SJT/SJM CWP
vertical pump
Main industries and applications

SJT/SJM CWP pumps can be used in the following fields:
- Cooling water pumps in utility and industrial power stations
- Water supply
- Irrigation
- Flood control and drainage
- General water service
- Water intake

Features and benefits

1. Modern fabricated suction bell and bowl casing
   - Incorporating flow straightener for stable pump performance curve
   - Tailor-made bowl diameter to optimize pump selection and efficiency

2. Modern semi-open or enclosed cast impeller design
   - Best hydraulic fitting and optimum efficiency
   - Fabricated impeller construction optional

3. Individually sized pump shaft
   - Sized for maximum torque
   - Shaft protection sleeves included as standard
   - Line shaft connected by split ring, key and sleeve couplings to ease maintenance

4. Fabricated column assembly and discharge head
   - Column assemblies have integral spider to improve stiffness
   - Segmented elbow to optimize the pump efficiency
   - Above- or below-ground discharge to fit the site requirements

5. Product lubricated radial bearings
   - Cutless rubber (phenolic backed) bearing bushings as standard in bowl/lineshaft, other material options are also available
   - Two bearings bushings included in the bowl for increased rotor stability

6. Packing shaft seal
   - Reliable sealing and simple maintenance

7. Thrust bearing
   - Thrust bearing can be provided either in the pump (see next page) or within the motor
Optional features and benefits

**Full pull-out construction**
- Reduces the crane lifting capacity required
- Significantly improves the maintenance turnaround time

**Thrust bearing assembly**
- Built to handle all of the downthrust produced by the pump and as much momentary upthrust that may occur
- Flexible coupling with spacer allows servicing the thrust bearing and mechanical seal as needed
- One-piece fabricated motor stand housing bolted down over the discharge to protect the bearing and support the motor

Optional features include sandstorm protection, special means for cooling and a constant level oil lubricator.

**Below ground discharge head**
- Comes with a segmented elbow designed to optimize pump efficiency
- Elbows are fabricated in various materials to meet many application requirements
- Discharge nozzle can be either plain-end or flanged
- Motor stand mounted above ground and designed to support the weight
Materials

<table>
<thead>
<tr>
<th>Pump part</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing</td>
<td>Fabricated carbon steel, austenitic steel, duplex or super duplex</td>
</tr>
<tr>
<td>Impeller</td>
<td>Chrome steel, austenitic steel, duplex or super duplex</td>
</tr>
<tr>
<td>Shaft</td>
<td>Chrome steel, austenitic steel, duplex or super duplex</td>
</tr>
<tr>
<td>Column and discharge head</td>
<td>Fabricated carbon steel, austenitic steel, duplex or super duplex</td>
</tr>
</tbody>
</table>

Operating data

<table>
<thead>
<tr>
<th></th>
<th>50 Hz</th>
<th>60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump size, impeller diameter</td>
<td>up to 1’920 mm</td>
<td>up to 76 in</td>
</tr>
<tr>
<td>Capacities</td>
<td>up to 90’000 m³/h</td>
<td>up to 396’000 USgpm</td>
</tr>
<tr>
<td>Head per stage</td>
<td>up to 60 m</td>
<td>up to 200 ft</td>
</tr>
<tr>
<td>Pressures</td>
<td>up to 8.6 bar</td>
<td>up to 125 psi</td>
</tr>
<tr>
<td>Temperatures</td>
<td>up to 50°C</td>
<td>up to 122°F</td>
</tr>
</tbody>
</table>

Performance ranges
Our values

Operational excellence
We continuously strive to be faster and better.

Customer partnership
Together, we win.

Committed people
We build on the strengths and diversity of our people.

A global specialist at your doorstep

Sulzer serves clients worldwide through a network of over 180 production and service sites and has a strong footprint in emerging markets.