Growing seasons are short, and failed water pumps can mean failed crops. You need a pumping solution that is rugged and reliable. You need a Pioneer Pump. Whether it’s irrigation, manure slurry, aquaculture or crop harvesting; our centrifugal water pumps are built in the USA and are designed to perform in the most demanding agricultural applications.
IREIGATION PUMPS

From well irrigated pastures to watering acres of farmland to meet crop requirements, these heavy-duty, high-efficiency water pumps with large impeller eye areas provide extreme performance and some of the lowest net positive suction head requirements in the industry.

APPLICATIONS
- Water management
- Frost protection
- Lift station
- High pressure/pivot

SEALING OPTIONS
- Packing Seal
- Mechanical Seal

CLOSE-COUPLED PUMP KITS
- Replace worn wet-ends with readily available kits
- Available for all models
- Reduce downtime with cost effective replacement kits

CONSTRUCTION

<table>
<thead>
<tr>
<th>Construction</th>
<th>Optional Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaft</td>
<td>316L SS, 17-4 PH SS</td>
</tr>
<tr>
<td>Impeller</td>
<td>CA6NM SS, CD4MCu SS</td>
</tr>
<tr>
<td>Casing</td>
<td>Ductile Iron ASTM A536</td>
</tr>
<tr>
<td>Wear Ring</td>
<td>A499 / 316 SS</td>
</tr>
<tr>
<td>Suction Cover</td>
<td>Ductile Iron ASTM A536</td>
</tr>
<tr>
<td>Baseplate</td>
<td>Ductile Iron ASTM A536</td>
</tr>
</tbody>
</table>

CONSTRUCTION MATERIALS

<table>
<thead>
<tr>
<th>Model</th>
<th>Shaft</th>
<th>Impeller</th>
<th>Casing</th>
<th>Wear Ring</th>
<th>Suction Cover</th>
<th>Baseplate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC315C75</td>
<td>316L SS</td>
<td>CA6NM SS</td>
<td>Ductile Iron ASTM A536</td>
<td>A499 / 316 SS</td>
<td>Ductile Iron ASTM A536</td>
<td>Ductile Iron ASTM A536</td>
</tr>
<tr>
<td>SC32C75</td>
<td>316L SS</td>
<td>CA6NM SS</td>
<td>Ductile Iron ASTM A536</td>
<td>A499 / 316 SS</td>
<td>Ductile Iron ASTM A536</td>
<td>Ductile Iron ASTM A536</td>
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<tr>
<td>SC32C10</td>
<td>316L SS</td>
<td>CA6NM SS</td>
<td>Ductile Iron ASTM A536</td>
<td>A499 / 316 SS</td>
<td>Ductile Iron ASTM A536</td>
<td>Ductile Iron ASTM A536</td>
</tr>
</tbody>
</table>

RECOMMENDED MODELS

C75-C10 FAMILY @ 3560 RPM

1. SC315C75
2. SC32C75
3. SC32C10
4. SC425C75
5. SC425C10
6. SC43C75
7. SC43C10
8. SC44C75
9. SC54C75
10. SC64C10

C75-C10 FAMILY @ 1780 RPM

1. SC315C75
2. SC32C75
3. SC32C10
4. SC425C75
5. SC425C10
6. SC43C75
7. SC43C10
8. SC44C75
9. SC54C75
10. SC64C10
11. SC86C10

C14 FAMILY @ 2000 RPM

1. PP53C14
2. PP64C14
3. PP86C14
4. PP1010C14
MANURE PUMPS

With two short seasons for moving manure slurry to the field, rugged, reliable and ruggedized pumps are a key part of a successful system. Pioneer Pump builds end suction centrifugal pumps in the USA that are designed to perform in the most demanding applications.

APPLICATIONS
- Dairy Pond Management
- Dragline Manure Application
- Booster Pump Stations
- Swine Manure Application

FEATURES
- Open impellers - dog less and pass larger solids
- Stainless steel impellers standard
- Available in abrasion resistant materials
- Sand or straw bedding
- Faster Transfer/Lower Operation Costs

CONSTRUCTION
Pioneer Pump offers a variety of metallurgies. Pumpage varies from region to region and job to job. We offer four levels of Brinell hardness on many models. Please contact Sales for assistance in selecting the right material for your applications.

COMPARISON TABLE

<table>
<thead>
<tr>
<th>Type</th>
<th>Ductile Iron</th>
<th>Ca-4M1 Stainless Steel</th>
<th>Heat Treated (Hardened)</th>
<th>Chrome Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages</td>
<td>High strength, impact resistance, weld repairable</td>
<td>Corrosion and pitting resistance</td>
<td>Moderate abrasion resistance, high strength</td>
<td>High abrasion resistance</td>
</tr>
<tr>
<td>Recommended for</td>
<td>General purpose, high pressure, low temperature</td>
<td>Corrosive pumpage, high chloride pumpages, seawater</td>
<td>Abrasive pumpage</td>
<td>Very abrasive pumpage, corrosive pumpage</td>
</tr>
<tr>
<td>Burnell Hardness</td>
<td>180</td>
<td>250</td>
<td>400</td>
<td>600</td>
</tr>
<tr>
<td>Models</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>B6S20, 12S22, 30S34</td>
</tr>
<tr>
<td>Relative cost</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>
Once the best pump is selected, select the mounting configuration best suited to your application. Close coupled, frame mounted or engine mounted with right or left hand rotation available for most pumps.

**THE PIONEER PUMP ADVANTAGE**

**PATENTED PIONEER PRIME**

Timing belt driven vacuum pump removes air from the suction line while the Patented Posi-Valve prevents liquid entry into the vacuum pump.

- Quick initial priming
- Overcomes minor suction-side leaks
- Continuous, unattended repriming under auto stop/start conditions

**HEAVY DUTY COMPONENTS**

All Pioneer Pump standard centrifugal models are designed to stand up under the most demanding environments. Over-sized shafts and bearings, optimal materials and advanced designs combine to create products that deliver performance in the field.

- Heavy duty modular bearing housing
- Designed to run at high speeds without risk of shaft or bearing failure

Vacuum Pump

- Belt driven from pump shaft

Optional Run Dry System

- Oil-lubricated mechanical seal allows the pump to run completely dry without damage. Standard on all Pioneer Prime models.

Hydraulic design maximizes lift capability

Priming Chamber

Stainless steel air separation valve allows for quick priming with no product carryover.

Non-contacting labyrinth type bearing frame seals

With protectors at drive and pump ends

Exclusive Pioneer hybrid cassette seals simultaneously prevent leakage and eliminate shaft wear

**THE PIONEER PUMP ADVANTAGE**

**CLOSE-COUPL ED**

- Frame mounted
- Engine mounted
- Direct coupled

**FRAME MOUNTED**

**ENGINE MOUNTED**

**DIRECT-COUPL ED**

**SKID PACKAGE**

**TRAILER PACKAGE**
POWER PERFORMANCE THROUGH INNOVATION

Leading-edge hydraulic engineering makes our centrifugal pumps the highest performing pumps on the market. Our pumps provide better flow, higher head, greater efficiency, and unparalleled service designed to meet your unique challenges. At Pioneer Pump, we don’t just design, we deliver.

**PRODUCT PERFORMANCE RANGE**

- **Size:** 1.5–30 inch
- **Flow:** 40–760 mm | 20–44,000 usgpm
  - 4–10,000 m³/hr | 2-3000 l/s
- **Size:** 700 feet | 210 meters

**EXTREME PERFORMANCE**

Low NPSHr heavy-duty, high-efficiency water pumps with large impeller eye areas provide extreme performance and some of the lowest net positive suction head requirements in the industry.

**SUPERIOR MATERIALS**

Stainless steel impellers don’t wear under the abrasive and corrosive effects of manure slurry. Ductile iron construction ensures a long water pump life.

**RUN-DRY CAPABILITY**

Our standard indefinite run-dry tungsten vs. silicon carbide mechanical seal with large oil reservoir is ideal for applications such as linear irrigation.

**THE ENGINEERING LEADERSHIP OF PIONEER PUMP**

Pioneer Pump was founded on the idea that pumps should be better. Thanks to our engineering leadership, all Pioneer pumps are built using an innovative impeller design that’s now the industry’s best. It moves more pumpage, more efficiently, size-for-size. You get extreme performance while using less energy, giving you the best lifetime value in an environmentally and budget-conscious world. The large eye area and low NPSHr provide better suction lift and vapor handling. And the enclosed design handles solids more efficiently for improved performance, less maintenance and longer life, compared to traditional impellers.

**FEATURES**

- Oversized shafts and bearings for exceptional reliability in demanding conditions
- Standard mechanical seal construction includes tungsten carbide vs. silicon carbide seal faces, Viton® elastomers and stainless steel hardware
- Patented PosiValve stainless steel positive sealing priming valve
- Run-dry capability
- Low NPSHr impeller designs for exceptional suction lifts
- 17-4 PH stainless steel shafts for corrosion resistance

pioneerpump.com | 503.266.4115

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