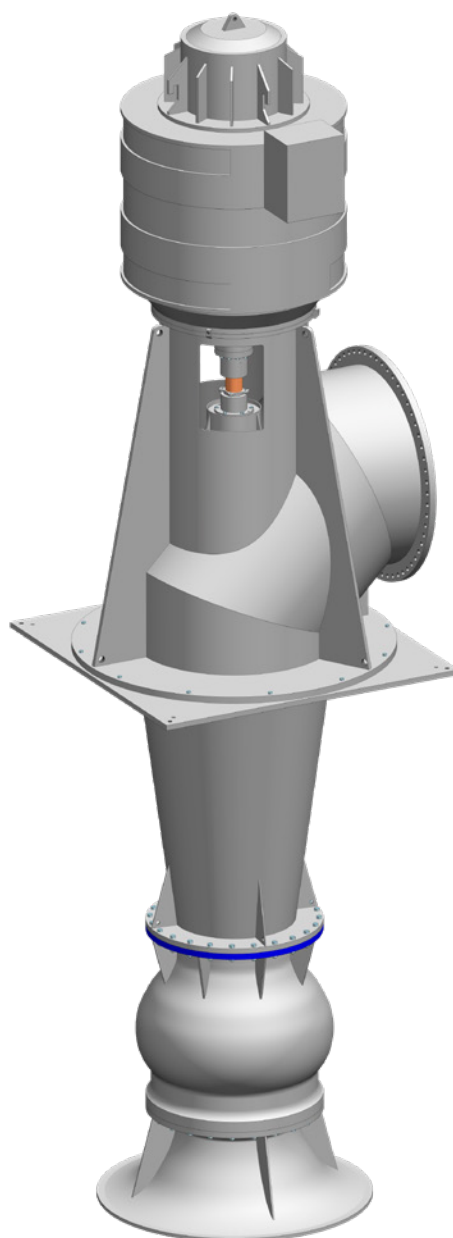


SJT std vertical pump



Main industries and applications

Sulzer SJT std vertical pumps are typically used across different industries when a liquid needs to be pumped upward from open bodies of liquid. Fully updated hydraulics and mechanical designs make the SJT std vertical pump highly efficient, cost-effective, and low-maintenance. It is mainly used in the following applications:

- Cooling water in conventional and renewable power stations
- Water supply and irrigation
- Raw water and seawater intake



Oil and gas



Power generation



General industry



Chemical process industry



Water and wastewater



Features and benefits

1 Suction bell

- The suction bells are cast construction, offered with or without tail bearing and anti-vortex ribs

2 Impeller

- Enclosed or semi-open designs and cast from various materials for versatility
- Balanced to assure vibration-free operations and polished to optimize performance

3 Bowls

- The bowls are cast construction offered with a variety of designs, single or double suction first stage, suction and series stages

4 Bowl bearings

- Bowls can be fitted with metal or rubber bearings of many different materials to meet required applications and specifications

5 Pump shaft

- The shaft is tailor-made to the service needs and sized individually for each installation; sized for maximum torque
- A stepped shaft with sleeves can be supplied

6 Column assembly

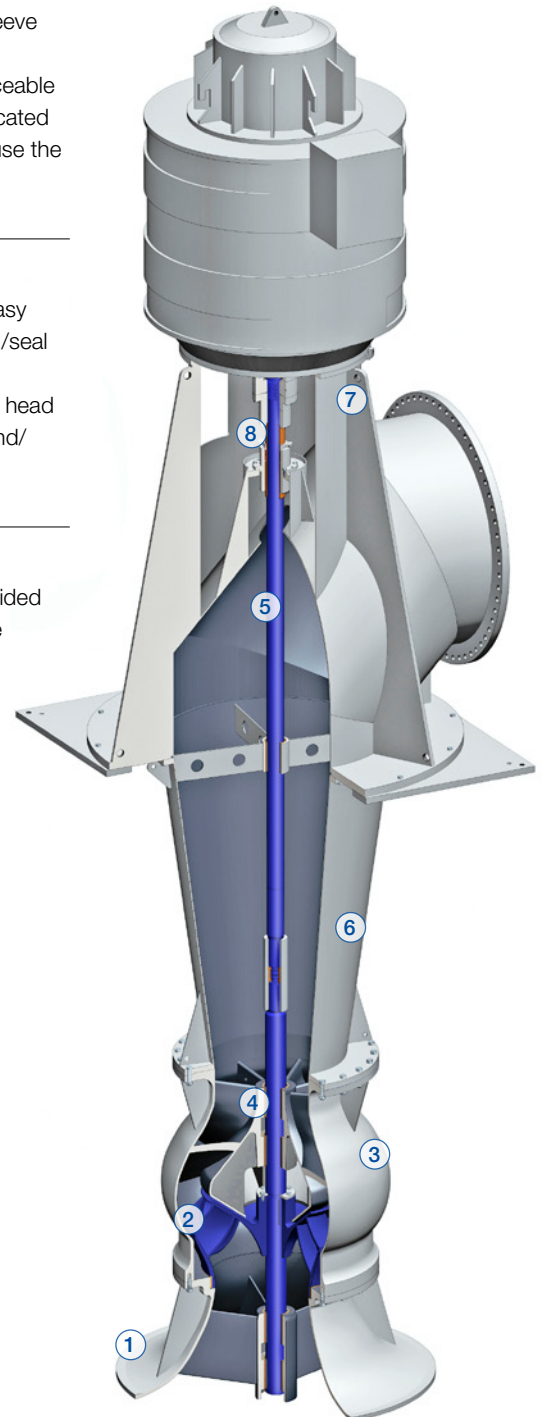
- Column pipes can be either threaded (smaller sizes) or flanged
- Line shaft couplings can be either threaded (smaller sizes) or sleeve type
- Line shaft bearings are replaceable
- The bearing spiders are fabricated into the column pipe and house the line bearing bushings

7 Discharge head

- Integral driver stand allows easy access to removable packing/seal box and coupling
- Each standardized discharge head comes with a segmented bend/motor stool

8 Shaft seal

- A packed stuffing box is provided for reliable sealing and simple maintenance



Options

Multistage construction

A multistage design of the SJT is available for increased head requirements.

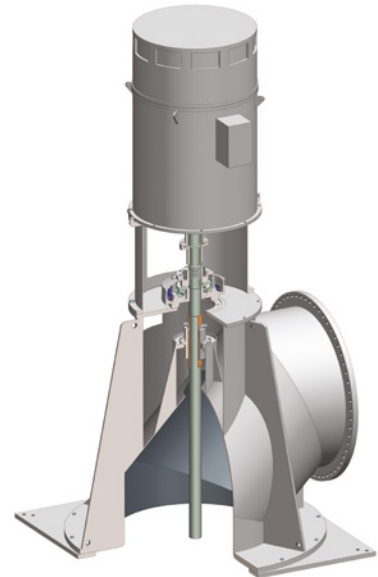
Mechanical seal

Mechanical seals can be provided.



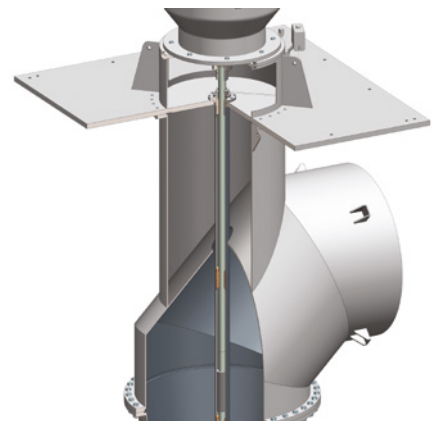
Thrust bearing assembly

Thrust bearing assemblies are available when required by application. They are built to handle all of the down thrust produced by the pump and as much momentary up thrust that may occur. A one-piece fabricated motor stand housing is bolted down over the discharge to protect the bearing and support the motor. The flexible coupling with spacer allows servicing the thrust bearing and mechanical seal as needed.



Discharge head

Below ground discharge head is available. Each comes with a segmented elbow designed to optimize pump efficiency. The discharge nozzle can be either plain-end or flanged. The motor stand is mounted above ground and is designed to support the weight and provide the maximum clearance for multiple stuffing box options.



Specifications

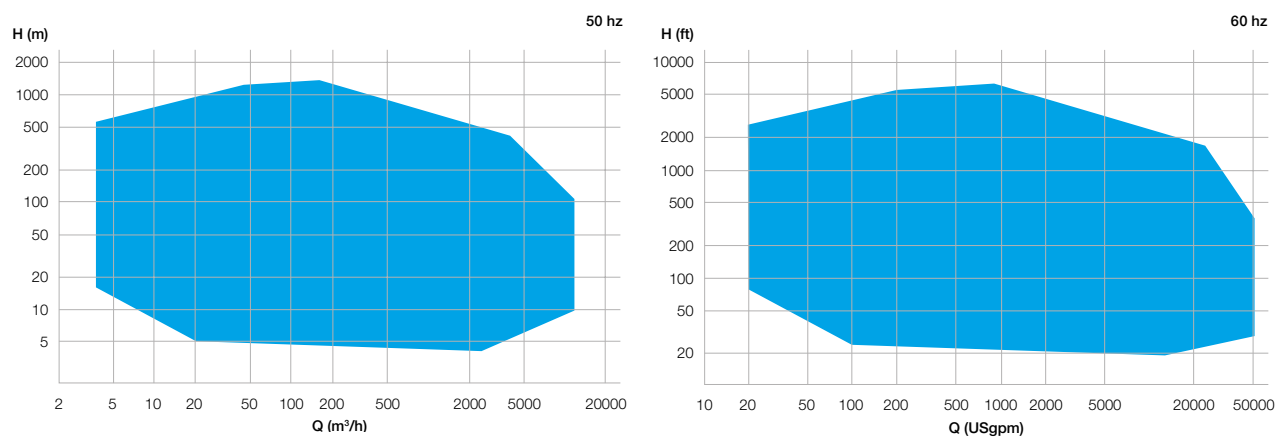
Material options

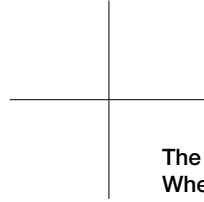
Cast parts	Cast iron, carbon steel, 316 stainless steel, duplex, super duplex and bronze
Shafts	12% chrome, 316 stainless steel, duplex, super duplex and monel
Fabrications	Carbon steel, 316L, duplex and super duplex
Bearings	Bronze, duplex or super duplex backed rubber

Operating data

	50 Hz	60 Hz
Discharge size	up to 1'050 mm	up to 42 in.
Capacities	up to 12'000 m ³ /h	up to 52'840 USgpm
Heads	up to 1'830 m	up to 6'000 ft.
Pressures	up to 78 bar	up to 1'130 psi
Temperatures	up to 100°C	up to 212°F

Performance range





The Sulzer Flow Equipment division keeps your processes flowing. Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

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