CORNELL’S NEW SLURRY PUMPS EXPAND OUR LINE OF DEWATERING PUMPING SOLUTIONS TO ABRASIVE APPLICATIONS IN THE MINING PROCESS INDUSTRY. WITH CORNELL’S PATENTED CYCLOSEAL® TECHNOLOGY, OUR SLURRY PUMPS ARE BUILT TO OPERATE WITHOUT FLUSH WATER.

NOTES:
1. Do not use for construction unless certified.
2. Dimension “U” and Keyway are in millimeters.
3. Flange dimensions are non-standard.

### APPLICATIONS
- Dewatering
- Cyclone feed
- Regrind
- Flotation
- Mill discharge
- Tailings and mine refuse
- Mining and mineral processing
- Heavy duty abrasive slurries
- Medium duty abrasive slurries
- In-plant slurry transfer pumps

### PUMP DIMENSIONS

| MODEL | FRAME | CONNECTION | DISCH. | SUCTION | A | B | CP | D | E | F | G | H | L | O | P | R | U | V | X | Y | Z | KEYWAY |
|-------|-------|------------|--------|---------|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|
| 2SP  | C     | 2          | 3      | 15.98   | 12.24 | 30.24 | 10 | 7 | 6.89 | 1.89 | 0.75 | 9.17 | 9.37 | 1.26 | 11.06 | 42mm | 4.76 | 8.27 | 5.98 | 5.43 | 12mm x 8mm |
| 3SP  | C     | 3          | 4      | 15.98   | 12.24 | 33.19 | 10 | 7 | 6.89 | 1.89 | 0.75 | 10.63 | 11.5 | 1.26 | 12.94 | 42mm | 4.76 | 10.31 | 7.4  | 5.87 | 12mm x 8mm |
| 4SP  | D     | 4          | 6      | 19.37   | 14.33 | 37.13 | 13 | 8.5 | 8.39 | 2.52 | 0.87 | 10.98 | 11.5 | 1.5 | 13.9 | 65mm | 6.46 | 10.31 | 7.4  | 5.87 | 18mm x 11mm |
| 4SP  | E     | 4          | 6      | 24.49   | 17.64 | 46.38 | 17.99 | 10.75 | 10.12 | 2.99 | 1.14 | 13.82 | 15.98 | 2.13 | 17.05 | 80mm | 8.74 | 13.31 | 8.5  | 9.02 | 22mm x 14mm |
| 6SP  | E     | 6          | 8      | 24.49   | 17.64 | 52.26 | 17.99 | 10.75 | 10.12 | 2.99 | 1.14 | 13.82 | 21.60 | 2.22 | 21.83 | 80mm | 8.74 | 18.11 | 11.5 | 12.52 | 22mm x 14mm |
| 6SP  | R     | 6          | 8      | 26.77   | 21.23 | 53.54 | 13.78 | 11.02 | 19.29 | 2.76 | -   | 12.28 | 21.69 | 1.98 | 21.81 | 85mm | 8.5  | 18.11 | 11.5 | 12.52 | 22mm x 14mm |
| 6SP  | ST    | 6          | 8      | 45.28   | 30.71 | 68.82 | 25.59 | 17.72 | 24.41 | 4.92 | 1.89 | 18.13 | 29.72 | 3.15 | 30.02 | 120mm | 11.02 | 25   | 15   | 18.27 | 32mm x 18mm |
| 8SP  | ST    | 8          | 10     | 45.28   | 30.71 | 71.5  | 25.59 | 17.72 | 24.41 | 4.92 | 1.89 | 18.13 | 37.37 | 3.15 | 31.97 | 120mm | 11.02 | 25   | 15   | 18.27 | 32mm x 18mm |
| 10SP | ST    | 10         | 12     | 45.28   | 30.71 | 71.5  | 25.59 | 17.72 | 24.41 | 4.92 | 1.89 | 18.13 | 37.37 | 3.15 | 31.97 | 120mm | 11.02 | 25   | 15   | 18.27 | 32mm x 18mm |
The SP series is designed to transport heavy abrasive slurry with high concentration of solids, at pH levels 1 to 13 (rubber lined) and 3 to 14 (metal). Pumps available in chrome iron and rubber lining configurations. SP series pumps are designed to handle abrasive high density slurries in mining, metallurgical, coal, manure, and other industrial applications.

**BENEFITS**
- Solids handling up to 3.5”
- Heads up to 235’ at BEP
- No Flush Water Required
- Industry leading two year warranty
- Superior abrasive and corrosive wear life
- Handles pH levels 1 to 13 (rubber lined) and 3 to 14 (metal)
- Available in rubber lined or chrome-iron configuration

**FEATURES**
- Specific lining allows for various material handling
- Large solids handling
- Robust design allows it to be applied in difficult operating environments
- Seal lasts up to three times longer than other mechanical seals
- Patented Cycloseal® and Run-Dry™ options

**SPECIFICATIONS**
- Housing Material: Ductile iron
- Liner Material: Chrome iron or rubber
- Impeller Material: Chrome iron or rubber
- Backplate: Chrome iron
- Bearing Housing & Pedestal: Cast iron
- Discharge Size: 2” to 12”
- Flow rate: Up to 14,000 GPM
- Seal Type: Cycloseal or gland packing
- Solids Diameter: Up to 3.5”
- Impeller Type: Enclosed
- Head: Up to 235’ at BEP
### SLURRY PUMPS

**Performances shown are for S.G. 1.0 60°F water, frame mounted configurations with Cycloseal®. Other mounting styles or water may require curve adjustments.**

<table>
<thead>
<tr>
<th>Frame</th>
<th>Max HP</th>
<th>Liner</th>
<th>Speed</th>
<th>Impeller Dia.</th>
<th>Style</th>
<th>Volute</th>
<th>Solids Dia.</th>
<th>Ns</th>
<th>Suction</th>
<th>Discharge</th>
<th>No. Vanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40</td>
<td>METAL</td>
<td>8.4&quot;</td>
<td>ENCLOSED</td>
<td>SINGLE</td>
<td>1.0&quot;</td>
<td>1265</td>
<td></td>
<td>3&quot;</td>
<td>2&quot;</td>
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</tr>
</tbody>
</table>

**Graphs showing performance curves for various conditions.**

**Cornell Pump Company  •  Clackamas, Oregon**

02/06/2014  •  CTG  •  MODEL: 2SPM  •  CURVE NO: 2SPMVA

**Graphs showing performance curves for various conditions.**

**Cornell Pump Company  •  Clackamas, Oregon**

02/06/2014  •  CTG  •  MODEL: 2SPR  •  CURVE NO: 2SPRVA

Performance curves are for S.G. 1.0 60°F water, frame mounted configurations with Cycloseal®. Other mounting styles or water may require curve adjustments.
### SLURRY PUMPS

**Cornell Pump Company • Clackamas, Oregon**

**Model: 3SPM Curve No: GH**

<table>
<thead>
<tr>
<th>Frame</th>
<th>Max HP</th>
<th>Liner</th>
<th>Speed</th>
<th>Impeller Dia.</th>
<th>Style</th>
<th>Volutes</th>
<th>Solids Dia.</th>
<th>N&lt;sub&gt;s&lt;/sub&gt;</th>
<th>Suction</th>
<th>Discharge</th>
<th>No. Vanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>40</td>
<td>METAL</td>
<td>3SPM</td>
<td>VARIOUS</td>
<td>ENCLOSED</td>
<td>SINGLE</td>
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<td>1448</td>
<td>4&quot;</td>
<td>3&quot;</td>
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</table>

Performances shown are for S.G. 1.0 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.

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**Model: 3SPR Curve No: VA**

<table>
<thead>
<tr>
<th>Frame</th>
<th>Max HP</th>
<th>Liner</th>
<th>Speed</th>
<th>Impeller Dia.</th>
<th>Style</th>
<th>Volutes</th>
<th>Solids Dia.</th>
<th>N&lt;sub&gt;s&lt;/sub&gt;</th>
<th>Suction</th>
<th>Discharge</th>
<th>No. Vanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>80</td>
<td>RUBBER</td>
<td>3SPR</td>
<td>VARIOUS</td>
<td>ENCLOSED</td>
<td>SINGLE</td>
<td>1.1&quot;</td>
<td>1605</td>
<td>4&quot;</td>
<td>3&quot;</td>
<td>5</td>
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</tbody>
</table>

Performances shown are for S.G. 1.0 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.
### SLURRY PUMPS

**Performances shown are for S.G. 1.0, 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.**

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<th>Solids Dia.</th>
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<th>Suction</th>
<th>Discharge</th>
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<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>METAL</td>
<td>144</td>
<td>VARIOUS</td>
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<td>117</td>
<td>1300</td>
<td>6&quot;</td>
<td>4&quot;</td>
<td>5</td>
</tr>
</tbody>
</table>

**Capacities:**

- **GPM:**
  - 0 to 2250 GPM

- **M³/H:**
  - 0 to 500 M³/H

**Total Dynamic Head:**

- **Feet:**
  - 0 to 300 FEET

- **Meters:**
  - 0 to 90 METERS

**Speed Impeller Dia. Style Solids Dia. N_s Suction Discharge No. Vanes**

- **Type:** SLURRY PUMP

**Cornell Pump Company • Clackamas, Oregon**

**06/27/14 12/16/13 CTG**

**Model:** 4SPM CURVE NO: 4SPMVA

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**Liner:**

- **Metal**

- **Rubber**

**Frame:**

- **D**

**Max HP:**

- **80**

- **160**

**Volute:**

- **Single**

**No. Vanes:**

- **5**

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**Performances shown are for S.G. 1.0, 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.**

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<td>SINGLE</td>
<td>117</td>
<td>1300</td>
<td>6&quot;</td>
<td>4&quot;</td>
<td>5</td>
</tr>
</tbody>
</table>

**Capacities:**

- **GPM:**
  - 0 to 2250 GPM

- **M³/H:**
  - 0 to 500 M³/H

**Total Dynamic Head:**

- **Feet:**
  - 0 to 240 FEET

- **Meters:**
  - 0 to 75 METERS

**Speed Impeller Dia. Style Solids Dia. N_s Suction Discharge No. Vanes**

- **Type:** SLURRY PUMP

**Cornell Pump Company • Clackamas, Oregon**

**06/20/14 12/16/13 CTG**

**Model:** 4SPR CURVE NO: 4SPRVA
### SLURRY PUMPS

**Cornell Pump Company**  •  Clackamas, Oregon

Performances shown are for S.G. 1.0 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Impeller Dia.</th>
<th>Style</th>
<th>Solids Dia.</th>
<th>Suction</th>
<th>Discharge</th>
<th>No. Vances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>800 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>650 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>500 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>400 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>300 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>250 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>200 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>150 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>125 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>100 RPM</td>
<td>20.0&quot;</td>
<td>ENCLOSED</td>
<td>2.5&quot;</td>
<td>1300</td>
<td>8&quot;</td>
<td>6&quot;</td>
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</tbody>
</table>

**Model:** 6SPM  
**Curve No:** 6SPMVA
Performance shown are for S.G. 1.0 60°F water, frame mounted configuration with Cycloseal®. Other mounting styles or S.G. may require curve adjustments.

<table>
<thead>
<tr>
<th>Frame</th>
<th>Max HP</th>
<th>Liner</th>
<th>Speed</th>
<th>Impeller Dia.</th>
<th>Style</th>
<th>Volute</th>
<th>Solids Dia.</th>
<th>Ns</th>
<th>Suction</th>
<th>Discharge</th>
<th>No. Vanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>750</td>
<td>METAL</td>
<td>VARIOUS</td>
<td>27&quot;</td>
<td>ENCLOSED</td>
<td>SINGLE</td>
<td>3&quot;</td>
<td>1550</td>
<td>10&quot;</td>
<td>8&quot;</td>
<td>5</td>
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<tr>
<td>Frame</td>
<td>Max HP</td>
<td>Liner</td>
<td>Speed</td>
<td>Impeller Dia.</td>
<td>Style</td>
<td>Volute</td>
<td>Solids Dia.</td>
<td>Ns</td>
<td>Suction</td>
<td>Discharge</td>
<td>No. Vanes</td>
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<td>----------</td>
</tr>
<tr>
<td>ST</td>
<td>750</td>
<td>RUBBER</td>
<td>VARIOUS</td>
<td>30&quot; ENCLOSED</td>
<td>SINGLE</td>
<td>3.4&quot;</td>
<td>1480</td>
<td>12&quot;</td>
<td>10&quot;</td>
<td>5</td>
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</tr>
</tbody>
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**SLURRY PUMPS**

Cornell Pump Company • Clackamas, Oregon

**06/27/14 01/06/14 CTG CTG**

**Model: 10SP R VA**

**Curve No: 10SP M VA**
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