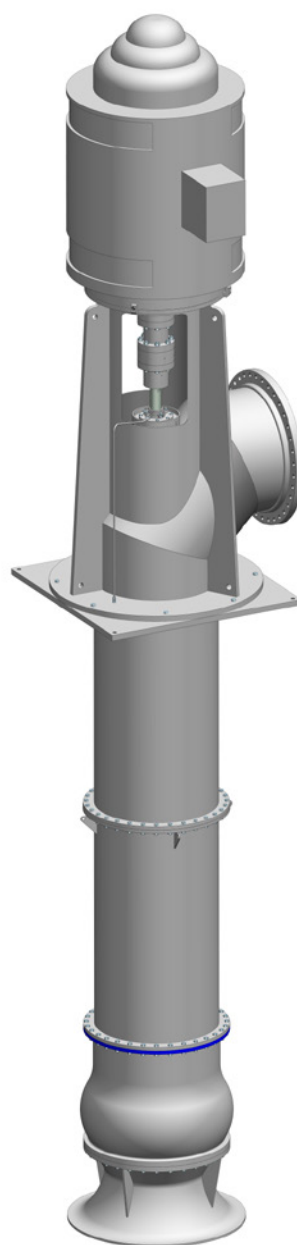
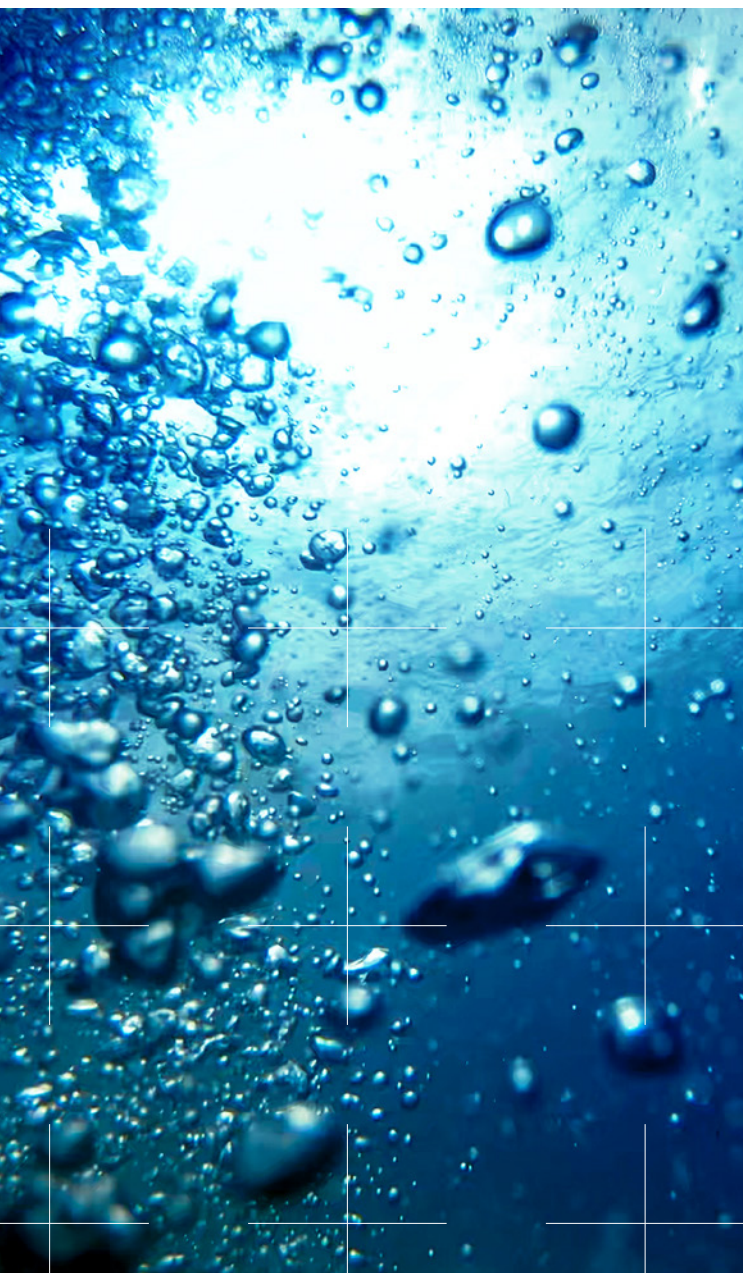


# SULZER

Flow Equipment

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## SJM vertical mixed flow pump



# Main industries and applications

SJM pumps can handle common types of fluids including water, service water and wastewater. They are used in the following applications:

- Cooling water pumps in utility and industrial power stations
- Raw water supply to process plants or refineries
- Condenser circulation service in nuclear or conventional power plants
- Finished water booster pumps
- Large irrigation projects



# Features and benefits

## 1 Bowls

- Combine energy conversion and diffusion of the intermediate bowl and discharge case in one single casing
- Reduce the required components and allow for a direct connection to the column pipe

## 2 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 and utilizes a stuffing box designed to accommodate various mechanical seals

## 3 Impeller

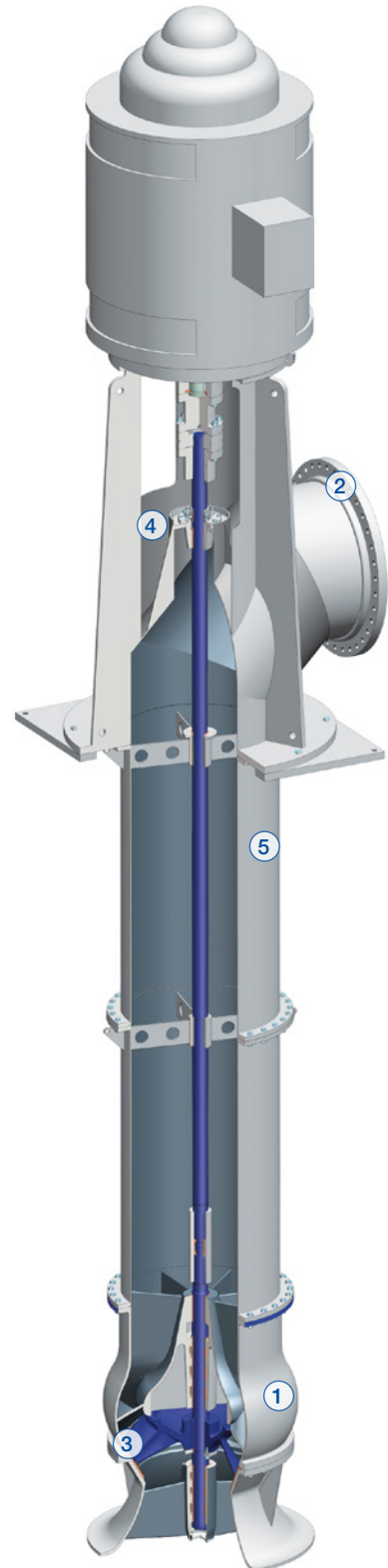
- Semi-open design, cast from various materials of choice for versatility
- Balanced to ensure vibration free operations
- Polished to optimize performance
- Secured to shaft by a key and split thrust ring

## 4 Shaft seal

- Packed stuffing box provided for reliable sealing and simple maintenance

## 5 Column assembly

- Column pipes are flanged
- Line shaft bearings are replaceable
- Column assemblies have an integral spider for column diameter above 14" (350 mm)



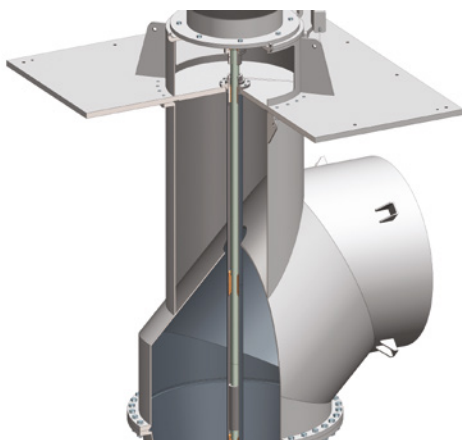
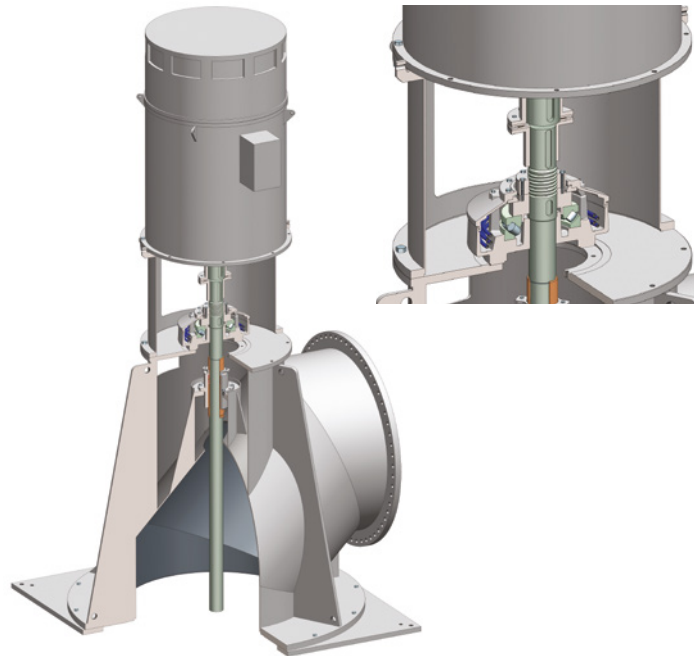
# Options

## 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.

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



## Discharge head

Below ground discharge head is available. Each comes with a segmented elbow designed to optimize pump efficiency. The elbows are made of various materials to meet virtually any requirements. 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

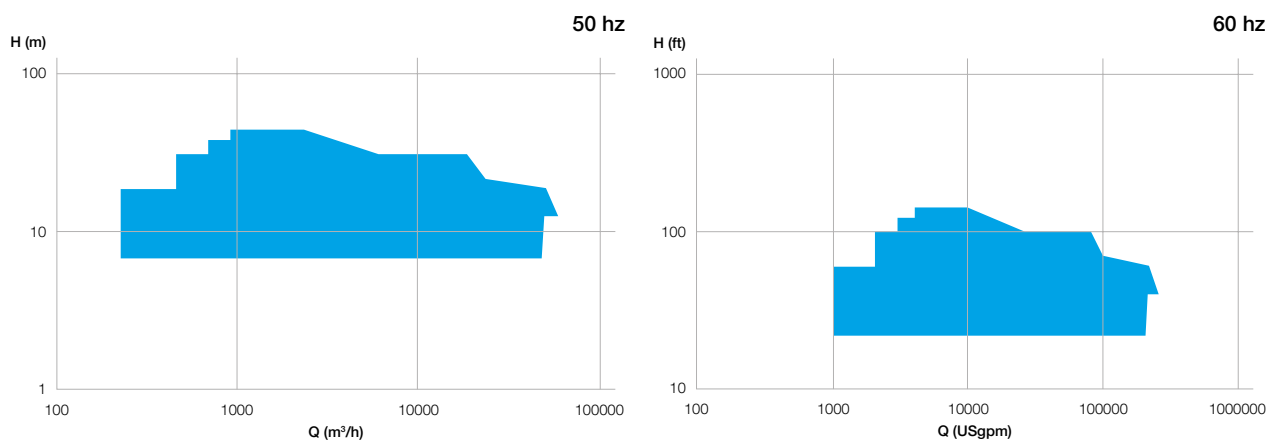
## Materials

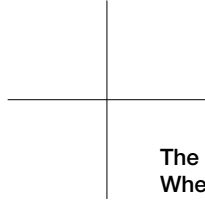
Pump part	Material
Cast parts	Cast iron, carbon steel, 316 stainless steel, duplex, super duplex and bronze
Shafts	12% chrome, 316 stainless steel, duplex, super duplex and monel
Fabrications	Carbon steel, 316L, duplex and super duplex
Bearings	Rubber, lined bronze, duplex and super duplex

## Operating data

	50 Hz	60 Hz
Bowl sizes	200 to 2'390 mm	8 to 94 in.
Capacities	up to 58'000 m <sup>3</sup> /h	up to 250'000 USgpm
Heads	up to 25 m per stage	up to 82 ft. per stage
Pressures	up to 18 bar	up to 260 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.**

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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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