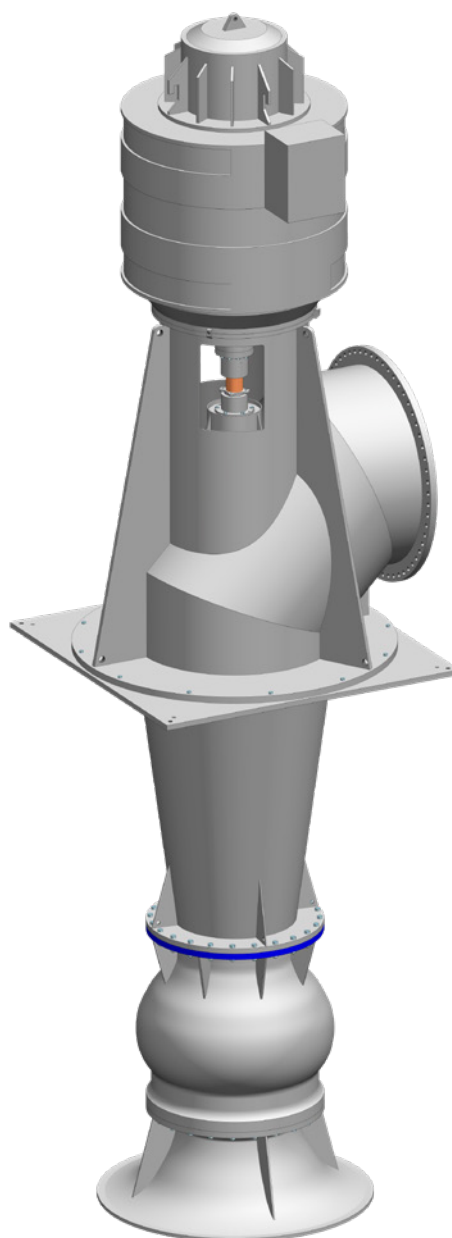
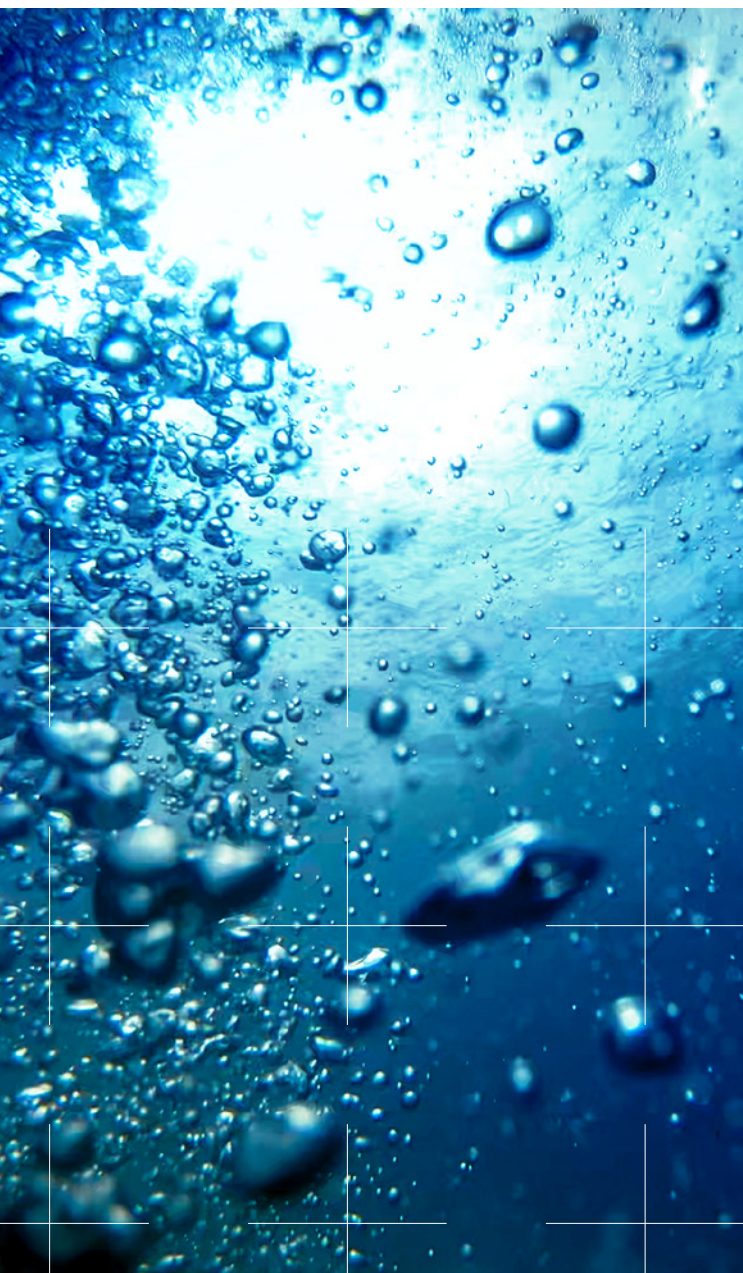


SULZER

Flow Equipment

SJT vertical turbine pump



Main industries and applications

The SJT pump is an “engineered to order” vertical turbine pump. Fully updated hydraulics and mechanical designs make the SJT 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
- Booster service
- Offshore fire and service water



Features and benefits

1 Suction bell

- Each suction bell includes anti-vortex ribs and tail bearing bushings
- The suction bells are available with replaceable wear rings

2 Impeller

- Closed or semi-open designs and cast from various materials for versatility
- Balanced to assure vibration-free operations and polished to optimize performance
- Secured to shaft by a key and split thrust ring

3 Bowls

- Combines the energy conversion and diffusion in one single casing, allowing for a direct connection to the column pipe

4 Bowl bearings

- Bowls can be fitted with metal or dual (rubber and metal) 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

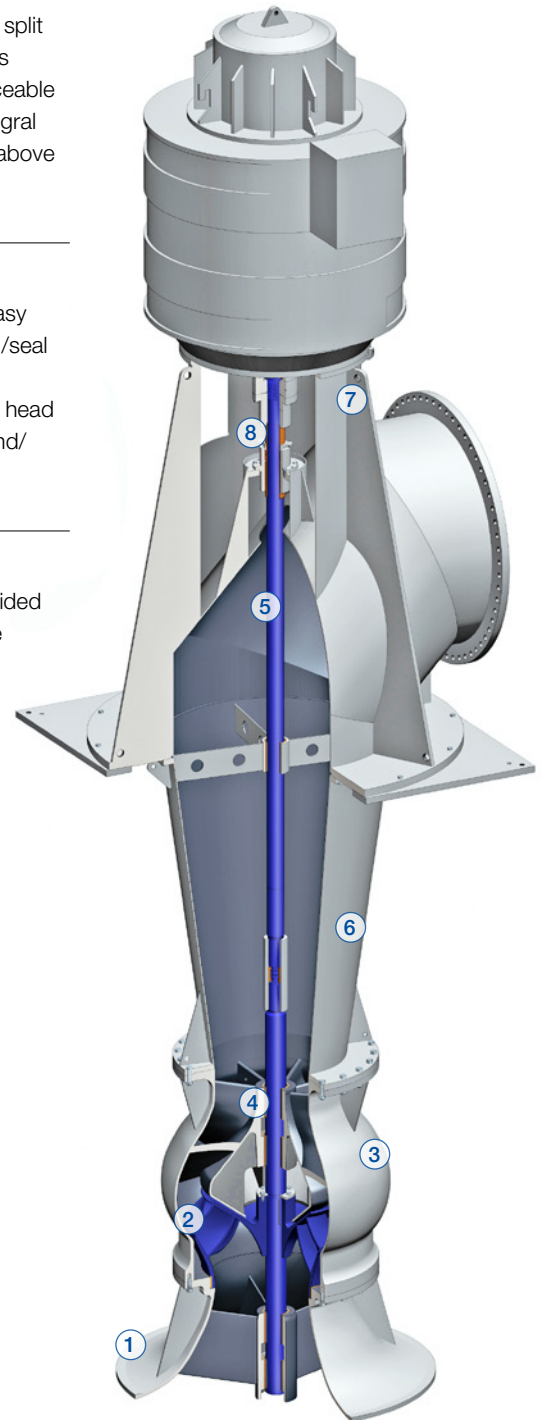
- Column pipes are flanged
- Line shafts are connected by split ring, key and sleeve couplings
- Line shaft bearings are replaceable
- Column assemblies have integral spiders for column diameter above 14"

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 up to 40bar (600 psi).

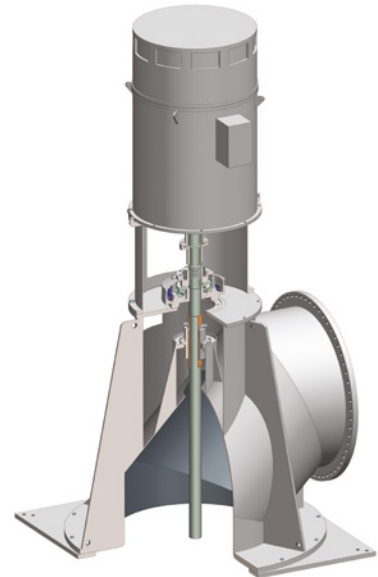
Mechanical seal

Mechanical seals can be provided.



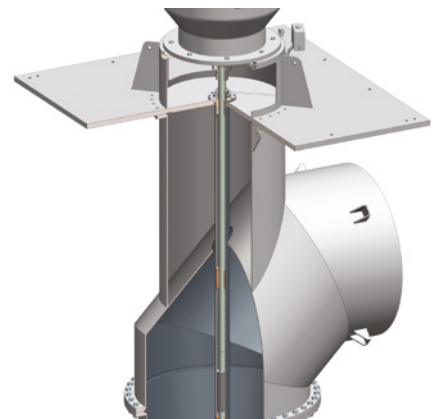
Thrust bearing assembly

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

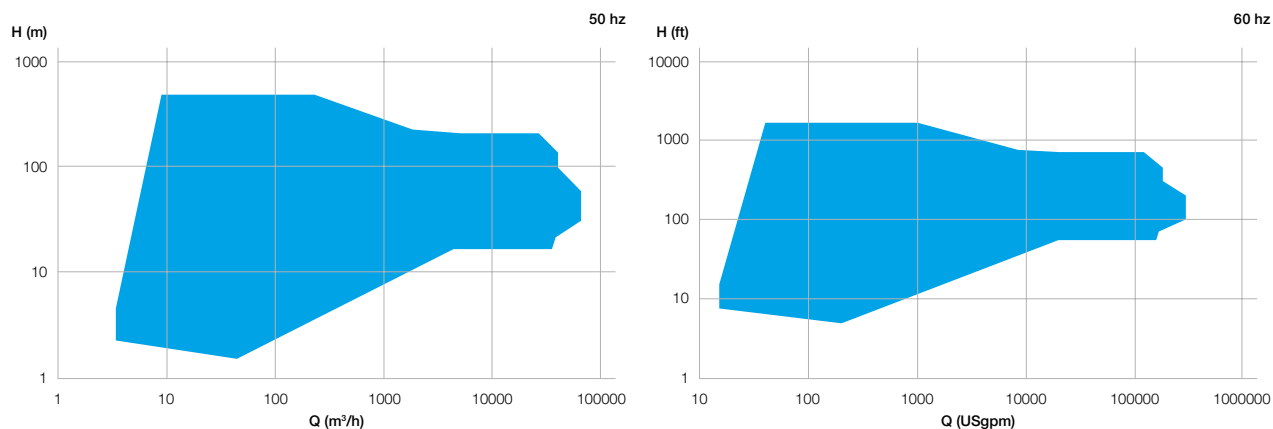
Material options

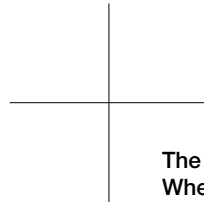
Cast parts	Cast iron, carbon steel, 316 stainless steel, duplex, super duplex and bronze
Shafts	12% chrome, 316 stainless steel, duplex, super duplex and monel
Fabrications	Carbon steel, 316L, duplex and super duplex
Bearings	Bronze, duplex or super duplex backed rubber

Operating data

	50 Hz	60 Hz
Pump size	150 to 3'000 mm	6 to 120 in.
Capacities	up to 62'000 m ³ /h	up to 270'000 USgpm
Heads	up to 110 m	up to 350 ft.
Pressures	up to 64 bar	up to 930 psi
Temperatures	up to 50°C	up to 122°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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