WEMCO® Torque-Flow Pump
WEMCO® Torque-Flow® Model C

<table>
<thead>
<tr>
<th>WEMCO Torque-Flow Model C</th>
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<tbody>
<tr>
<td>Materials of Construction</td>
</tr>
<tr>
<td>Configurations</td>
</tr>
<tr>
<td>Sealing</td>
</tr>
<tr>
<td>Maximum Flow</td>
</tr>
<tr>
<td>Maximum Head</td>
</tr>
<tr>
<td>Discharge Size</td>
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</table>

- WEMCO, the preferred name for grit pumping in municipal grit removal applications
- The original recessed impeller pump
- Cupped impeller deflects wear to sacrificial suction piece
- Wet-end weights: 3": 360 lbs. | 4": 500 lbs. | 6": 800 lbs.
- Over 100,000 hour L-10 bearing life
- Self-venting case
- Clock-wise and counter-clock-wise rotations available
- Extreme duty grit pump
- High Chrome or Ni-hard wet-end
- Heavy-duty wet-end components
- Extra-thick on the wear areas
- Extra-thick two piece case
- Easily replaceable sacrificial cover plate
- Lugged bolting for fast, easy servicing
- Hydraulic design of cupped impeller minimizes wear and increases performance
- Available with flush-less slurry seal
- Pump will pass pipe-sized solids
WEMCO® Torque-Flow® Model CE

### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials of Construction</strong></td>
<td>Ni-Hard, High Chrome</td>
</tr>
<tr>
<td><strong>Configurations</strong></td>
<td>Horizontal, Vertical, Submersible, Immersible, Cantilever, Column</td>
</tr>
<tr>
<td><strong>Sealing</strong></td>
<td>Multiple options available</td>
</tr>
<tr>
<td><strong>Maximum Flow</strong></td>
<td>to 2200 GPM (500 m³/hour)</td>
</tr>
<tr>
<td><strong>Maximum Head</strong></td>
<td>to 340 feet (104 m)</td>
</tr>
<tr>
<td><strong>Discharge Size</strong></td>
<td>2, 3, 4, 6 inch (5, 7.6, 10, 15 cm)</td>
</tr>
</tbody>
</table>

- Heavy-duty grit pump
- Great for grit-laden sludge
- High Chrome or Ni-hard wet-end
- Rimmed radial vane impeller decreases wear on casing
- Trimmable impeller allows for customizing flow range
- Casing thickness increased in areas of maximum wear
- CEX impeller available for steeper H/Q curve
- Self-venting case
WEMCO® Torque-Flow® Model E

Materials of Construction | Cast Iron, Stainless Steel, *High Chrome

Configurations | Horizontal  
Vertical  
Submersible  
Cantilever  
Column

Sealing | Multiple options available

Maximum Flow | 4500 GPM (1022 m³/hour)

Maximum Head | 226 feet (69 m)

Discharge Size | 2, 3, 4, 6, 8 inch (5, 7.6, 10, 15, 20.32 cm)

*High Chrome available in some configurations

- Vortex impeller pump for large soft solids
- Passes large, soft solids without plugging
- Economical, yet heavy duty
- Radial vane recessed impeller
- Trimmable impeller
- Clock-wise and counter-clock-wise rotations available
- Best suited for low flows with large solids
WEMCO® Torque-Flow® Model EL

- Small recessed impeller pump
- Used for low-flow applications
- Extremely large solids passage for such a small pump
- Cast iron or stainless steel wet-end

- Trimmed impeller
- Radial vane recessed impeller
- Motor mounted option allows for smaller footprint

**WEMCO Torque-Flow Model EL**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials of Construction</td>
<td>Cast Iron, Stainless Steel</td>
</tr>
<tr>
<td>Configurations</td>
<td>Horizontal</td>
</tr>
<tr>
<td>Sealing</td>
<td>Packing, component seals</td>
</tr>
<tr>
<td>Maximum Flow</td>
<td>to 550 GPM (125 m³/hour)</td>
</tr>
<tr>
<td>Maximum Head</td>
<td>to 141 feet (43m)</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>1, 2, 3 inch (2.5, 5, 7.6 cm)</td>
</tr>
</tbody>
</table>

**Graphical Representation**

- Flow (GPM)
- Head (Feet)
- Head (Meters)
- Flow (m³/hr)

- 1 x 5¼
- 2 x 5¼
- 3 x 5¼
WEMCO® Torque-Flow® Model S

- Designed to be completely submerged while running
- Operates in clockwise rotation only
- Inexpensive submersible recessed impeller pump
- Threaded discharge connection available

- Legs can be cast integral to the casing
- Motor equipped with two seals for added protection of electrical parts

<table>
<thead>
<tr>
<th>WEMCO Torque-Flow Model S</th>
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<tbody>
<tr>
<td>Materials of Construction</td>
</tr>
<tr>
<td>Configurations</td>
</tr>
<tr>
<td>Sealing</td>
</tr>
<tr>
<td>Flow</td>
</tr>
<tr>
<td>Head</td>
</tr>
<tr>
<td>Discharge Size</td>
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</tbody>
</table>
WEMCO® Torque-Flow® Model LR

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials of Construction</td>
<td>Cast Iron, High Chrome</td>
</tr>
<tr>
<td>Configurations</td>
<td>Horizontal, vertical, submersible, cantilever</td>
</tr>
<tr>
<td>Sealing</td>
<td>Multiple options available</td>
</tr>
<tr>
<td>Maximum Flow</td>
<td>4000 GPM (909 m³/hour)</td>
</tr>
<tr>
<td>Maximum Head</td>
<td>191 feet (58 m)</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>3, 4, 6, 8 inch (7.6, 10, 15, 20.32 cm)</td>
</tr>
</tbody>
</table>

- Trimmable impeller to meet a specific duty point
- Foot mounted case with a true back pull-out power end
- Advanced impeller design for high efficiency, reaching 60 percent
- Special alloys are available to meet specific requirements
- Ideal for difficult solids-handling applications including entrained air
The slurry seal for WEMCO Torque-Flow pumps replace standard packing and requires no external flush system. The slurry seal operates in the product being pumped without diluting the product.

The slurry seal is a simple, pre-set cartridge that requires no measuring or special tools for installation in the pump housing. Replacement seal parts can be fitted easily by hand, using only basic hand tools and a suitable lubricant.

Constructed of CD4MCu and 316 Stainless Steel components with Viton® or EPDM elastomer and tungsten carbide on silicon carbide seal faces, the slurry seal will provide a long life of trouble free service.

**No Flush Required**
- Saves thousands of gallons of water per pump, per year
- Eliminates seal water system maintenance and power

**Slurry Rated Design**
- State-of-the-art materials stand up to what ever is pumped without flush water
- 600 Brinell abrasion-resistant seal chamber

**Flushless Design and Simplicity in Motion**

Kit includes all the components necessary to convert a WEMCO Torque-Flow pump, including:
- Slurry Seal
- 600 Brinell Hi Chrome seal chamber, ASTM A532
- 650 Brinell Hi-Chrome or Ni-Hard backplate, with larger-than-standard bore to allow greater circulation of pumped liquid.

**Installation**

The slurry seal is installed from the impeller side of the pump, only requiring removal of the pump case, impeller and backplate (where installed) for complete access to the seal for installation, inspection and/or maintenance.

**Specifications**

A single cartridge mechanical seal, requiring no external flushing, shall be furnished for installation in the pump. The seal shall utilize a rotating and stationary seal ring loaded by a non-fouling conical spring encapsulated in Viton®. Installation of the seal shall require no measurements or scribe marks on the shaft. The stationary ring shall be silicon carbide and the rotating ring shall be tungsten carbide.

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**Retrofit Your Existing WEMCO Torque-Flow Pumps**

Replace all of this...

With this...

**O-Rings**
- Setting Plates
- Set Screw
- Setting Plate Groove
- O-Ring
- Stationary Face
- Seal Sleeve
- Retainer Screws
- Retainer
- Rotary Face Cup
- Conical Spring Assembly
- Rotary Body
- Rotary Face
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