

# SULZER

Flow Equipment

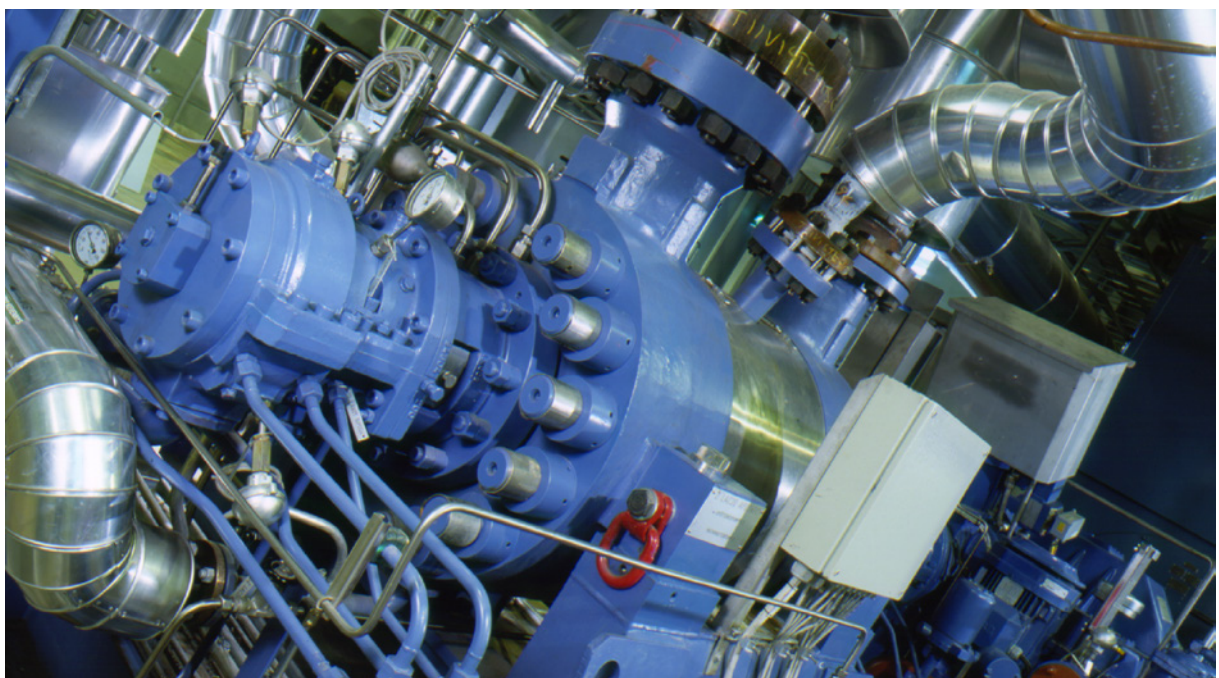
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## ME high pressure stage casing pump

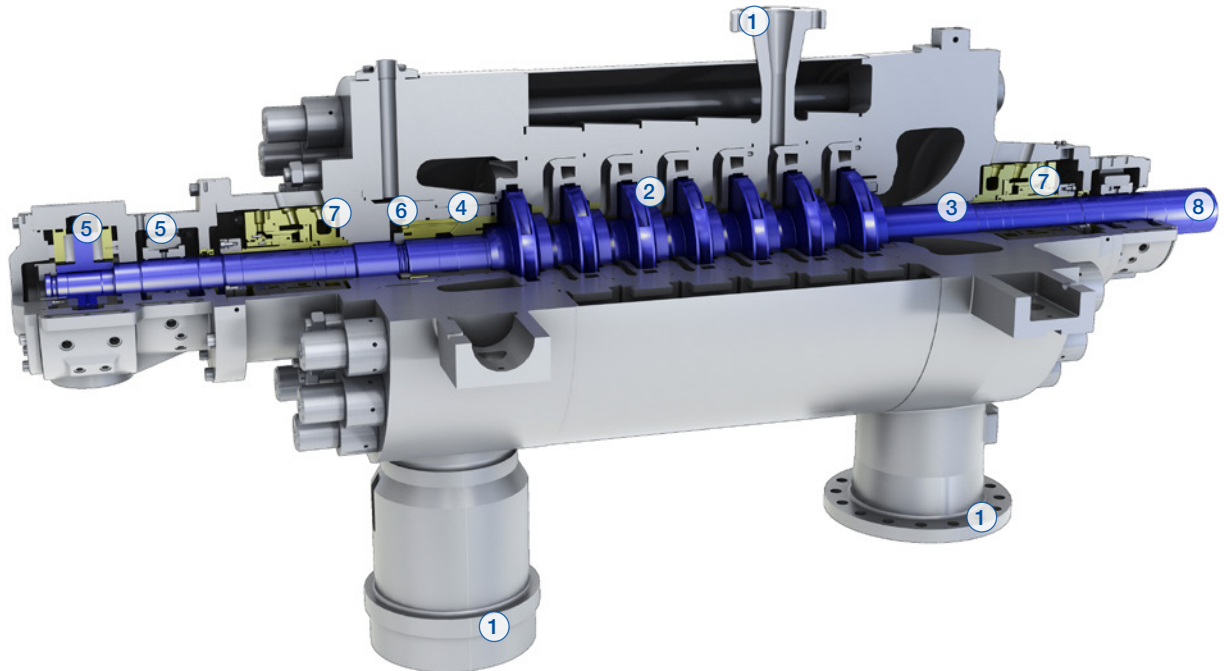


# Main industries and applications

The ME pump is primarily designed for power applications, especially boiler feed in thermal power stations. They are optimized to provide high-efficiency operation over an extended period of time, thus reducing operating and maintenance costs.



# Features and benefits



## 1 Branch position

- Adaptable to system configuration
- Optional intermediate take-off possible

## 2 Wear rings

- Optimized labyrinth design for high efficiency and good rotordynamic behavior
- Integral impeller wear rings for longer life dimensioned to allow several re-machining

## 3 Shaft

- Shaft forged in chrome nickel steel for a low L/D ratio, stable operation without critical speed problems and reduced vibration levels

## 4 Balance drum/liner

- Axial thrust compensation by balancing drum/liner
- Shrunk on with oil press fit to avoid damage during transient conditions

## 5 Bearings

- Four-lobe journal bearings provide high stiffness and damping to minimize shaft movement
- Double acting tilting pad thrust bearing sized to accept the residual thrust over the full pump operating range

## 6 Optimized design

- Radial grooves to increase radial stiffness, reduce effect on rotor tilting and allow a good rotor dynamic behavior
- Swirl break at balancing piston to maintain rotor stability even when internal clearances are worn

## 7 Shaft sealing

- Optimized design with jacket cooling and mechanical seal (pre-warming not required)
- Seal shaft sleeve fixed with shrink disk

## 8 Coupling

- Shrunk on coupling with oil press fit, parallel stepped or taper fit

# Specifications

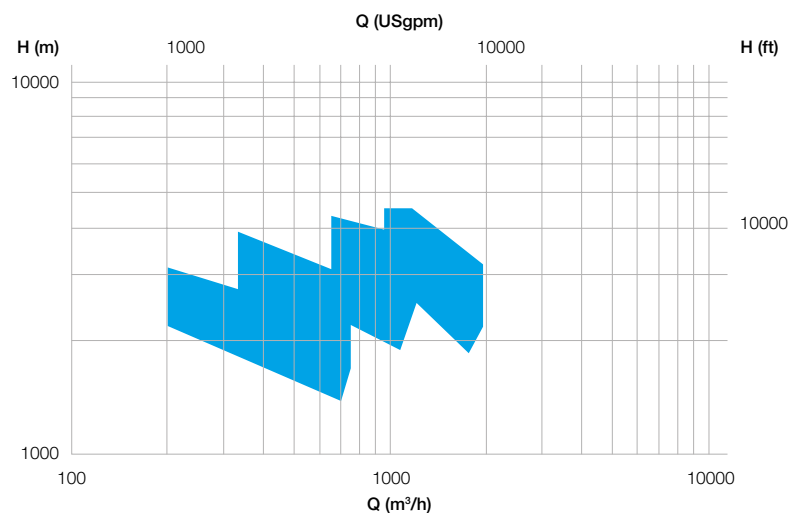
## Materials

Pump part	Material
Suction casing, stage casings and discharge casing	Chrome steel
Impellers	Chrome steel
Shaft	Chrome steel
Balancing system	Chrome steel

## Operating data

	Metric units	US units
Pump sizes	up to 300 mm	up to 12 in.
Capacities	up to 1'750 m <sup>3</sup> /h	up to 7'700 USgpm
Heads	up to 4'000 m	up to 13'120 ft.
Pressures	up to 430 bar	up to 6'240 psi
Temperatures	up to 220°C	up to 430°F

## Performance range







# We keep your processes flowing

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Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

## Our offer

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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.



### Pumps

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As one of the world's leading pump manufacturers, Sulzer provides a wide range of products for engineered, configured, and standard pumping solutions as well as essential auxiliary equipment. We are renowned for our state-of-the-art products, performance reliability and efficient solutions.



### Agitators and dynamic mixers

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Sulzer mixing and agitation technology offers a wide range of products for industrial applications. Side-mounted horizontal and top-mounted vertical agitators, dynamic chemical mixers, and tower and tank flow management products guarantee effective mixing and agitating processes.



### Compressors and aeration

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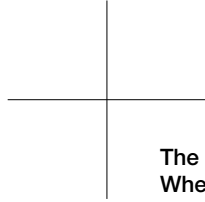
Sulzer's state of the art offering for municipal and industrial wastewater treatment includes turbocompressors, aeration systems and mechanical aerators. Our application and process know-how combined with our unique product portfolio give us the means to provide customers with reliable and efficient solutions.



### Submersible mixers

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Sulzer's energy efficient submersible mixers are suitable for a wide range of applications in industry and municipal treatment plants. They provide the right solution to match mixing tasks for agitating, blending, mixing, dissolving and suspension of solids in industry and municipal treatment plants.



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