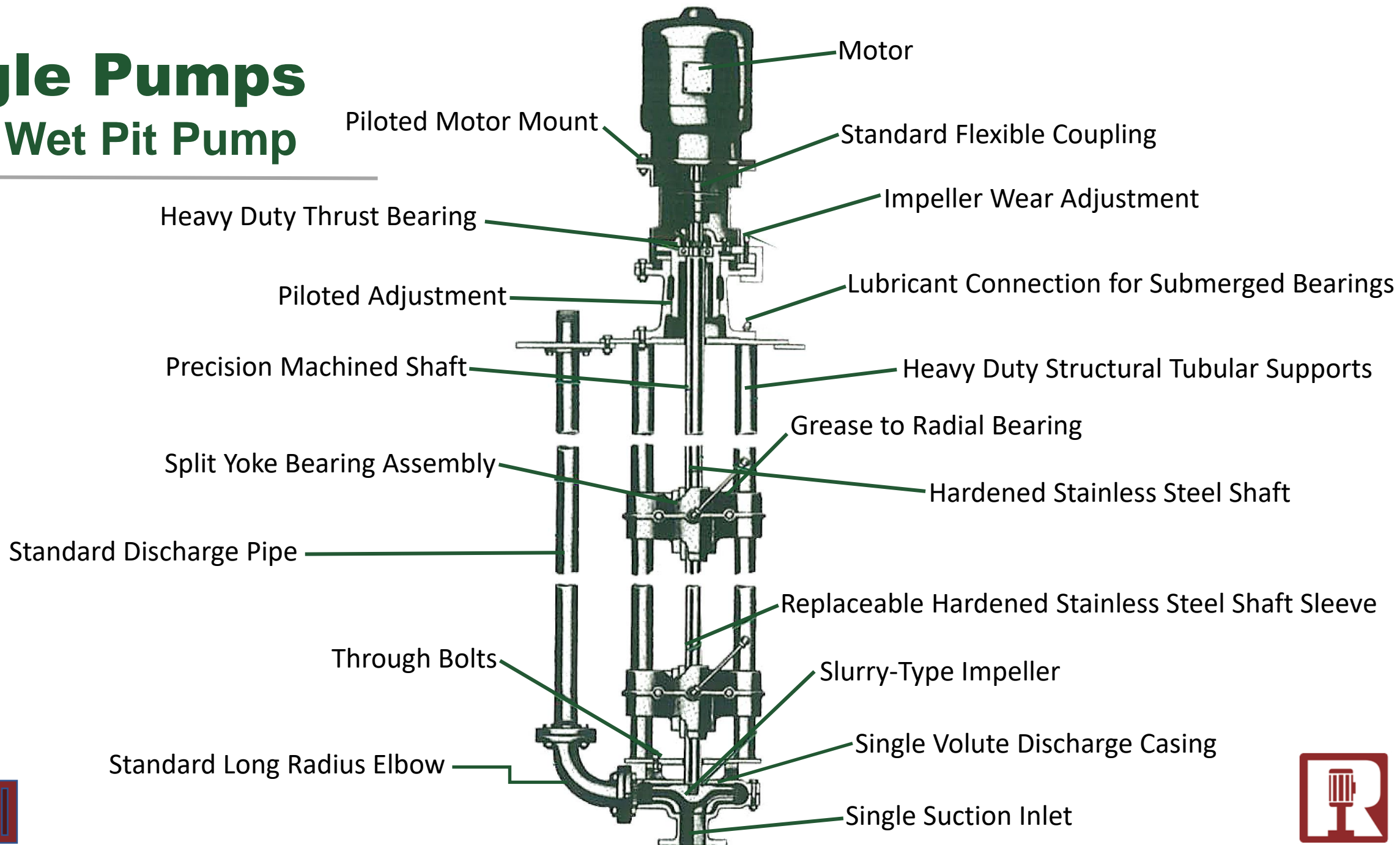
Options

- Direct coupled or V-belt drive
- Top or bottom suction
- Chemical or slurry type wet end designs



Nagle Pumps

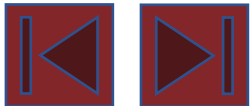
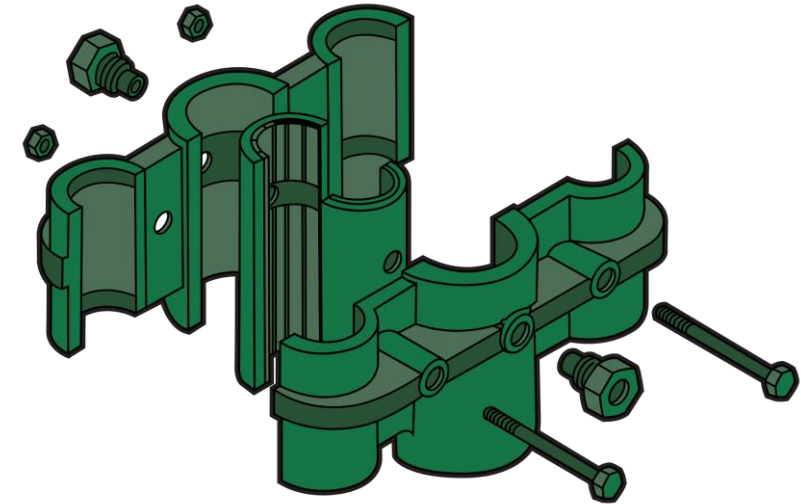
YWS Wet Pit Pump



Nagle Pumps

YWS Split Yoke Bearing Assembly

- Submerged bearings consist of split sleeves mounted in a split yoke housing clamped across the heavy-duty structural tubular supports.
- Bearing replacement is quick and simple with no need to disturb the casing and the impeller. The through bolts can either be loosened, burned, sawed or chiseled off, if corrosion or age is a problem. This is an impossibility when attempting to remove conventional tapped-in studs.
- Bearing replacement can sometimes be made without removing the pump. This open bearing arrangement permits easier inspection and complete lubrication or flushing.
- The bearing material itself can be micarta, ni-resist, cutless rubber, babbitt, bronze, stainless steel, cast iron, teflon, or any other available material suitable for the particular application.
- The bearings can be lubricated with grease, water, or by the liquid which is being pumped.



Nagle Pumps

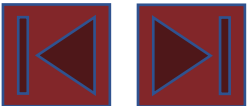
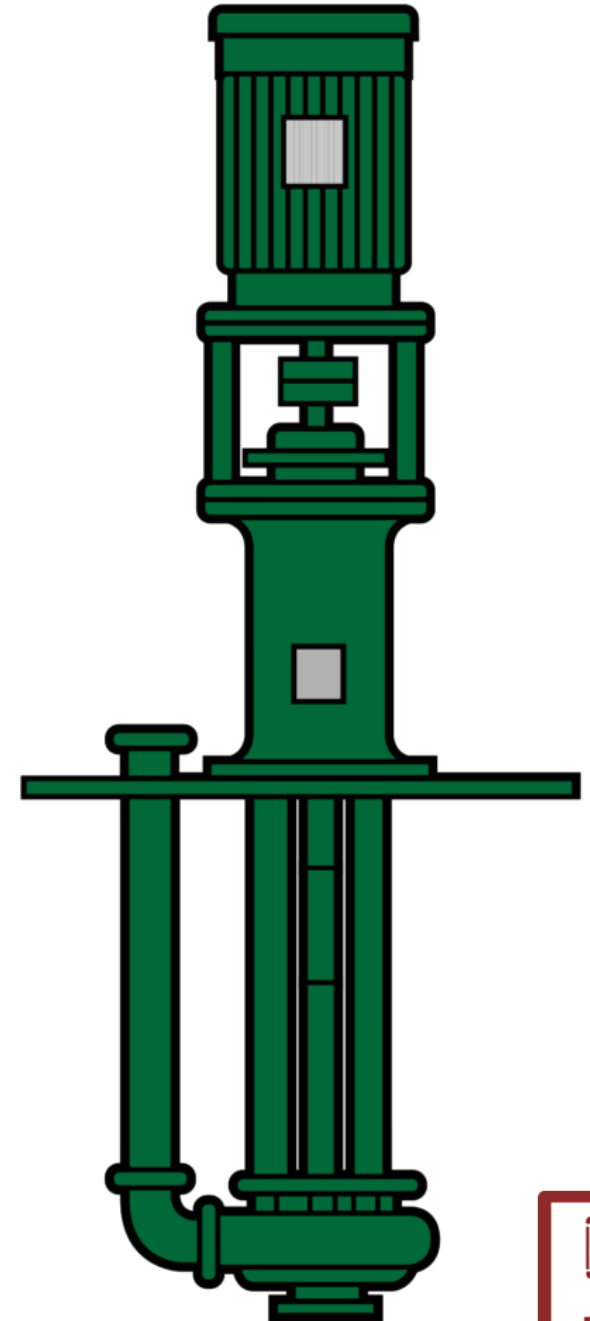
TWO Wet Pit Pump

Specifications

- Sizes: 1" to 16"
- Capacities: Up to 10,000+ gpm
- Pressures: To 130 psi

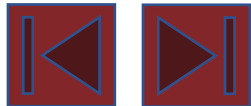
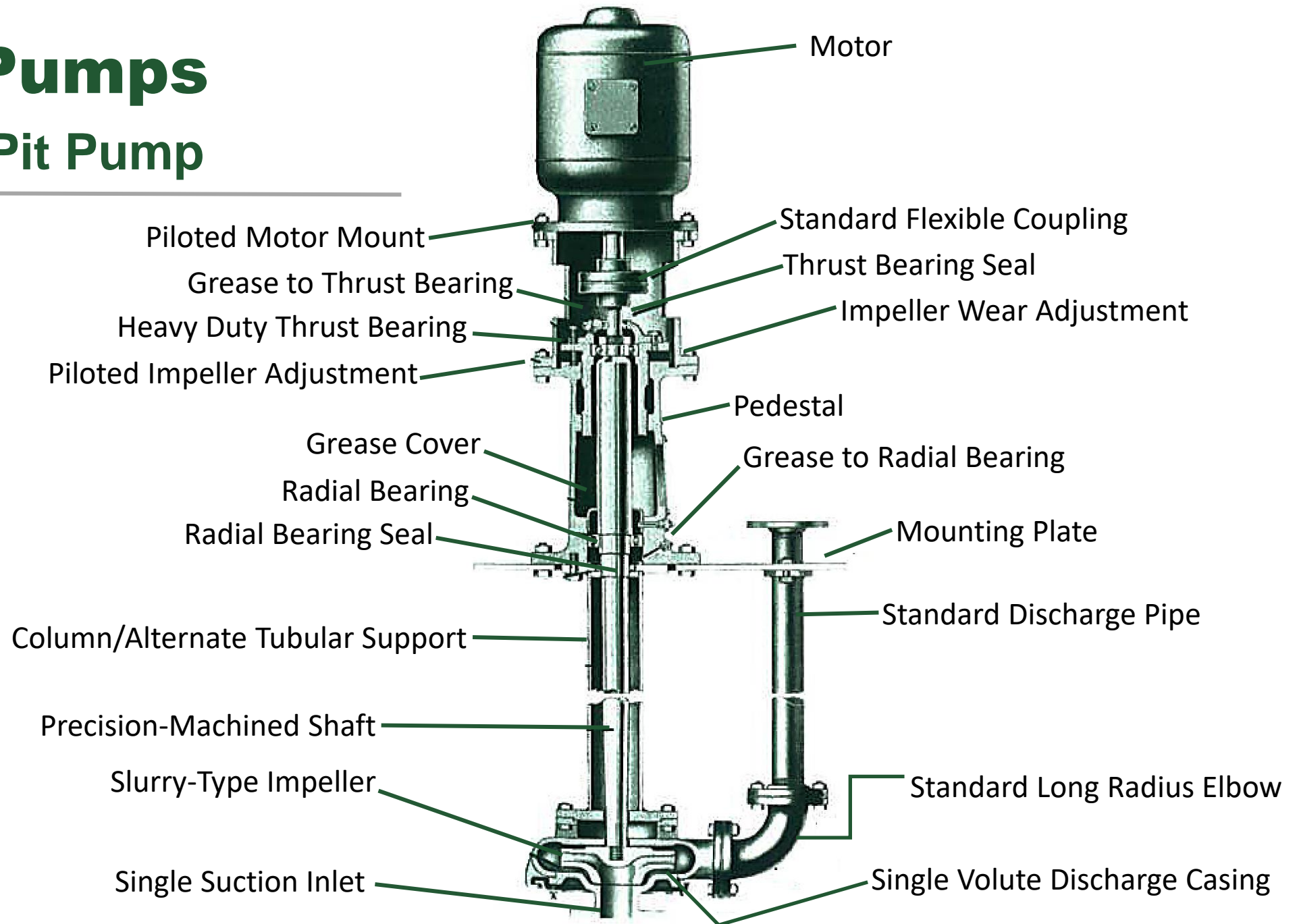
Features

- Handles heavy slurries up to 70% solids, molten salts, and metals to 1500°F
- Designed for wet pit installation with bottom suction or optional top suction
- The TWO features an open shaft and strong tubular supports for the casing
- Custom design options include choice of materials of construction, including wide selection of abrasion-, corrosion-, and heat-resistant metals
- CWO closed shaft models of this pump are a legacy product and only available as a direct replacement for a previously purchased pump



Nagle Pumps

TWO Wet Pit Pump



Nagle Pumps

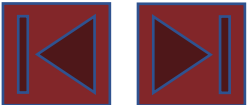
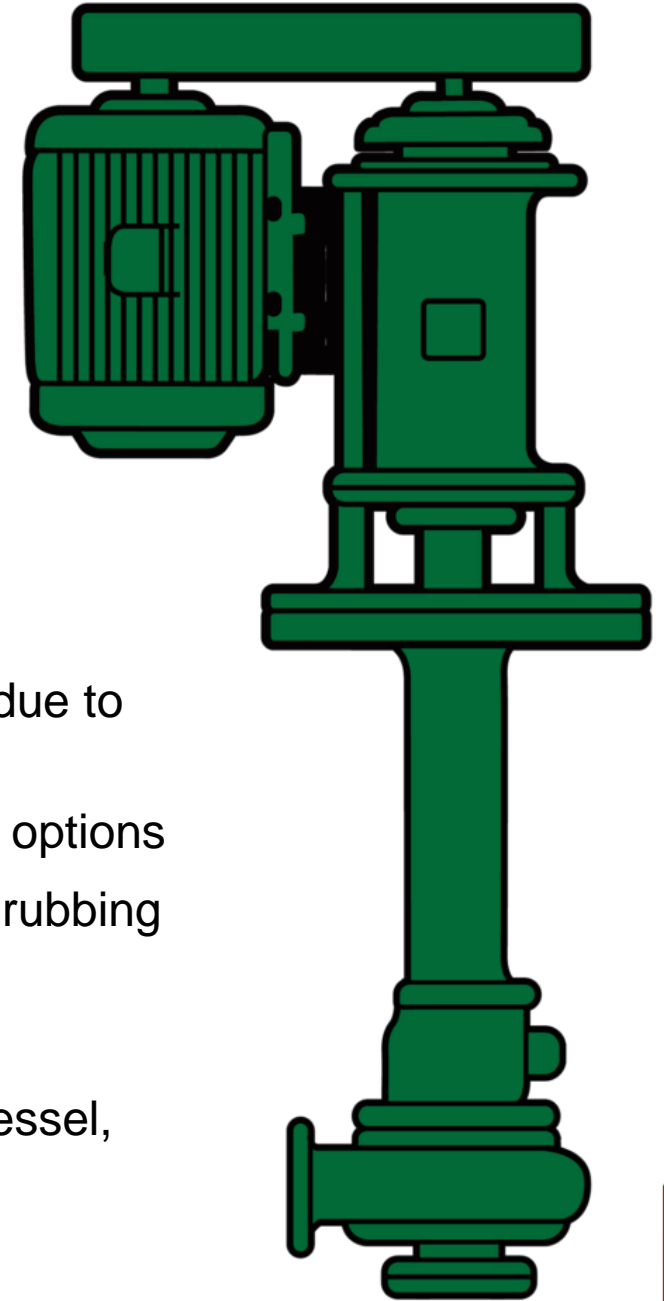
CDO Dry Mounted Pump

Specifications

- Sizes: 1.5" to 10"
- Capacities: Up to 4,000 gpm
- Pressures: To 87 psi

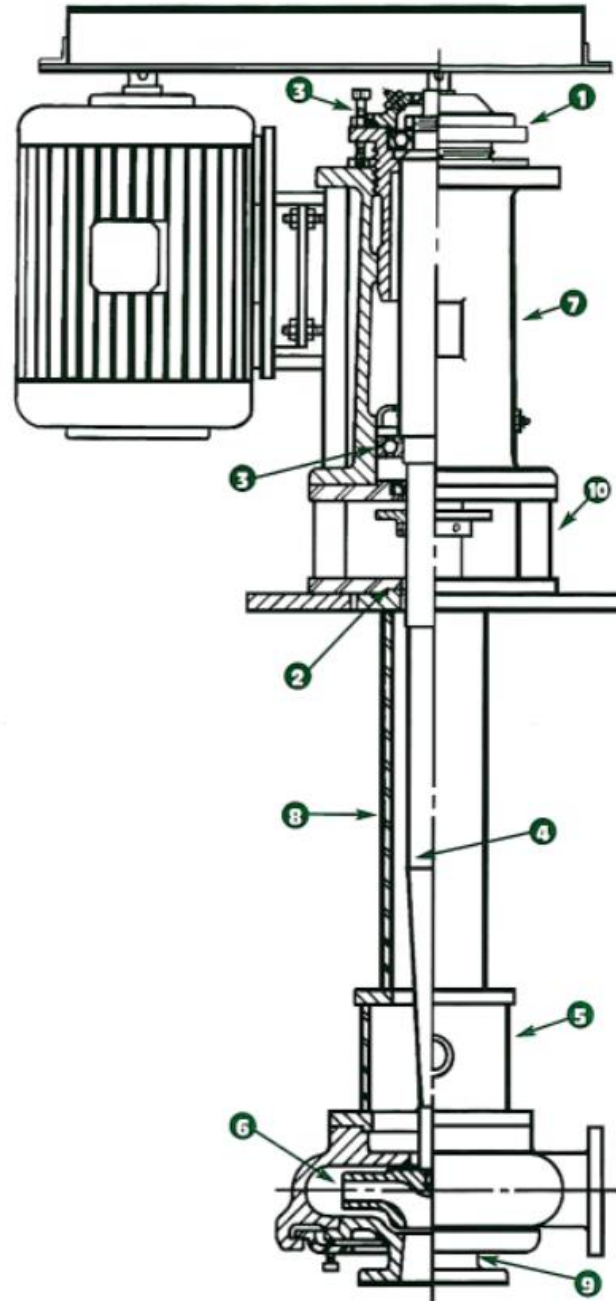
Features

- Recommended for heavy slurry applications not suitable for wet pit pumps due to tank agitator interference, including magnetite and ceramic slip pumping
- Designed for dry pit installation with bottom suction or top suction mounting options
- True cantilever shaft design-no bearings, seals, packing, bushings or other rubbing parts are in contact with the pumpage
- No flushing or sealing fluids are required
- Bearing frame, mounting assembly and drive are not directly over source vessel, lessening contact with fumes and splash

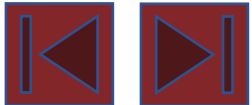


Nagle Pumps

CDO Dry Mounted Pump



- 1 Threaded Housing
- 2 Piloted Mating Parts
- 3 Heavy Duty Bearings
- 4 Cantilever Shaft
- 5 Collector Chamber
- 6 Enclosed Impeller
- 7 Bearing Pedestal
- 8 Endurance-Engineered Column
- 9 Suction Plate
- 10 Spacer Pedestal



Nagle Pumps

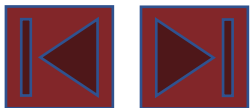
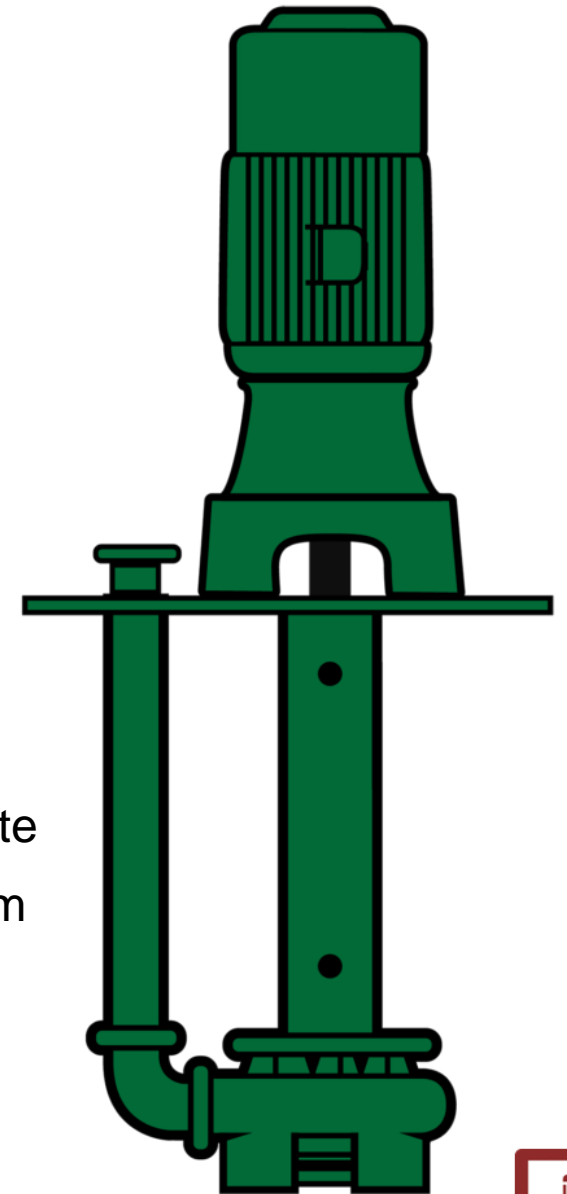
MWO Wet Shaft Pump

Specifications

- Sizes: 1" to 3"
- Capacities: Up to 300 gpm
- Pressures: To 54 psi

Features

- For light to medium weight slurries at near ambient temperatures
- Designed for wet pit installation
- True cantilever shaft design-no bearings, bushings or brushes below mounting plate
- A spacer area between mounting plate and motor protects motor and bearings from contamination
- Suitable for depth settings up to 3 feet; suction extension available to increase overall pump length



Nagle Pumps

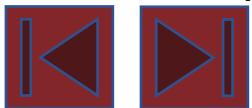
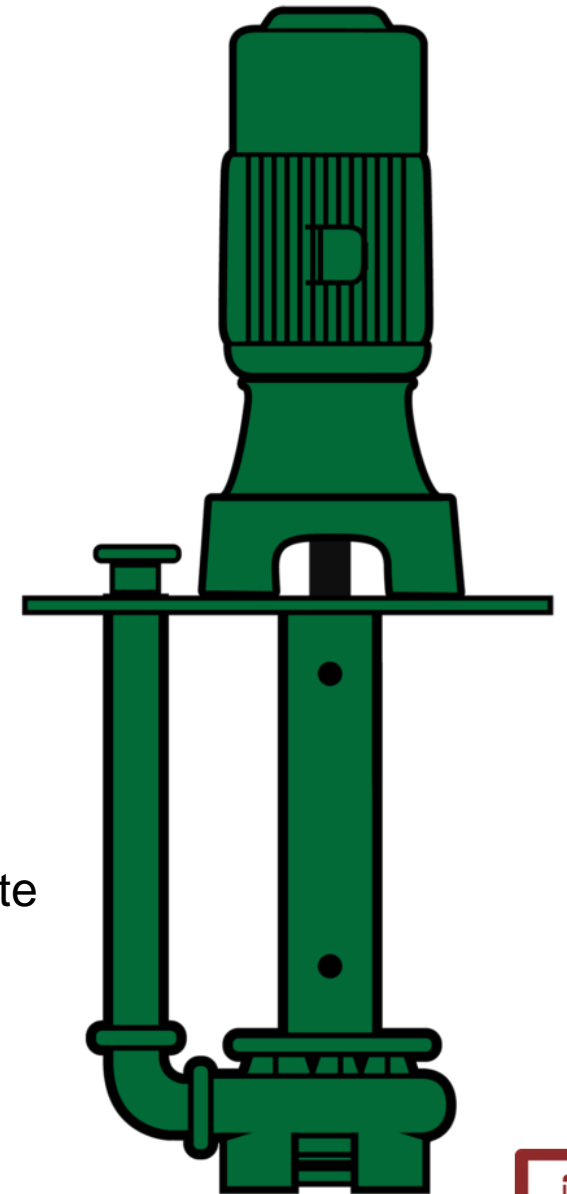
MDO Dry Shaft Pump

Specifications

- Sizes: 1" to 3"
- Capacities: Up to 300 gpm
- Pressures: To 54 psi

Features

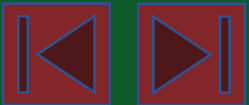
- For light to medium weight slurries at near ambient temperatures not suitable for wet shaft pumps
- Designed for dry pit installation
- True cantilever shaft design-no bearings, bushings or brushes below mounting plate
- A spacer area between mounting plate and motor protects motor and bearings from contamination
- Suitable for depth settings up to 3 feet; suction extension available to increase overall pump length



Nagle Pumps

Nagle MWO Vertical Cantilever Shaft Pump:

- Spacer area between the mounting plate and motor allows for minor overflow and wash-down
 - No bearings, bushings, or brushes are below the mounting plate
- Discharge sizes are 1" through 3"
- Suction extension available to increase pump length
- MWO pumps are available in a Dry Pit design

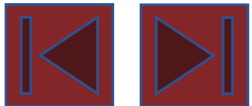


Nagle Pumps

A Nagle Cantilever Pump being prepared for shipment

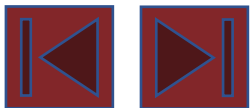
Nagle standard Materials:

- Cast Iron
- 28% Chromium hard Iron
- 316 Stainless Steel
- CD4MCu
- Alloy 20
- High Nickel Alloys



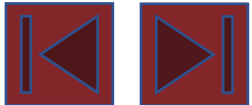
Nagle Pumps

A Nagle Pump handles extremely abrasive material for **Armstrong World Industries** in Germany.



Nagle Pumps

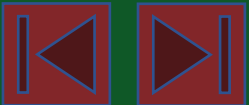
An order of Nagle
Cantilever Pumps
ready to ship to a
Texas Power Plant



Nagle Pumps

Heavy-Duty Horizontal Pumps:

- Can be used above or below the liquid level
- Rugged design with only 3 wearing parts: Casing, Suction Plate, Impeller
- Enclosed shaft/cartridge bearing assembly protects bearings from contamination or Pumpage Blow-by
- FCH/FDV-H model options (KCR models of this pump are a legacy product and only available as a direct replacement for a previously purchased pump)



Nagle Pumps

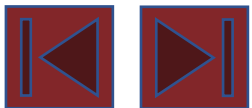
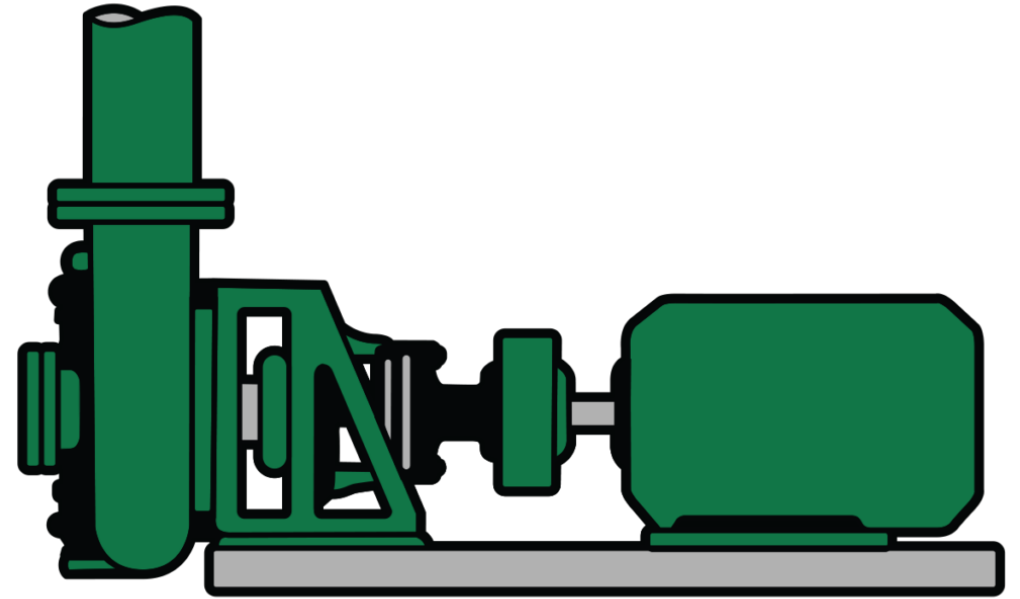
FCH/FDV-H Horizontal Pump

Specifications

- Sizes: 1" to 12"
- Capacities: Up to 10,000+ gpm
- Pressures: To 150 psi

Features

- For slurries with solids; large impeller passages reduce wear, efficiently manage flow
- Heavy wall sections maximize service life
- Adjustable impeller maintains design conditions
- Bearing isolators (Inpro) extend bearing life
- Heavy double row bearings increase durability and extended bearing life
- Piloted components insure concentricity during maintenance, impeller adjustments and assembly



Nagle Pumps

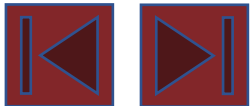
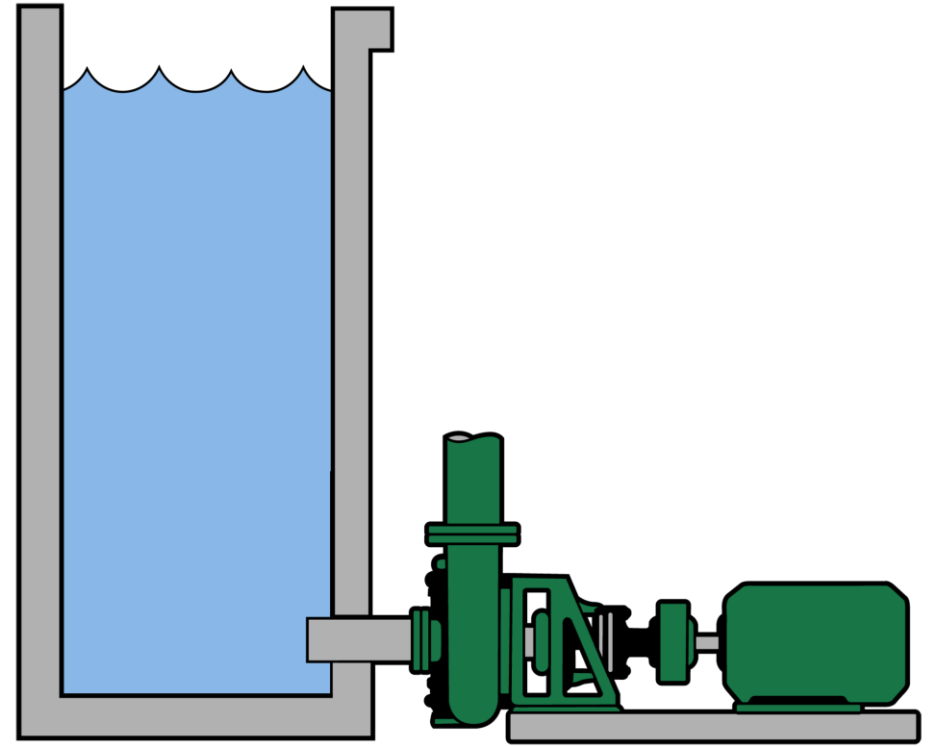
FCH/FDV-H Horizontal Pump

Features (continued)

- Front and back vanes control axial load control and reduce stuffing box pressure
- Stainless steel gland is standard
- Shaft design minimizes deflection and stress at packing

Options

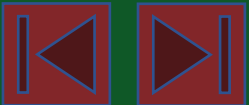
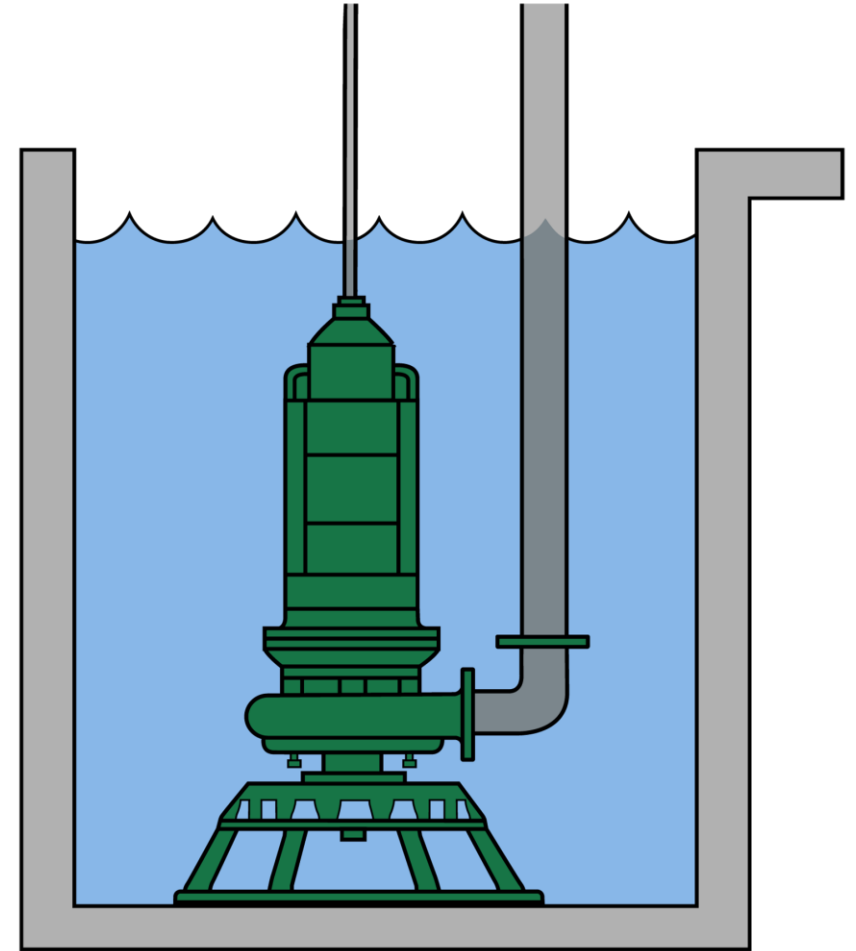
- FDV-H Model vertical mounting configuration for dry pit installation
- Dry packing available
- Mechanical seal material selection, with dynamic seals available on selected sizes
- Suction inducers on selected sizes
- Priming Inductor for positive priming with heavy solids



Nagle Pumps

Submersible Slurry Pumps

- Capable of handling slurries with up to 70% solids
- Nagle submersible pumps can tolerate a wide range of abrasive and corrosive applications
- They save space as well as money by eliminating the need for head room, mounting pedestals, long columns and tail pipes
- Vortex model available for high solids applications



Nagle Pumps

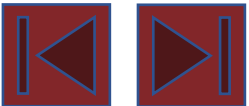
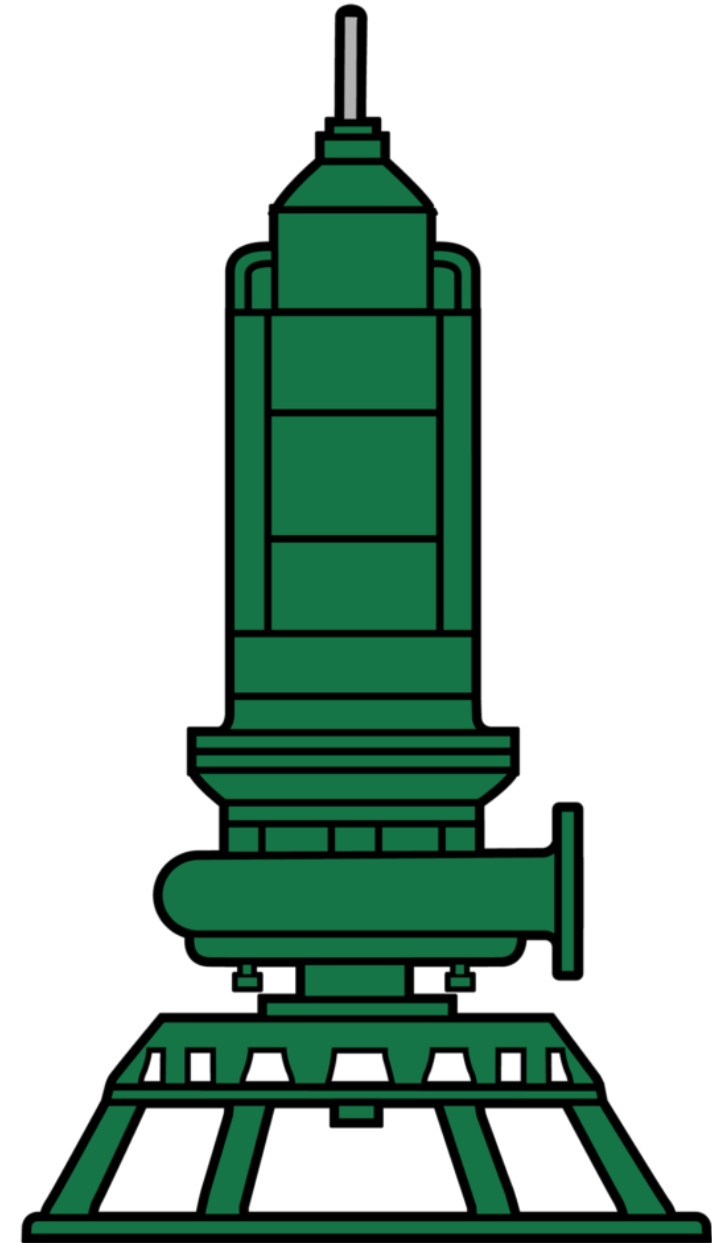
SMR/SML Submersible Slurry Pump

Specifications

- Sizes: 1" to 10"
- Capacities: Up to 4,000 gpm
- Pressures: To 104 psi

Features

- Large Impeller passages reduce wear, maximize solids handling
- Wider sealing areas eliminate need for wear rings
- Dual moisture sensing probes detect contamination and sound alarm
- Pump bypass feature removes pump pressure from motor seal
- Flinger/sleeve directs flow away from motor seal
- Combination strainer and pump stand



Nagle Pumps

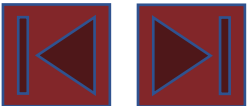
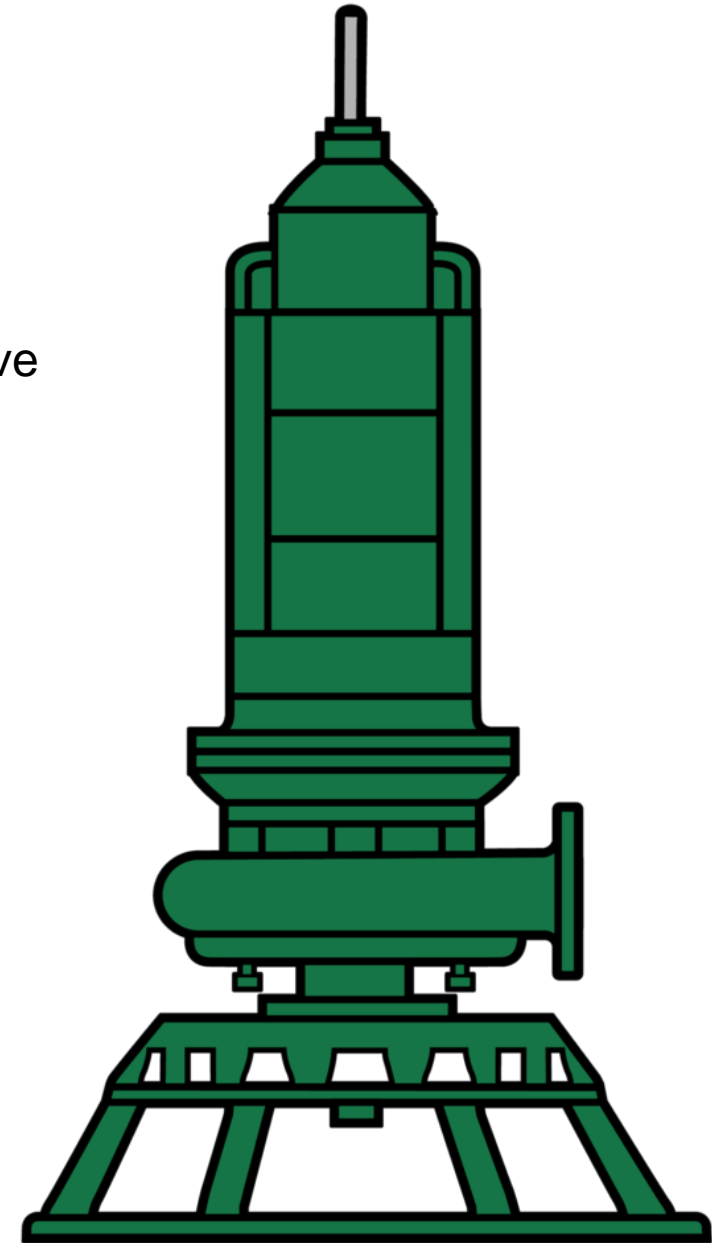
SMR/SML Submersible Slurry Pump

Features (continued)

- The SMR is designed for heavy duty slurry applications with progressive casting wall thickness to maximize service life
- The SML is recommended for lighter slurry applications

Options

- Continuous in-air run dry motor
- UL Class 1, Group D, explosion-proof enclosure
- Quick disconnect discharge with guide rail systems
- Sump Agitator to prevention suction clogging



Nagle Pumps

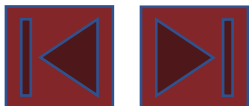
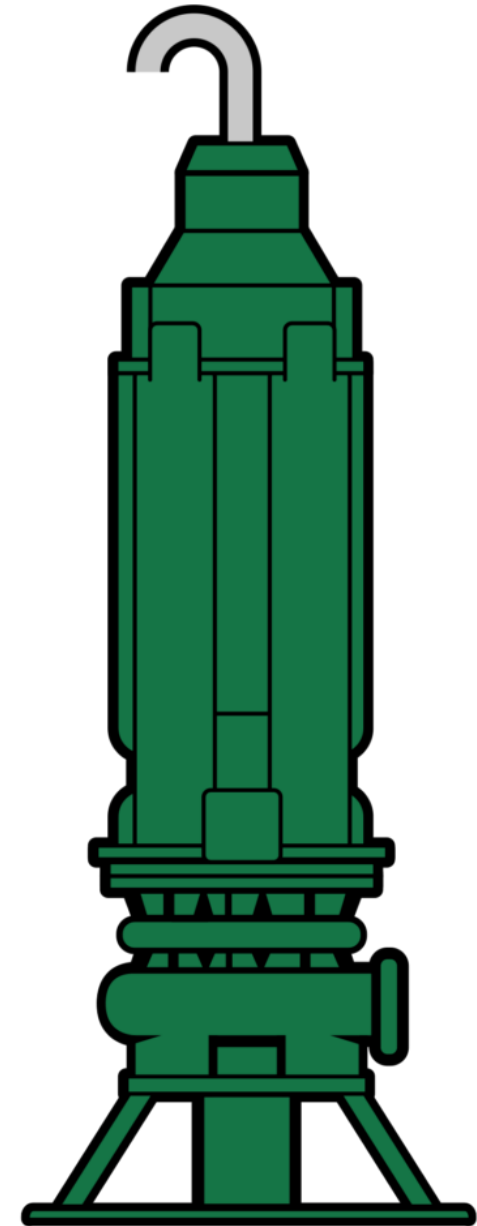
SMV Submersible Vortex Slurry Pump

Specifications

- Sizes: 2" to 6"
- Capacities: Up to 2,700 gpm
- Pressures: To 190 psi

Features

- Non-clog impeller recessed out of the casing reduces wear and maximizes solids handling
- Double mechanical seals protect motor from water and contaminants
- Dual moisture sensing probes detect contamination and sound alarm
- Pump bypass feature removes pump pressure from motor seals



Nagle Pumps

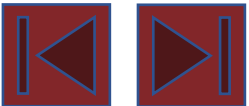
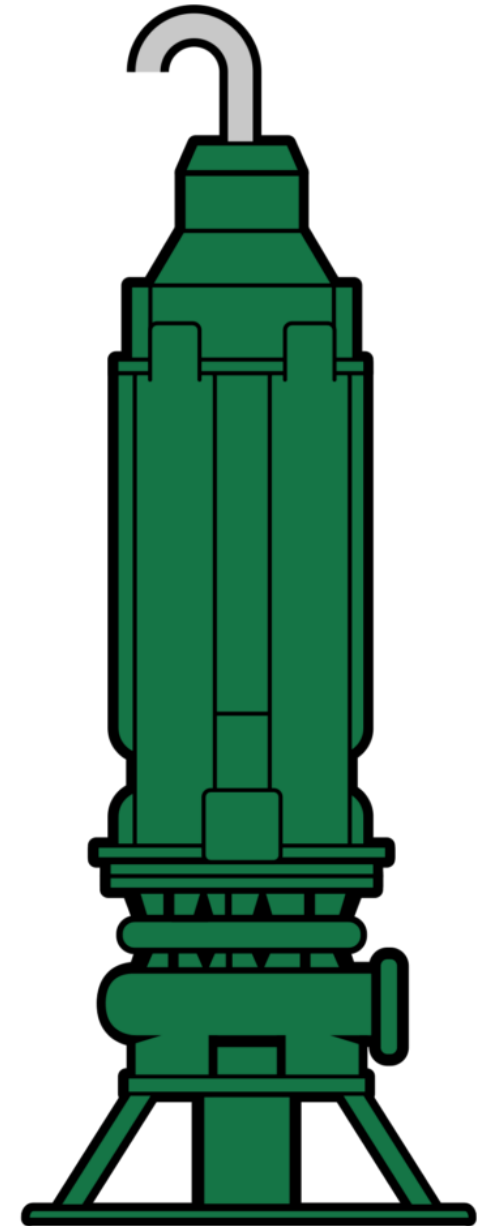
SMV Submersible Vortex Slurry Pump

Options

- Sizes: 2" to 6"
- Capacities: Up to 2,700 gpm
- Pressures: To 190 psi

Features

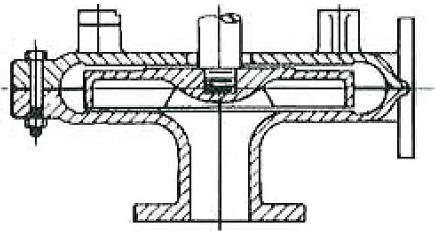
- Continuous in-air run dry motor
- UL Class 1, Group D, explosion-proof enclosure
- Quick disconnect discharge with guide rail systems



Nagle Pumps

Options: Casings

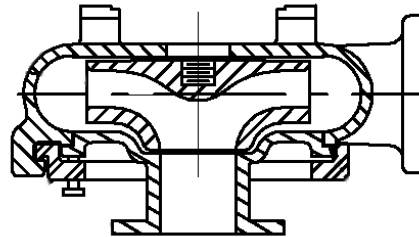
Type -C



Split casing design;
bolted together around
periphery, where
frequent inspection is
not necessary

**Models: TWO; CWO;
CDO; MWO; MDO;
YWS**

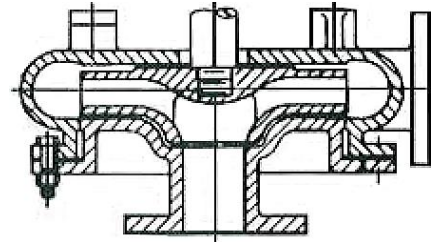
Type -R



Ring clamp design;
suction plate clamped
into place by means of
ring and set screws to
provide easy inspection

**Models: TWO; CWO;
CDO; MWO; MDO;
YWS; SWR; KCR**

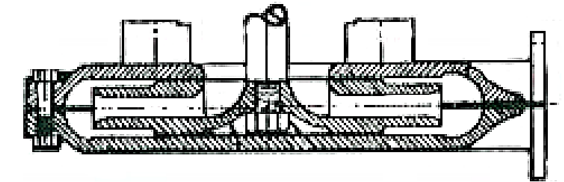
Type -F



Flanged design; secured
in casing by means of
flanges and bolts for
high-pressure
applications

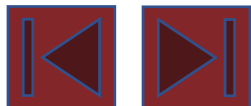
**Models: TWO; CWO;
CDO; MWO; MDO;
YWS**

Type -IC



Inverted casing top
suction design; bolted
together around
periphery

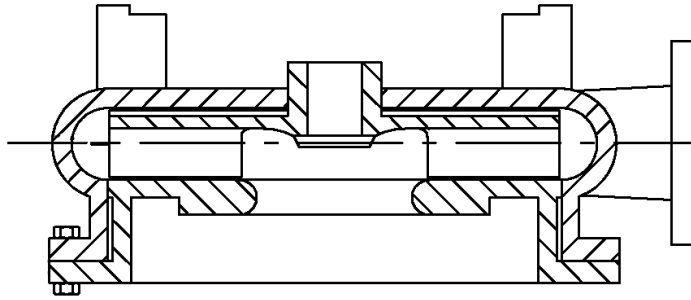
**Models: TWO; CWO;
CDO; MWO; MDO;
YWS**



Nagle Pumps

Options: Casings, cont.

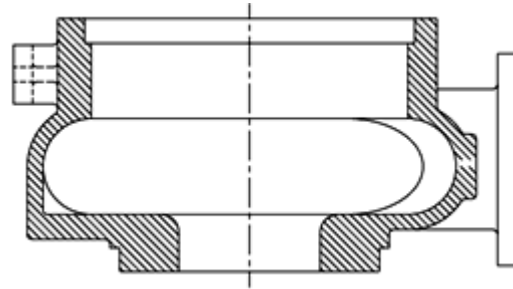
Type -L



Suction plate design; bolts to casing, suitable for medium duty

Models: SML

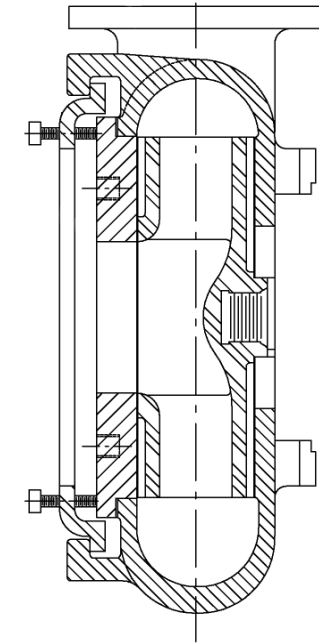
Type -V



Handles large solids without clogging. Allows throttling to a low performance range unacceptable to many centrifugal pumps.

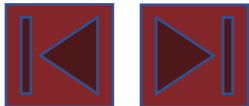
Models: SMV

Type -H



Suction plate design; held to casing with lockbolts through clamp ring

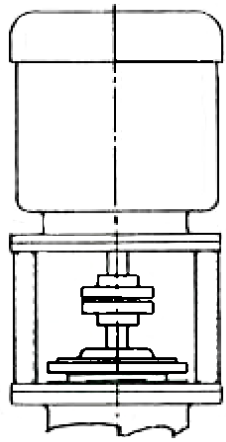
Models: FCH



Nagle Pumps

Options: Motors & Drives

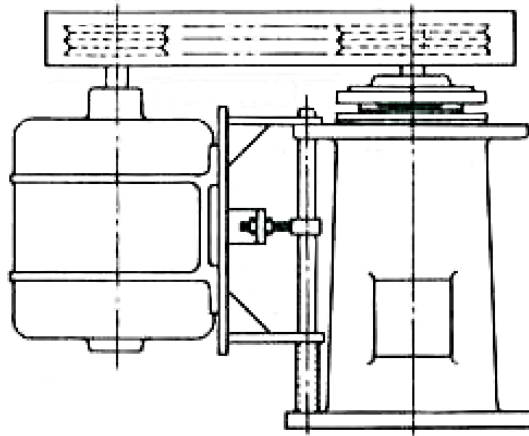
Direct Mounted



Many installations of vertical pumps utilize vertical motors directly flanged to the top of the pump and connected to the pump with a standard flexible coupling

Models: TWO; YWS

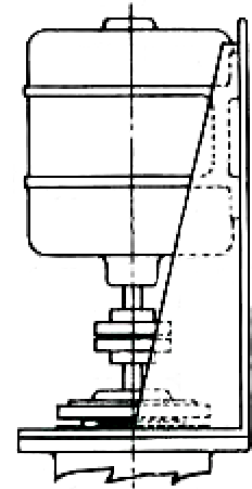
Belt Drive



Reduces the head room requirement; useful where operating conditions are variable. Permits minor sheave size and belt changes to achieve different pump spreads without altering motor or impeller

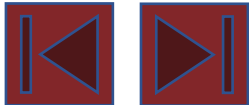
Models: TWO; YWS

Bracket Mounted



A bracket or chair mounting permits use of standard horizontal motors for direct connecting with a standard flexible coupling

Models: TWO



Nagle Pumps

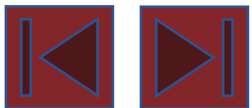
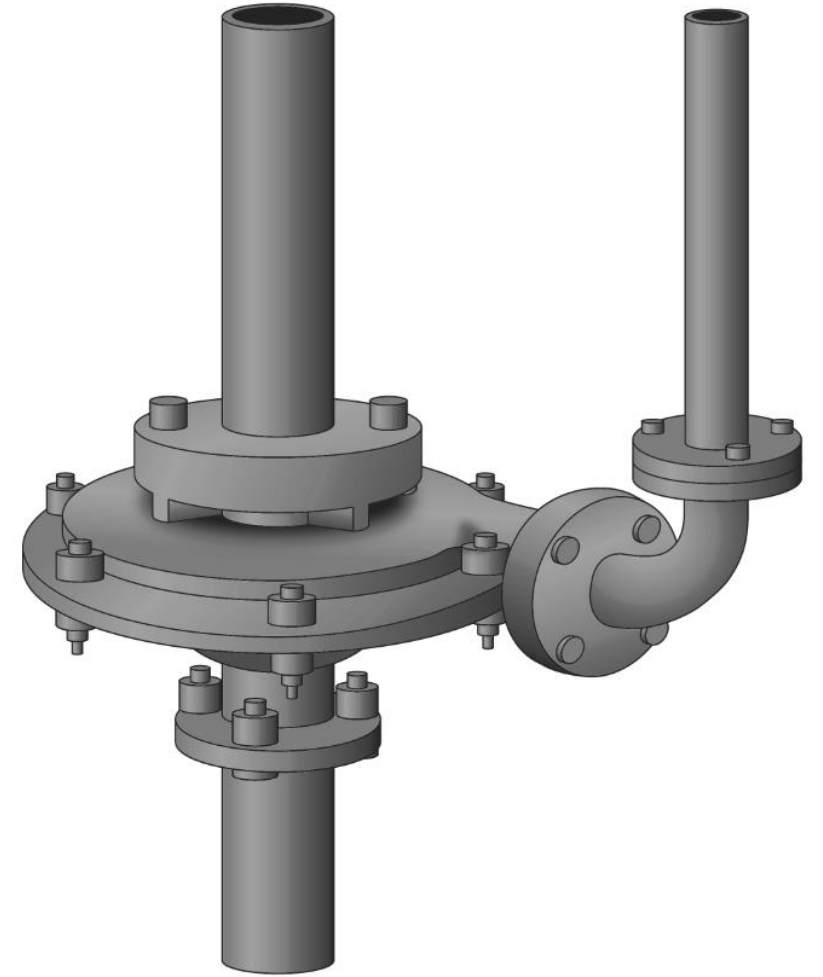
Options: Tail Pipe

Benefits

- Permits use of shorter setting pipe
- Reduces cost and equipment footprint

How it works

- The pump will draw down to the bottom of the tail pipe, but will not prime again unless the liquid level comes back up to the center of the impeller
- This provides satisfactory liquid level control
- For liquids with rapidly settling solids, sump agitation, continuous operation with speed regulation, or some other flow control method is required



Nagle Pumps

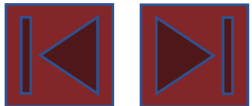
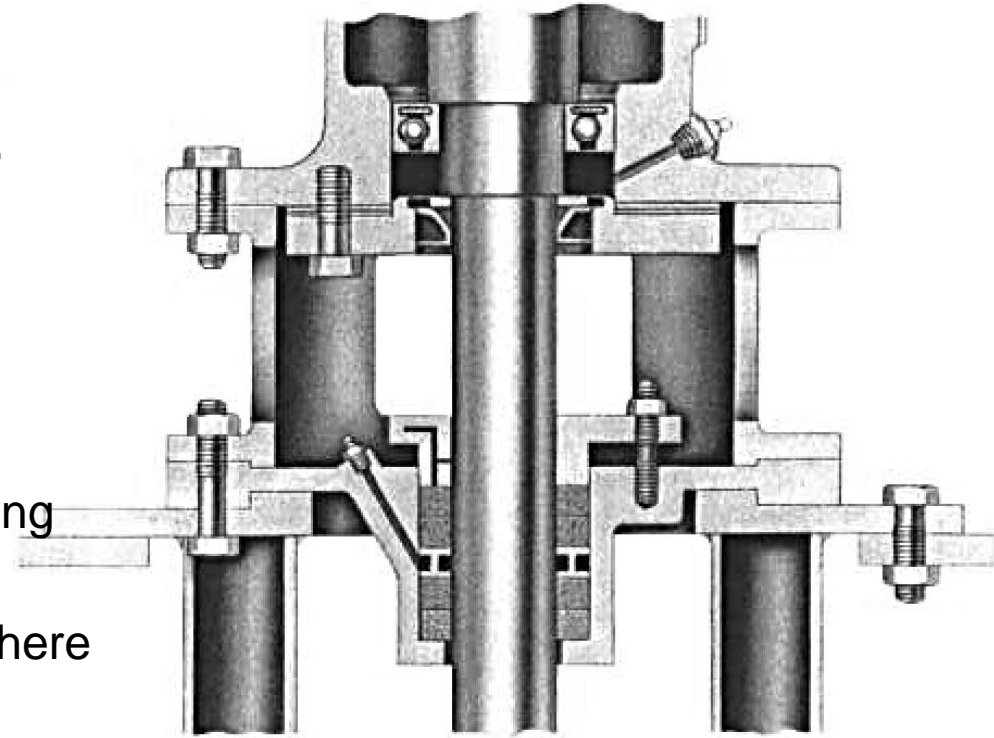
Options: Spacer Pedestal

Benefits

- Provides overflow and flume protection for the radial bearing

How it works

- Spacer pedestal is installed between the mounting cover and bearing pedestal
- Optional, but required if the pump uses a belt drive arrangement where the motor is hung from the pedestal itself
- May contain optional cooling fan and guard arrangements



Nagle Pumps

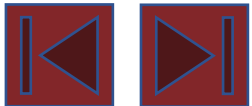
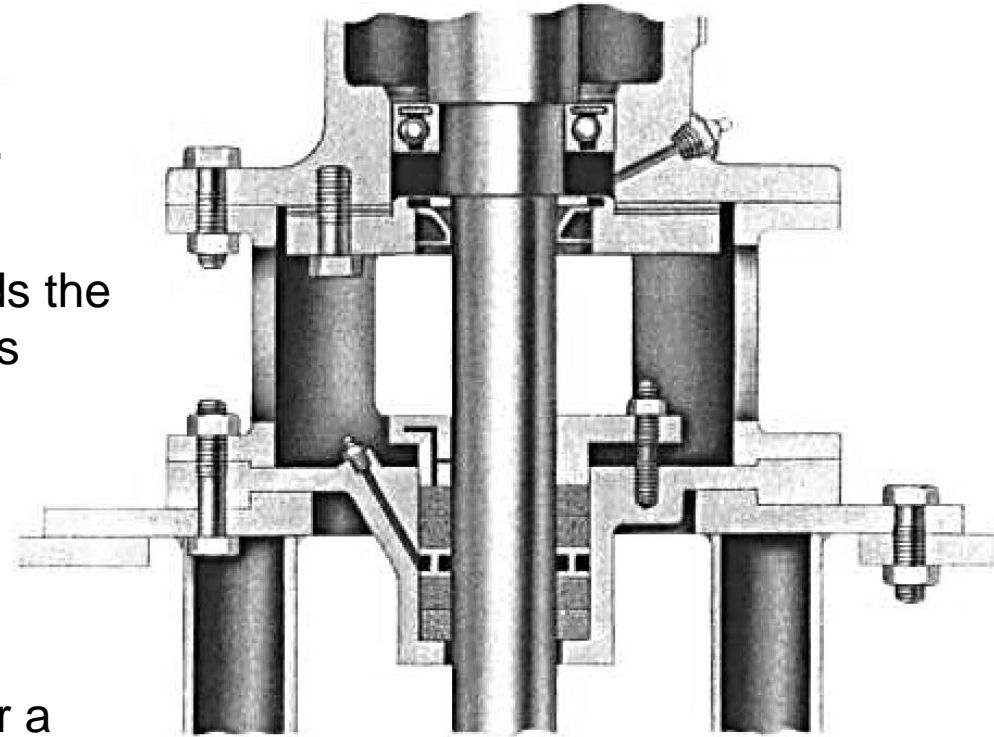
Options: Stuffing Box

Benefits

- Enables inert gas purging, sump pressure maintenance, and guards the pumpage from foreign substances, depending on application needs

How it works

- Installed in the pedestal box as an option
- Type of packing and lubrication is application-dependent
- If dictated by application needs, the stuffing box can be adapted for a mechanical seal arrangement



Nagle Pumps

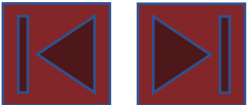
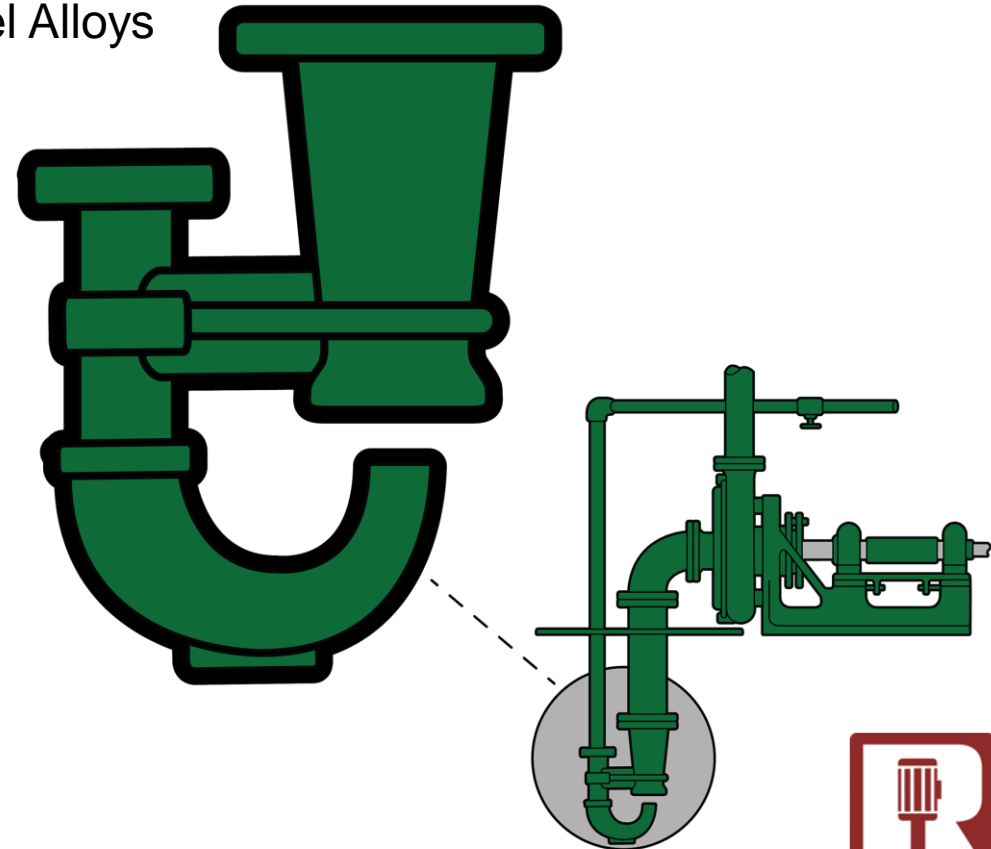
Accessories: Priming Inductor

Specifications

- Sizes: 1.5" through 12"
- Materials: Cast Iron, CD4MCu, HC28, Alloy 20, 316SS, High Nickel Alloys

Benefits

- Process pumps are primed in just seconds
- Unaffected by air or fluid leaks in the system
- No moving parts
- Easily automated start up sequence
- Primes even if suction is buried in packed solids
- Augments feed of high density slugs of solids
- Avoids priming problems with aerated sump fluids
- Specially designed for abrasive applications



Nagle Pumps

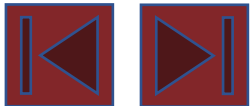
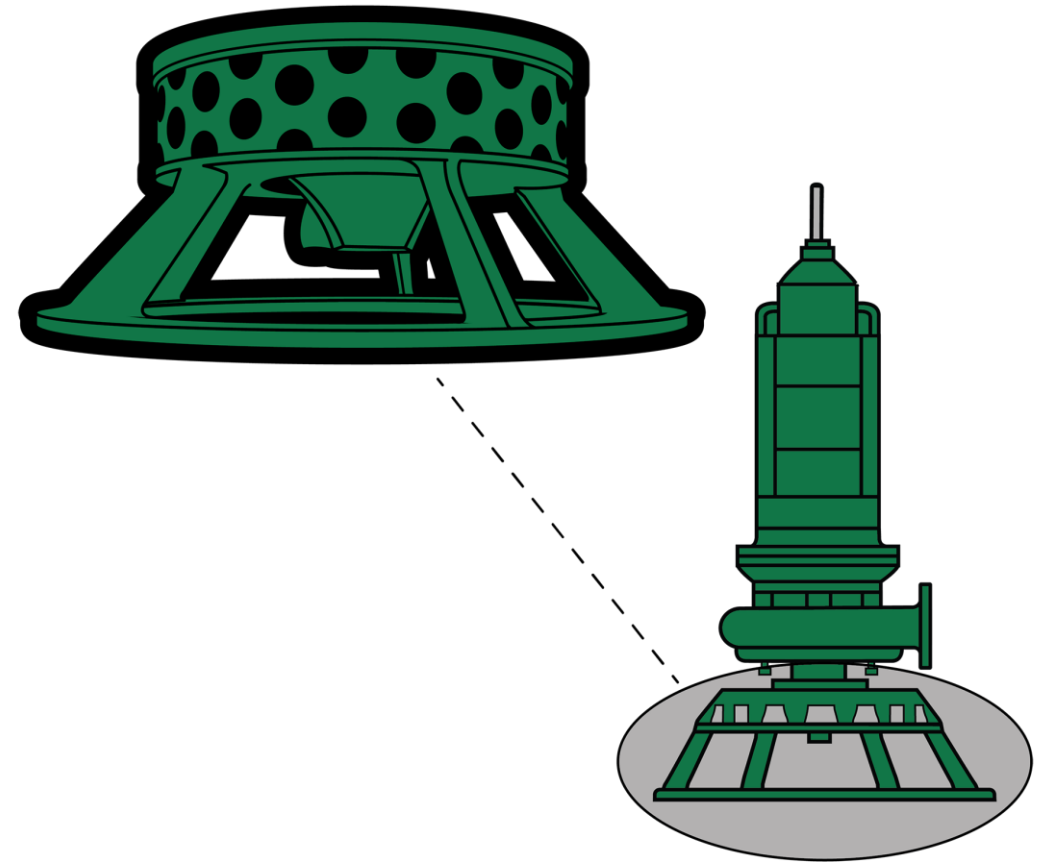
Accessories: Agitator

Specifications

- Compatible with: All Nagle Vertical Cantilever, Submersible and Submerged Bearing pumps
- Materials: Wide range of custom options to suit any application

Benefits

- Ensures smooth suction of even heavy slurries and sludges, in ash removal, coal handling and similar applications
- Keeps sediment and solids from settling
- Prevents pump damage and clogging from
- Constant circulation maintains more uniform fluid viscosity



Nagle Pumps

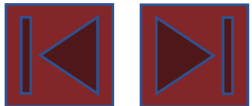
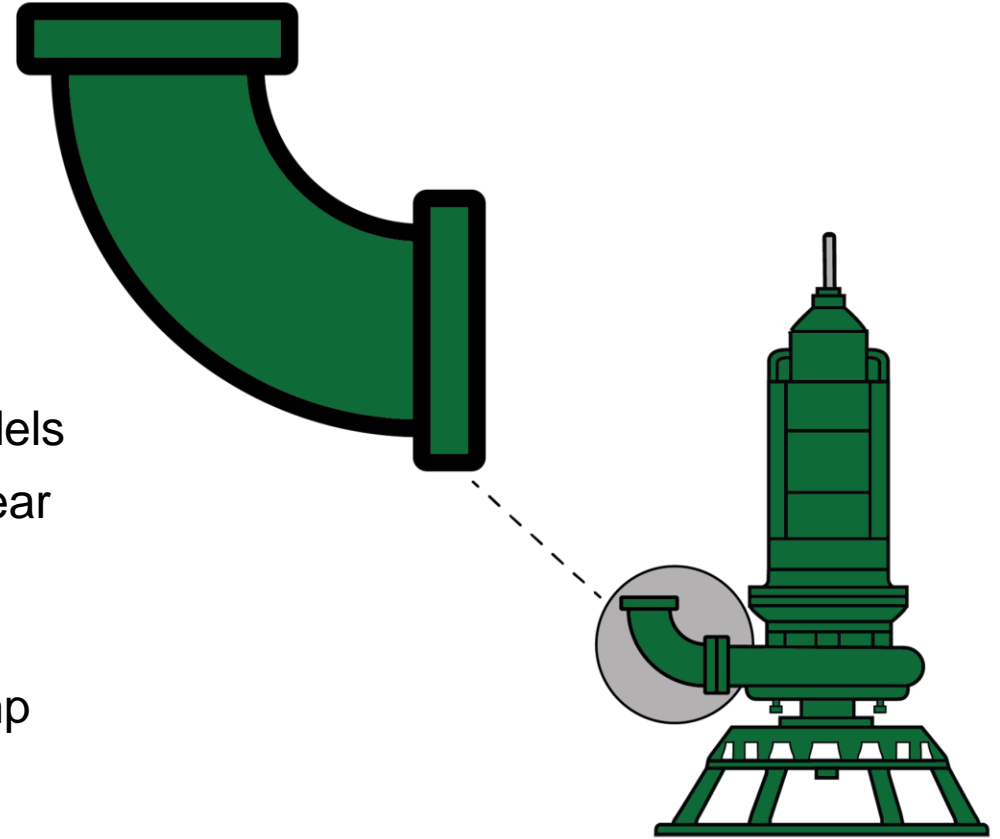
Accessories: Discharge Elbows

Specifications

- Sizes: 1" to 16"
- Radius Types: Standard and Long

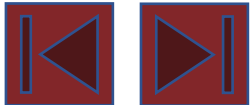
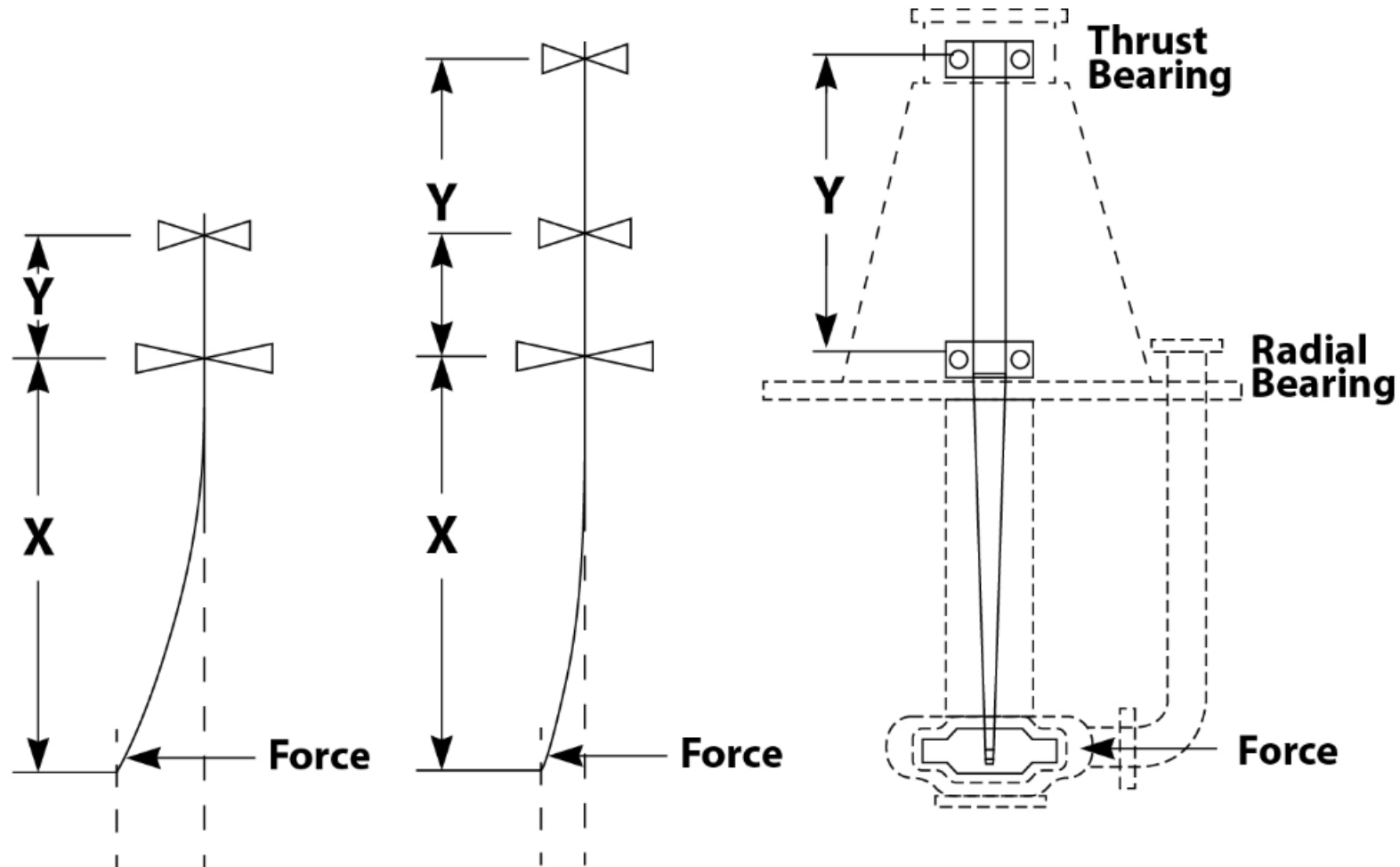
Benefits

- Mounting flexibility for submersible and horizontal pump models
- Parts cast in-house to ensure smooth flow lines to reduce wear and tear and lengthen service life
- Custom material selection to match application requirements
- Provides a smooth conduit for flow of liquid to maximize pump performance
- Four bolt flange connection for easy installation



Nagle Pumps

Cantilever Shaft Design

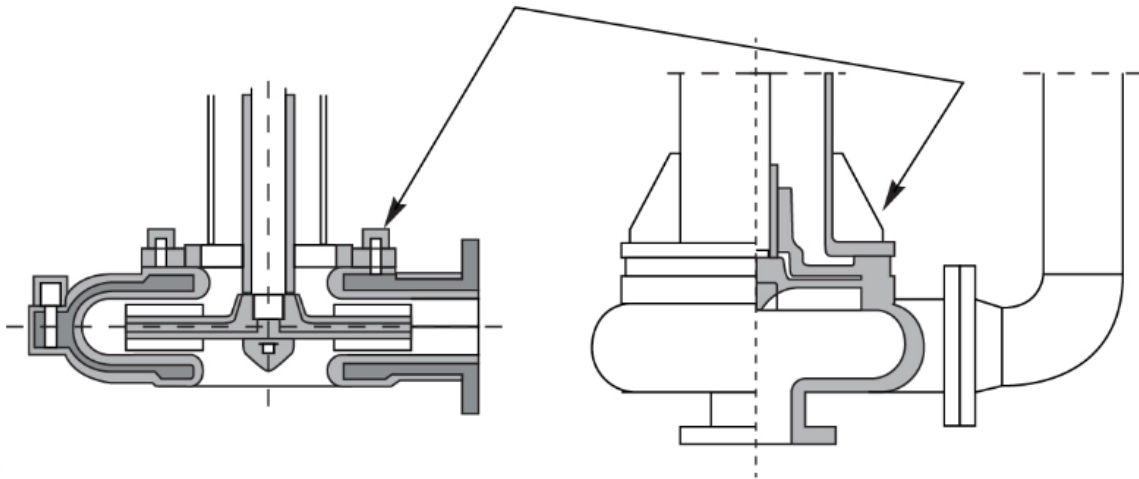


Nagle Pumps

Through Bolt Construction

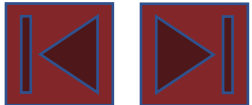
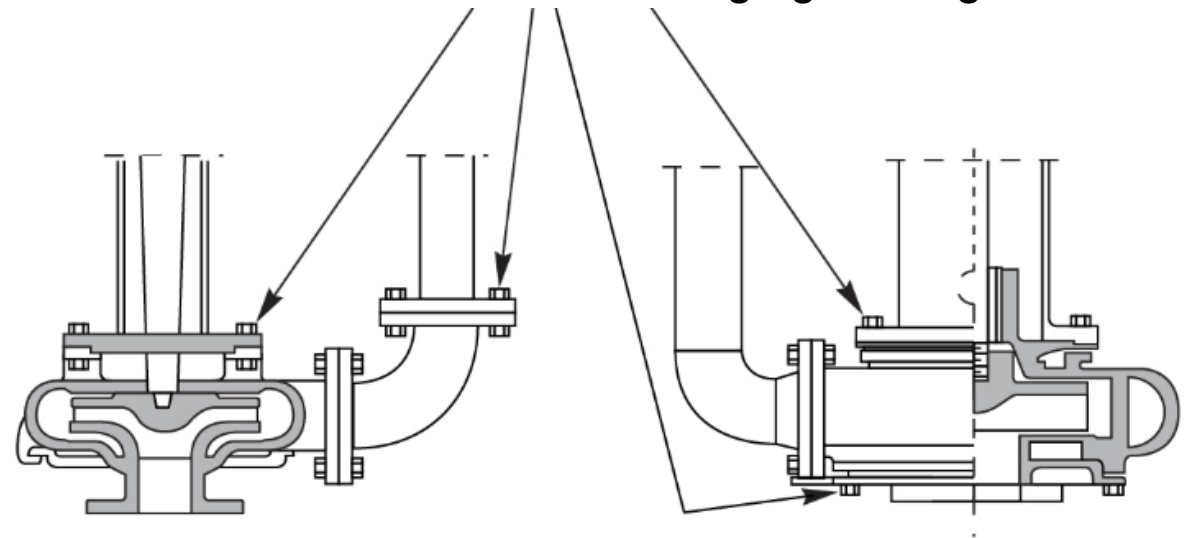
Tapped Hole Construction

Corroded or broken fasteners require re-tapping or new castings



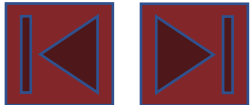
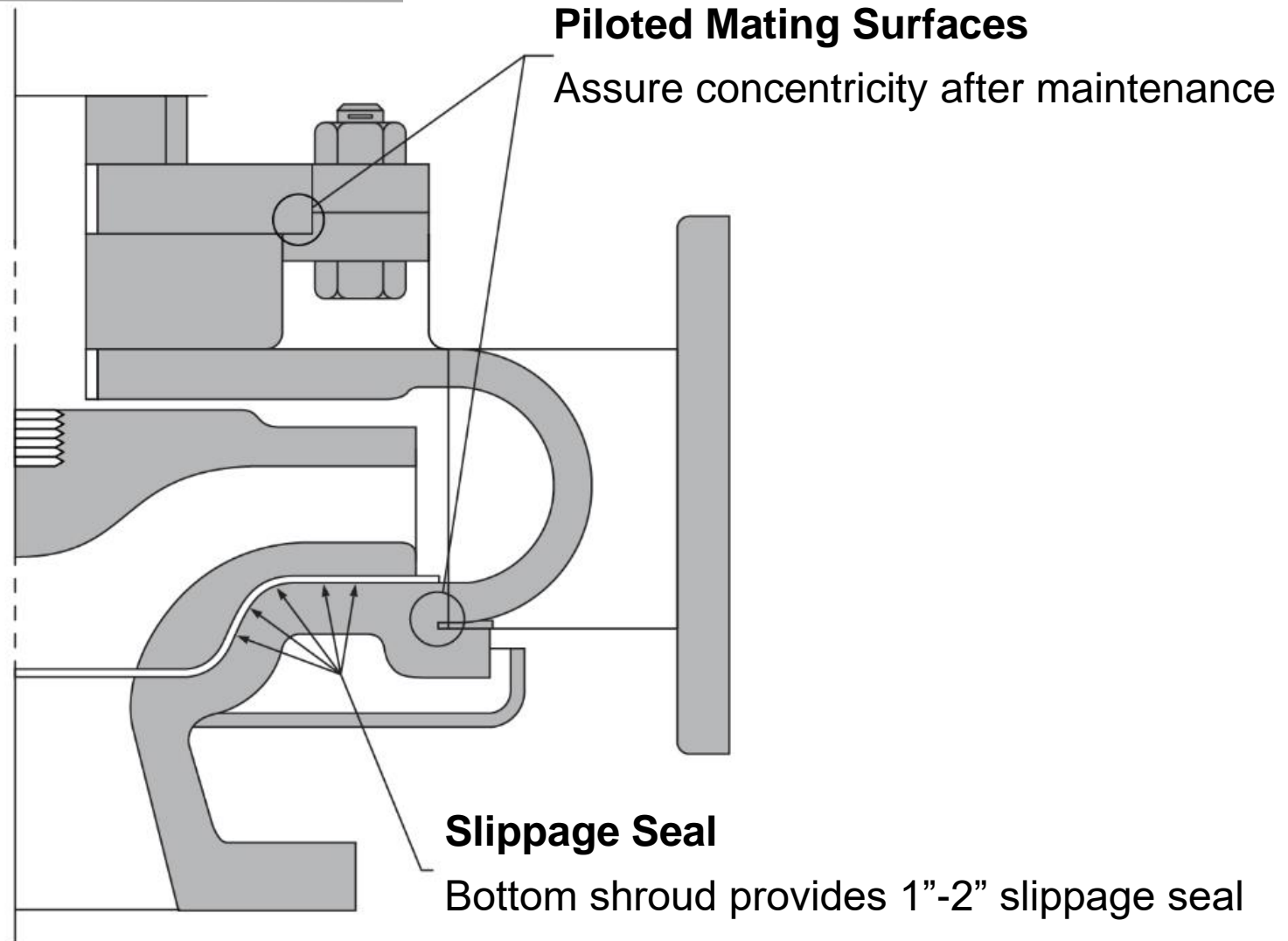
Through Bolt Construction

Corroded or broken fasteners require burned off without damaging casting



Nagle Pumps

Construction Features



Nagle Pumps

Impeller Types

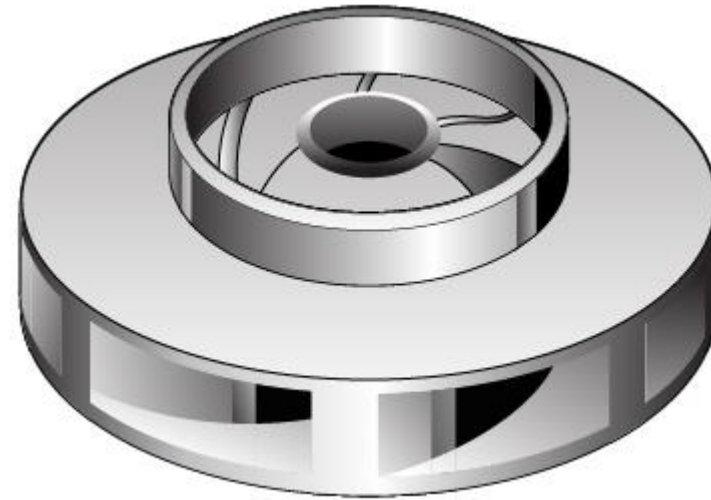
Open

Vane edges exposed



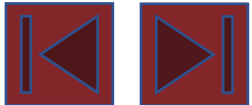
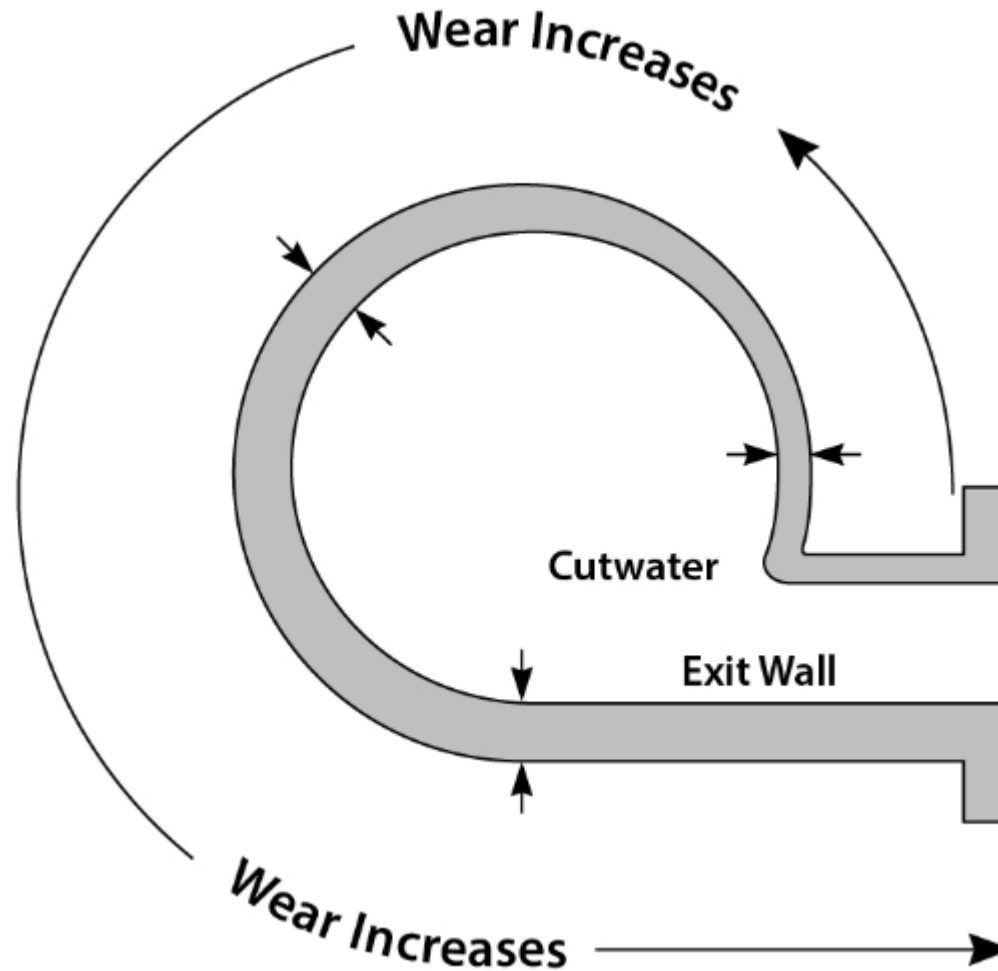
Enclosed

Vane edges protected



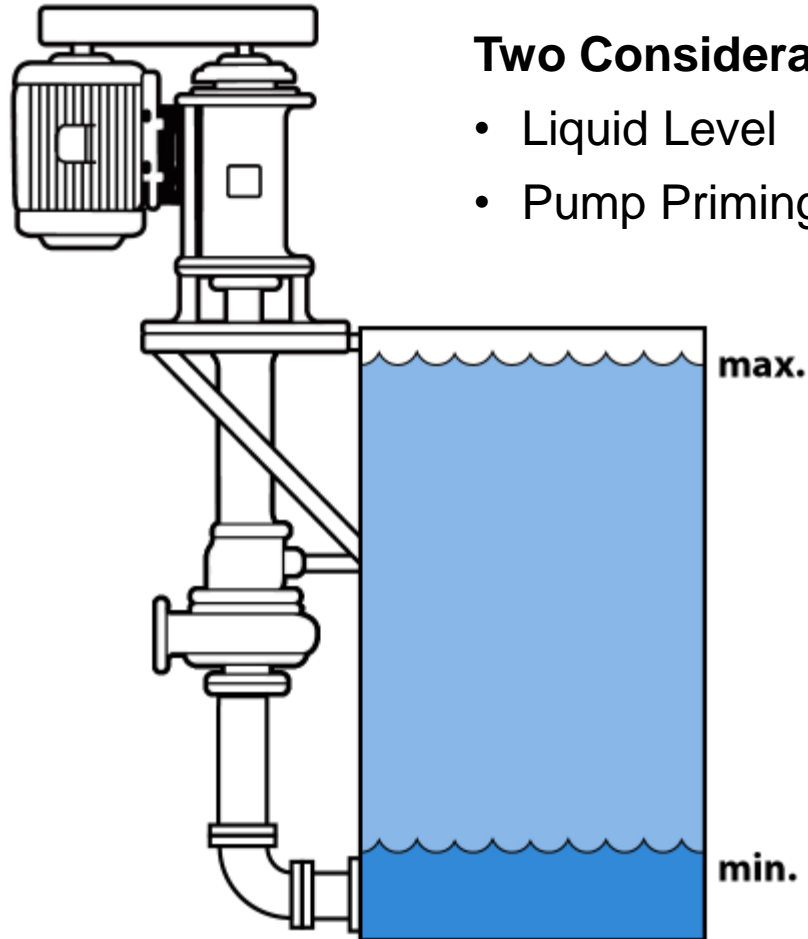
Nagle Pumps

Casing Wear



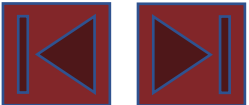
Nagle Pumps

Dry Pit Vertical Pump Configuration



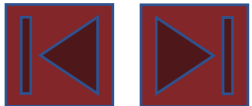
Two Considerations

- Liquid Level
- Pump Priming





Sales and Manufacturing of Hydraulic Bypass Relief Valves



Introduction video: https://youtu.be/Fro9AMFpk_g



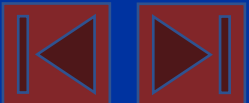
Fulflo

Hydraulic Bypass Relief Valves

Valve Range

Flagship Product: Bypass/Relief Valves

- Chatter-free performance
- Continuous duty; Consistent pressure regulation
- UL approved, CRN certified, RoHs compliant, API 520 & 614 approved
- High reliability & dependability
- Can be mounted in any position (unique)
- Sizes from 3/8" to 4"
- Flows from 0 to 600 gpm
- Pressures up to 1500 psi (selected sizes)
- Material selection: Cast Iron (Class 30); Cast Steel (WCB); Brass (360), Stainless Steel (CF8M)
- Flexible internal design (interchangeable parts)
- Durable design, "Built to Last"



Fulflo

Hydraulic Bypass Relief Valves

Click on a Series to learn more.

Valve Series



SVB-Series



A-Series



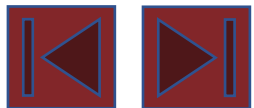
V-Series



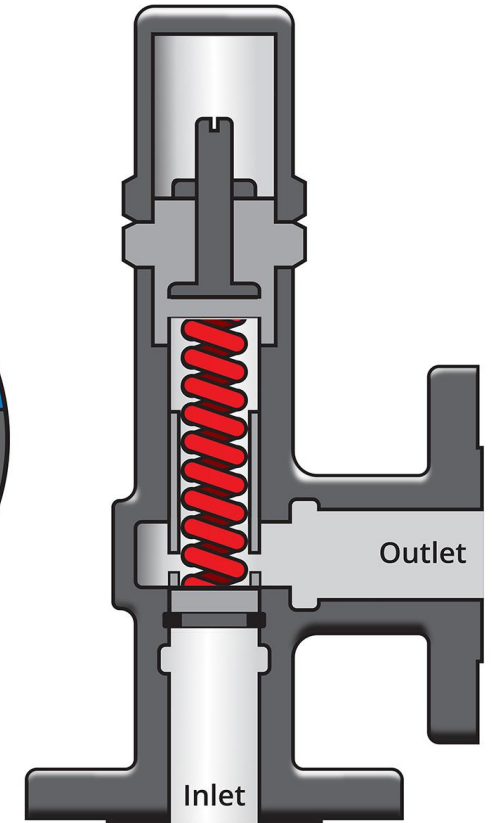
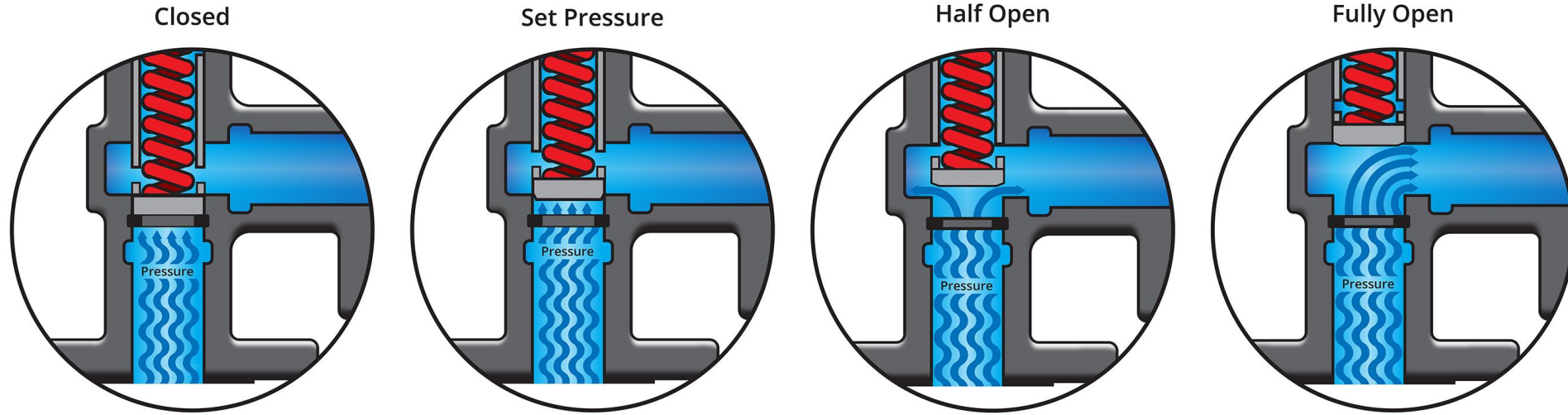
FV-Series



OV-Series



Operation Under Pressure



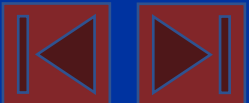
Fulflo

Hydraulic Bypass Relief Valves

V-Series

Features

- API 520 & 614 Approved
- Size 3/8" through 2" ports
- Connection NPT, Flanged, SAE, & Socket Weld
- Flows from 0 to 150 gpm
- Pressures up to 900 psi (adjustable)
- Steel, Cast Iron, Brass and Stainless
- "Chatter Free" operation
- Continuous Duty
- Mounts in any position
- Specials available



Fulflo

Hydraulic Bypass Relief Valves

FV-Series

Features

- API 520 & 614 Approved
- Size 3/8" through 2" ports
- Connections NPT, Flanged, SAE, Socket Weld
- Flows from 0 to 150 gpm
- Pressures up to 900 psi (adjustable)
- Steel, Cast Iron, Brass and Stainless
- "Chatter Free" operation
- Continuous Duty
- Mounts in any position
- Specials available



Leak-free cap = Safer design



Fulflo

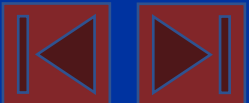
Hydraulic Bypass Relief Valves

OV-Series

A balanced pressure relief valve-for variable back pressure applications

Features

- API 520 & 614 Approved
- Size ½" through 2"
- Pressures up to 500 psi
- Connections NPT, Flanged
- Steel, Cast Iron, Brass, Stainless Steel
- "Chatter Free" operation
- Continuous Duty
- Mounts in any position
- Specials available



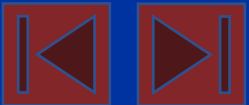
Fulflo

Hydraulic Bypass Relief Valves

A-Series Direct Acting

Features

- API 520 & 614 Approved
- Size 2 ½" through 4" ports
- Pressures up to 150 psi
- Connections NPT, Flanged
- Flows from 150 to 600 gpm
- Steel, Cast Iron and Stainless
- "Chatter Free" operation
- Continuous Duty
- Mounts in any position
- Specials available



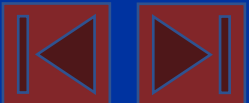
Fulflo

Hydraulic Bypass Relief Valves

A-Series Pilot Operated

Features

- API 520 & 614 Approved
- Sizes 2 ½" through 4" ports
- Pressures setting 50 to 500 psi
(up to 800 psi by special order)
- Flows from 150 to 600 gpm
- Connections NPT, Flanged
- Steel, Cast Iron and Stainless
- "Chatter Free" operation
- Mounts in any position
- Continuous duty



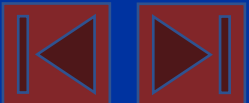
Fulflo

Hydraulic Bypass Relief Valves

SVB-Series

Features

- UL-842 approved (Boiler Valves; flammable fluid)
- Size 3/8" through 2" ports NPT
- Flows from 0 to 150 gpm
- Pressures up to 500 psi, limited to no more than 25% higher than the set pressure
- "Chatter Free" operation
- Continuous Duty
- Mounts in any position



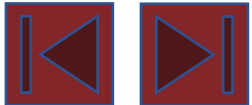
Fulflo

Hydraulic Bypass Relief Valves

Manufacturing

The Fulflo Advantage:

- Quality US manufacturing
- All machining and assembly at our Blanchester, OH plant
- Domestic castings
- Tight quality control
- DFARS compliant



Fulflo

Hydraulic Bypass Relief Valves

Manufacturing

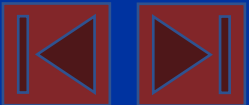
Every valve is tested to ensure operation is to specifications, then stamped with model number for full tracking and accountability.



Fulflo

Hydraulic Bypass Relief Valves

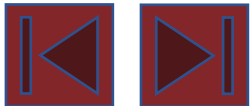
A-Series Valve Under Test



Fulflo

Hydraulic Bypass Relief Valves

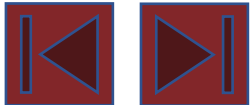
Fulflo Valves are on the hydraulic system supporting this 3,000-ton antenna for **NASA**.




Fulflo

Hydraulic Bypass Relief Valves

An Engine Dyno equipped with a Gusher Horizontal Pump and a Fulflo Relief Valve in the automotive service technology area at **Southeastern Career Center** in **Versailles, Indiana**.





RAE PUMPS
A RUTHMAN COMPANY

READY TO SHIP
Vertical and Horizontal Pumps

By the people who know pumps

Multistage Pumps

Vertical Immersion

GTPK SERIES
Operating Parameters:
• up to 142 max psi
• 4.26 gpm
• 30-50 ft. head
Comparable to Grundfos SPK series pumps.

GTPHK SERIES
Operating Parameters:
• up to 142 max psi
• 4.76 gpm
• 40-50 ft. head
Comparable to Grundfos MTC & MTH series pumps.

GMVCP SERIES
Operating Parameters:
• up to 335 max psi
• 4.14 gpm
• 40-77 ft. head
Comparable to Grundfos CRK and Xylan (Goulds) VLS series pumps.

Vertical External Mount

MSVP SERIES
Operating Parameters:
• up to 277 max psi
• 2.377 gpm
• 43-78 ft. head
Comparable to Grundfos CRK and Xylan (Goulds) e-SP series pumps.

www.RAEPumps.com | 513.779.3334

RUTHMAN
Engineering Pump Solutions

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Products

RAE's extensive line of stock industrial pumps includes a number of vertical multistage immersion pump series, a vertical multistage flange mount series, a horizontal multistage series and a sealless immersion pump series. Within each series, a number of models and configurations are available to meet your performance and installation parameters.


Product categories




Multistage Vertical Immersion Pumps



Multistage Vertical External Mount Pumps



Multistage Horizontal External Mount Pumps



Sealless Vertical Immersion Pumps

Your Cart

- ✗ GMVCP 4 Vertical Multistage Immersion Pump - GMVCP4-20-2 9 x \$543.00
- ✗ GMVCP 4 Vertical Multistage Immersion Pump - GMVCP4-40-4 22 x \$689.00

Subtotal: \$20,045.00

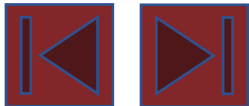
[View order](#) [Submit order](#)

Product categories

Multistage Pumps

- Vertical Immersion Pumps
- Vertical External Mount Pumps
- Horizontal External Mount Pumps
- Sealless Vertical Immersion Pumps

Your online source for a range of stock vertical and horizontal pumps



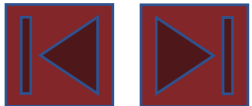
RAE Pumps

By the people who know pumps

Ruthman Companies has built its reputation on its Gusher custom-engineered pumps for challenging applications.

But sometimes, you just need a reliable, competitively-priced pump that's easy to order and delivered quickly. That's why we created RAE Pumps.

- Hundreds of different standard model configurations suitable for industrial and OEM use.
- Drop-in replacement for most OEM pump brands.
- Many pumps are in stock and available for immediate shipping.
- Pumps are available through our distributor network or for direct order online at www.RAEPumps.com.



RAE Pumps

High Pressure Centrifugal Multistage Pumps

Applications:

- CNC Lathe Coolants
- Grinding Machines
- Processing Centers
- Heat Exchangers
- Industrial Cleaning
- Reverse Osmosis
- Filtering
- High Pressure Machine Tools
- Golf Courses
- Agriculture
- High Rise Buildings
- Pools
- Car Washes



RAE Pumps

Click on a Series to learn more.

Pump Series

Vertical External Mount



MSVF Series

Horizontal



GTPH Series

Vertical Immersion



GTPK Series



GTPHK Series

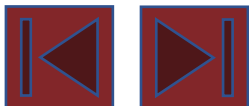


GMVCP Series

Sealless Vertical Immersion



VBV Series



RAE Pumps

Multistage Vertical Immersion



GTPK Series

- 2 models
- up to 142 max psi
- 4-26 gpm
- 20-308 ft. head



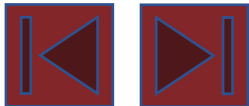
GTPHK Series

- 4 models
- up to 142 max psi
- 4-75 gpm
- 46-300 ft. head



GMVCP Series

- 4 models
- up to 335 max psi
- 4-114 gpm
- 60-775 ft. head



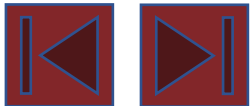
RAE Pumps

Multistage Vertical External Mount



MSVF Series

- 10 models
- up to 377 max psi
- 2.7-572.1 gpm
- 43-784 ft. head



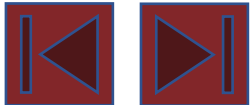
RAE Pumps

Multistage Horizontal



GTPH Series

- 6 models
- up to 142 max psi
- 4-380 gpm
- 10-240 ft. head



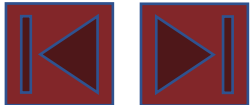
RAE Pumps

Sealless Vertical Immersion



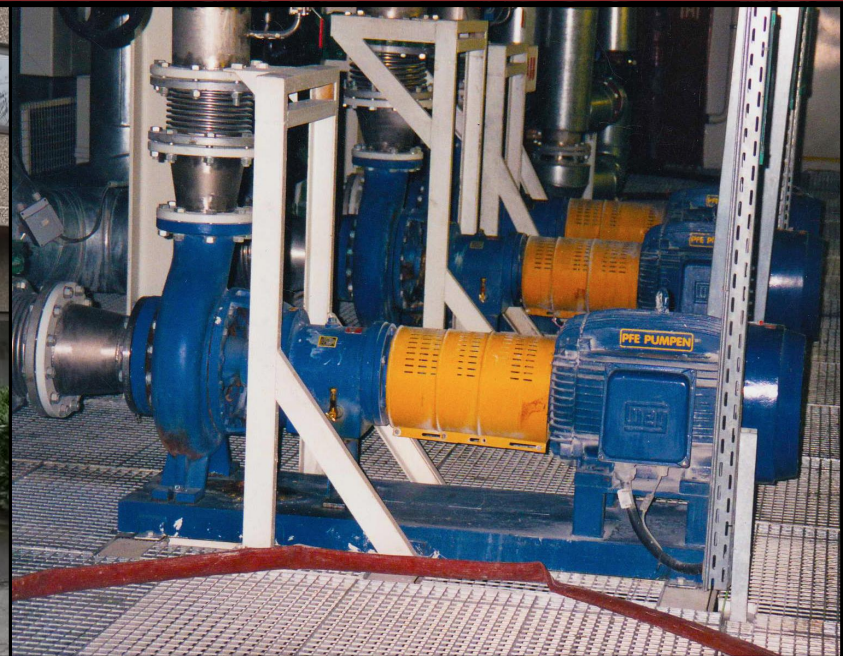
VBV Series

- 1 & 3 phase models
- up to 162 max psi
- 6-46 gpm
- 14 to 70 ft. head

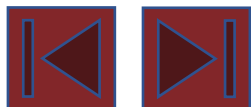




Thomas-Edison-Str. 11
D-52499 Baesweiler
Germany



Ruthman's German Sales and Manufacturing Division

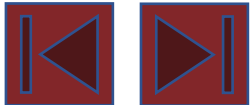


Ruthmann Pumpen

Ruthman 16 DIN Closed Coupled Bloc Pumps were installed for the Filtration System at a **Ford Plant** in **Yelabuga, Russia**.

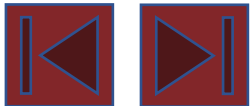


Go Further



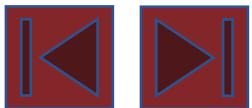
Ruthmann Pumpen

Large immersion pumps are being used for parts washers in a **plant** in **Germany**.



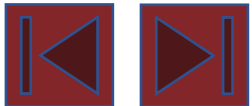
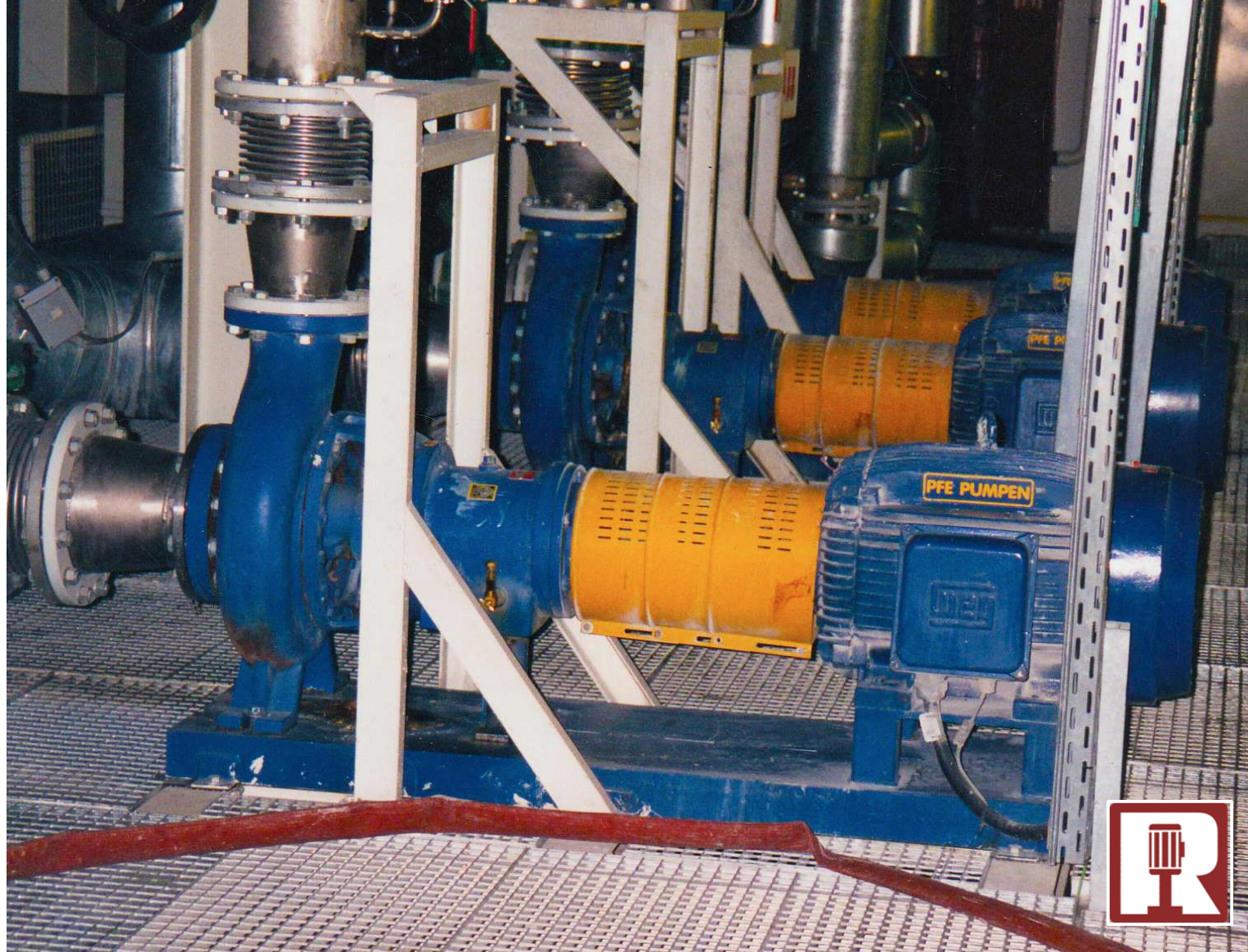
Ruthmann Pumpen

Eight Gusher 7550 Vertical Pumps and 24 Horizontal Closed Coupled Pumps are being used at a **German Auto Supplier**.



Ruthmann Pumpen

Ruthman Pumpen
installation at a **Škoda
Plant** Paint Department
in **MladáBoleslav**,
Czech Republic.

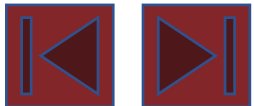


Ruthmann Pumpen

An International Effort

Specialty Multi-Stage Pumps were engineered for a **Mayfran Coolant Filtration** System. Mayfran is a German (Ruthmann Pumpen) Customer.

The Pumps were made by Gusher of Dry Ridge and Williamstown, KY and shipped to **Ford ChonQuing** in **China**.



- ✓ Ruthmann Pumpen
- ✓ Gusher United States
- ✓ Gusher Shanghai





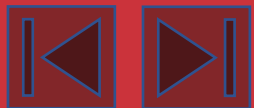
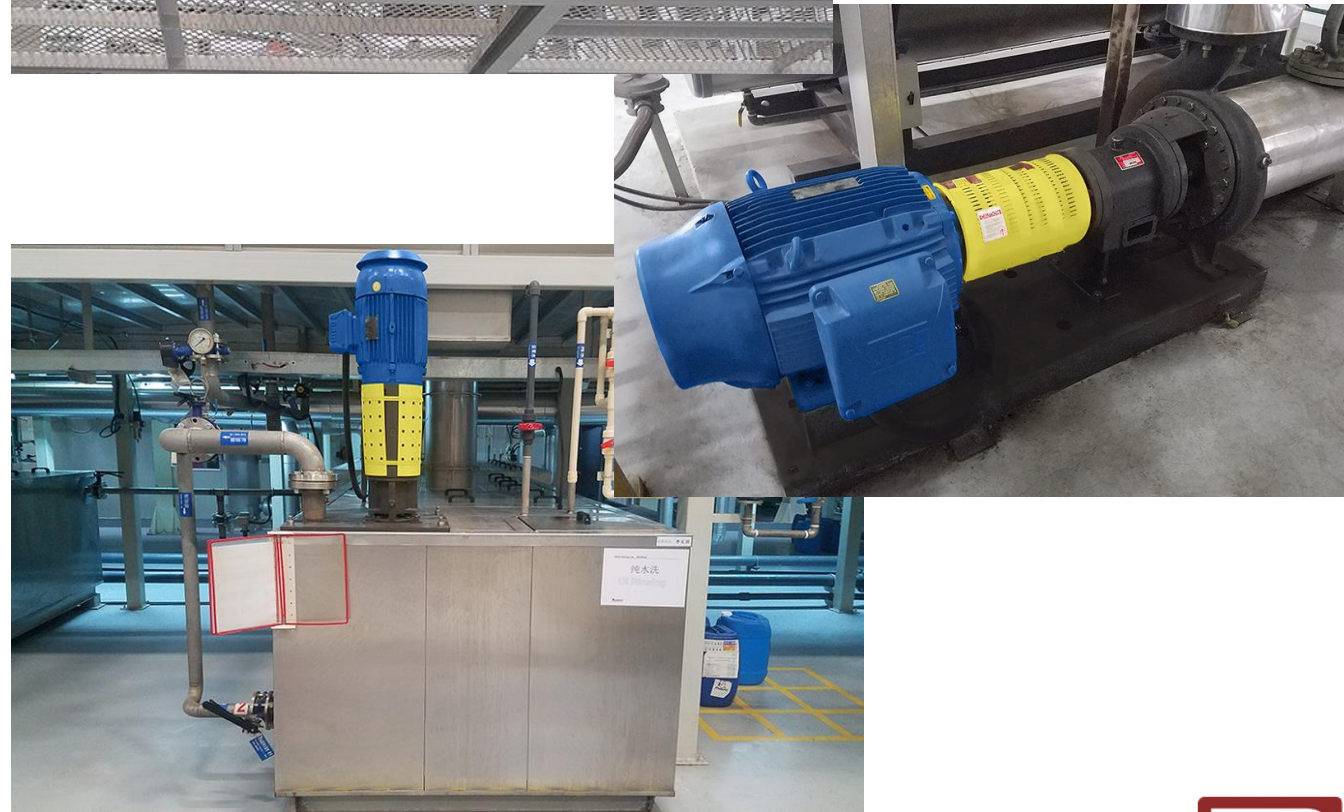
Ruthman's Sales and Manufacturing Partners in China

Gusher Pumps

Shanghai

Established in 2004 year

- Manufactures select Gusher pumps
- Provides sales and service for all Ruthman manufacturing brands across Asia
- Performs quality control on parts sourced locally

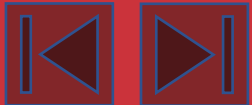
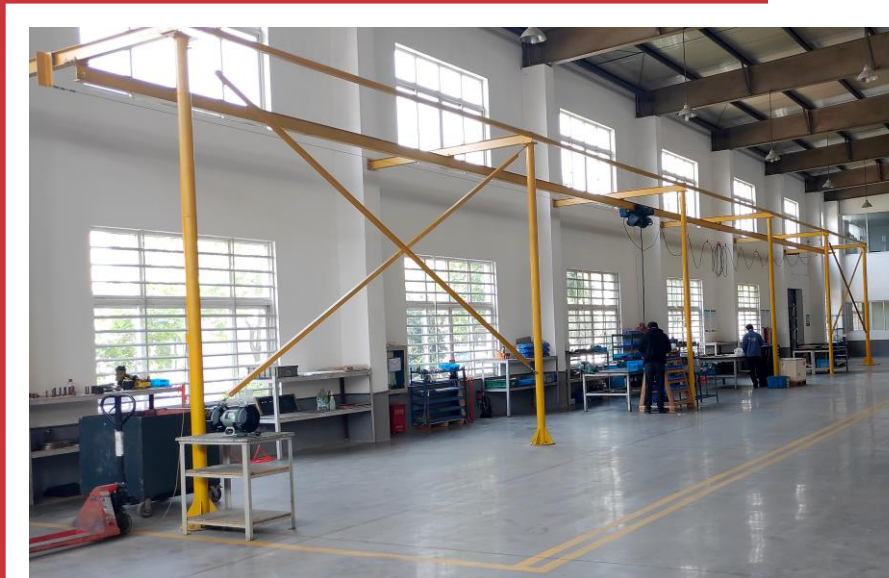


Gusher Pumps

Shanghai

New purpose-built facility opened 2020

- Over 2500 square feet of manufacturing and office space
- Extends inventory capabilities for manufacturing continuity
- Larger assembly area
- New tank area for performance testing



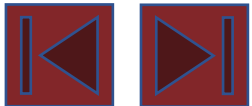
Gusher Pumps

Shanghai

Global
Cooperation

PSI™ Pumps

Completing quality control for
a Process Systems Vertical
Turbine Pump.

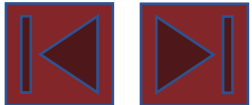


Gusher Pumps

Shanghai

Loading PSI
Thrust-Heads
for machining.

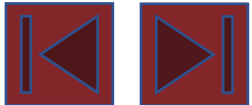
PSI™ Pumps



Gusher Pumps

Shanghai

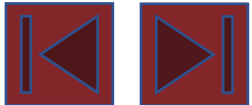
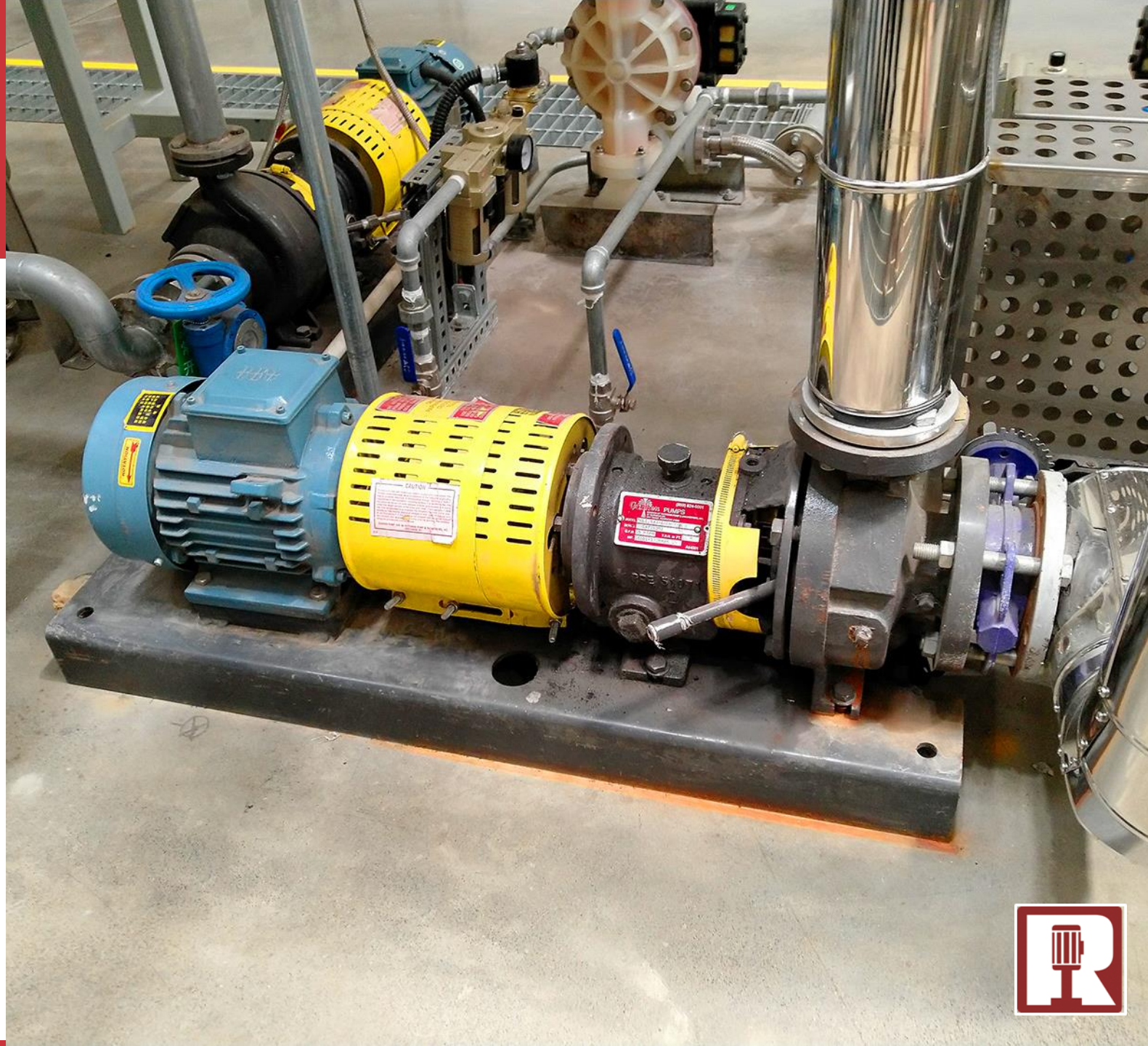
CNC machining an
impeller housing.



Gusher Pumps

Shanghai

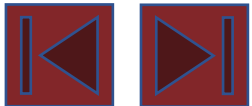
Gusher 7071 Series
Ansi Pumps operating
at **AO Smith's**
Shanghai Water
Treatment operations
in **Nanjing, China.**



Gusher Pumps

Shanghai

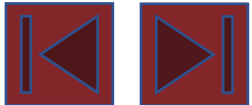
A large order of Gusher Block DIN Series Pumps ready for motor installation.



Gusher Pumps

Shanghai

**State-of-the-Art
Balancing Machine
ensures precision
and quality.**



Why Ruthman?

A Family Commitment

1. Proven **engineering team** to meet your pumping challenges

2. Technical experts **available when you need them**

3. Willingness to **help at any phase** of product planning and implementation

4. Multi-facility reach for global and local **support**

5. New product development **based on specific customer needs**

6. 100% Family ownership **ensures customers are the priority**

