Chemical Pumps
For Highly Corrosive and Mildly Abrasive Service

RamParts® Pumps
an ANDRONACO INDUSTRIES company
PRO-FLO END-SUCTION CENTRIFUGAL PUMPS

FOR ABRASIVE / CORROSIVE APPLICATIONS

Centrifugal Ramparts Pumps Pro-Flo Elastomer-lined (vertically split) End Suction Centrifugal pumps are specially designed for Chemical process and mild slurry applications, offering outstanding resistance to a wide range of design incorporating tangential discharge which guarantees continuous pumping performance and efficiency. Pumps, base, and guard are epoxy coated for external protection. Pumps are capable of handling up to 1” spherical solids, depending on pump size. Pumps are available in four sizes: 2 x 1/2-8 1/2, 3 x 2 10 1/4, 4 x3 -11 1/2, and 6 x 4 -16.

INNER RING
RESILIENT SLEEVE
OUTER RING
YOKE
GLAND
RETAINING RING
CASING

PRO-FLO Elastomer-lined End-Suction Centrifugal Pumps

PERMANENTLY BONDED LININGS ELIMINATE FLUTTER, CREEP AND COLD FLOW.

Ramparts linings are permanently bonded to strong, rigid casing and covers eliminating lining flutter, creep, and cold flow found in other pumps. Lining and impellers are available in Natural Rubber (Hard), Neoprene, Nordel (EPDM), Buna N, Butyl, and Viton. Impellers are also molded in Kynar and Diall.

TYPICAL FLUIDS HANDLED

Sulfuric Acid • Sodium Hypochlorite • Hydrochloric Acid • Ammonium Hydroxide • Nitric Acid • Potassium Hydroxide • Phosphoric Acid • Calcium Hypochlorite • Chlorine Water • Ferric Trichloride • Zinc Chloride.

SHAFT SLEEVE

Materials offered: Kynar, Ceramic, 316 Stainless, Alloy 20, Hastelloy “B” or “C” and Titanium. The ceramic sleeve eliminates liquid to metal exposure when using standard packing, single external or double internal mechanical seals.

LINED STUFFING BOX

Internal protection continues into the stuffing area with the same lining material as the pump housing. All pump sizes can accommodate standard inside, outside, single or double mechanical seals without special adaptation. Flush lines are provided when required, to allow product or clean water flushing.

Contact Information
4855 Broadmoor Ave. S.E. | Kentwood, MI 49512
Tel. (616) 656-2250 | Fax. (616) 656-2255
www.rampartsPumps.com

PUMP SPECIFICATIONS

Size: 2” x 1.5” (20mm x 38mm) Flanged. Will pass up to 5/16” (7.9 mm) diameter spherical solid.

Pump Castings: Gray Iron No. 30 Vertically Split; Lined.

Linings: Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N). Consult Factory for additional lining materials.

Impeller: Available In The Same Materials As Shown Above For Pump Casting Linings.

Shaft: Stress proof Steel

Shaft Sleeve: Kynar, Ceramic, Alloy 20, 316 SST, Hastelloy B or C, Titanium.

Bearings: Open Double Row with oil bath lubrication.

Gaskets/O-rings: Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N).

Standard Equipment: Constant Level Oiler, Standard RamParts blue paint other paints available.

Sealing Options:

Packing: PTFE or Grapholil with PTFE Lantern Ring.

Seals: Most major manufacturers including Flowserve and John Crane.

Maximum Temperature: 285°F (140° C) Dependent on lining.
**PUMP SPECIFICATIONS**

**Size:** 3” x 2” (76mm x 50mm) Flanged. Will pass up to 1/2” (12.7 mm) diameter spherical solid.

**Pump Castings:** Gray Iron No. 30 Vertically Split; Lined.

**Linings:** Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N). Consult Factory for additional lining materials.

**Impeller:** Available In The Same Materials As Shown Above For Pump Casing Linings.

**Shaft:** Stress proof Steel.

**Shaft Sleeve:** Kynar, Ceramic, Alloy 20, 316 SST, Hastelloy B or C, Titanium.

**Bearings:** Open Double Row with oil bath lubrication.

**Gaskets/O-rings:** Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N).

**Standard Equipment:** Constant Level Oiler, Standard RamParts blue paint other paints available.

**Sealing Options:**
- **Packing:** PTFE or Graphoil with PTFE Lantern Ring.
- **Seals:** Most major manufactures including Flowserve and John Crane.

**Maximum Temperature:** 285°F (140° C) Dependent on lining.
**Specification Data**

**3x2**

**NET WEIGHT:** 175 LBS. (80 KG.)

**SHIPPING WEIGHT:** 205 LBS. (90 KG.)

**EXPORT CRATE:** 3.0 CU. FT. (0.09 CU.M.)

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**APPROXIMATE DIMENSIONS & WEIGHTS**

<table>
<thead>
<tr>
<th>Size</th>
<th>4” x 3” (102mm x 76mm) Flanged. Will pass up to 3/4” (19.0 mm) diameter spherical solid.</th>
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</thead>
<tbody>
<tr>
<td><strong>Pump Castings:</strong></td>
<td>Gray Iron No. 30 Vertically Split; Lined.</td>
</tr>
<tr>
<td><strong>Lining:</strong></td>
<td>Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N). Consult Factory for additional lining materials.</td>
</tr>
<tr>
<td><strong>Impeller:</strong></td>
<td>Available In The Same Materials As Shown Above For Pump Casing Linings.</td>
</tr>
<tr>
<td><strong>Shaft:</strong></td>
<td>Stress proof Steel</td>
</tr>
<tr>
<td><strong>Shaft Sleeve:</strong></td>
<td>Kynar, Ceramic, Alloy 20, 316 SST, Hastelloy B or C, Titanium.</td>
</tr>
<tr>
<td><strong>Bearings:</strong></td>
<td>Open Double Row with oil bath lubrication.</td>
</tr>
<tr>
<td><strong>Gaskets/O-rings:</strong></td>
<td>Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N).</td>
</tr>
<tr>
<td><strong>Standard Equipment:</strong></td>
<td>Constant Level Oiler, Standard RamParts blue paint other paints available.</td>
</tr>
<tr>
<td><strong>Sealing Options:</strong></td>
<td>Packing: PTFE or Grapholil with PTFE Lantern Ring.</td>
</tr>
<tr>
<td></td>
<td>Seals: Most major manufactures including Flowserve and John Crane.</td>
</tr>
<tr>
<td><strong>Maximum Temperature:</strong></td>
<td>285°F (140° C) Dependent on lining.</td>
</tr>
</tbody>
</table>
**PUMP SPECIFICATIONS**

**Size:** 6" x 4" (152mm x 102mm) Flanged. Will pass up to 1" (25.4 mm) diameter spherical solid.

**Pump Castings:** Gray Iron No. 30 Vertically Split; Lined.

**Lining:** Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N). Consult Factory for additional lining materials.

**Impeller:** Available In The Same Materials As Shown Above For Pump Casing Lining.

**Shaft:** Stress proof Steel

**Shaft Sleeve:** Kynar, Ceramic, Alloy 20, 316 SST, Hastelloy B or C, Titanium.

**Bearings:** Open Double Row with oil bath lubrication.

**Gaskets/O-rings:** Neoprene; Nordel; Fluorocarbon (Viton); Nitrile (Buna-N).

**Standard Equipment:** Constant Level Oiler, Standard RamParts blue paint other paints available.

**Sealing Options:**
- **Packing:** PTFE or Grapholil with PTFE Lantern Ring.
- **Seals:** Most major manufactures including Flowserve and John Crane.

**Maximum Temperature:** 285°F (140° C) Dependent on lining.
**Specification Data**

**6x4**

**APPROXIMATE DIMENSIONS & WEIGHTS**

- **NET WEIGHT:** 572 LBS. (260.8 KG.)
- **SHIPPING WEIGHT:** 625 LBS. (283.5 KG.)
- **EXPORT CRATE:** 3.3 CU. FT. (0.09 CU.M.)

**NET WEIGHT:** 572 LBS. (260.8 KG.)

**SHIPPING WEIGHT:** 625 LBS. (283.5 KG.)

**EXPORT CRATE:** 3.3 CU. FT. (0.09 CU.M.)