

SULZER

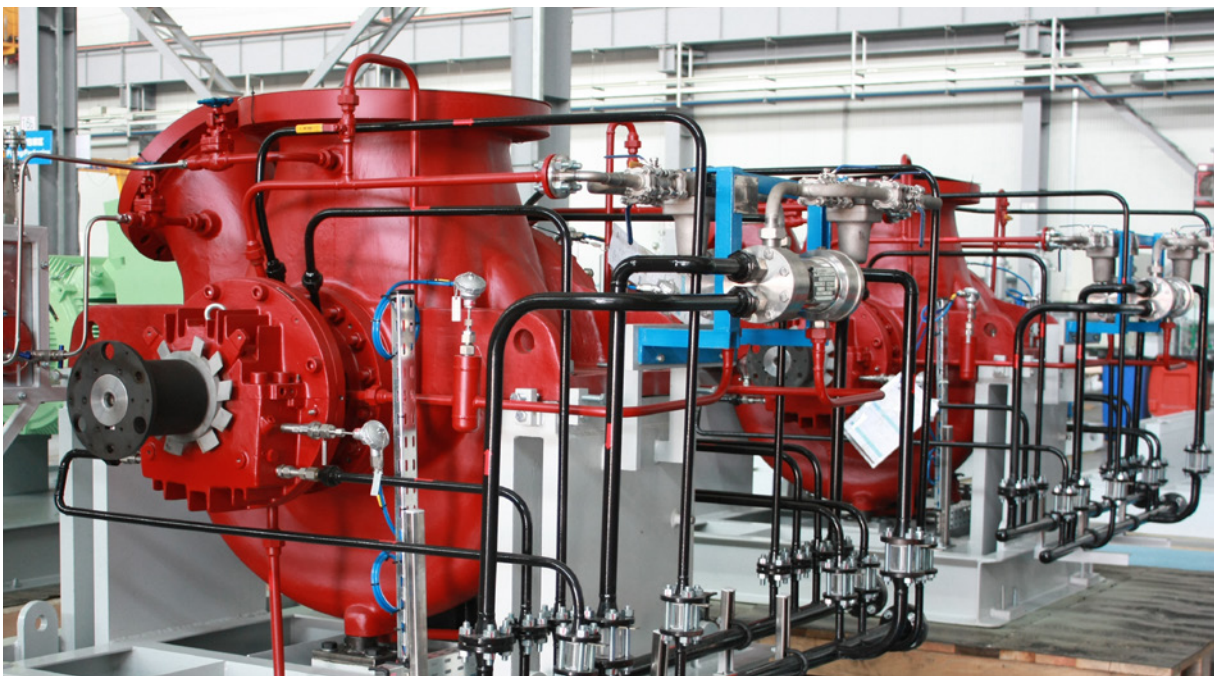
Flow Equipment

HZB double suction volute pump



Main industries and applications

HZB pumps are horizontal, single stage, double suction, centerline mounted pumps. They are designed for hot water applications with relatively low NPSH available, primarily as booster pump for large boiler feed water units in both conventional thermal and nuclear power stations.



Features and benefits

1 Centerline mounted cast pump casing

- Double suction and double volute, radially split at non-drive end with spiral wounded gasket between casing and cover
- Ensures reliable sealing under all operating conditions
- Provides optimized axial hydraulic balance and reduced radial load
- Allows free thermal expansion and high nozzle loads

2 Top suction / bottom discharge, top suction / top discharge (50°) or side / side nozzle arrangement

- Flange rating is ANSI 300#; transition pieces prepared for weld connections are optional
- Adaptable to the preferred piping layout

3 Double suction impeller, enclosed type and dynamically balanced

- Keyed to the shaft and positively positioned against a shaft shoulder
- Ensures low Net Positive Suction Head required (NPSHr)
- Allows low suction pressures, thus minimizing plant construction costs

4 Stiff shaft design with minimum bearing span used

- Ensures that deflection is minimized at seal faces, wear rings and coupling and that the critical speed is a minimum of 20% above the maximum operating speed

5 Amply sized sleeve radial and tilting pad (pivot shoe) bearings

- Forced lubrication is standard
- Optionally, self-contained ring oil lubrication available (sleeve radial and ball thrust bearings)
- Long bearing life and safer operation under changing load conditions

6 Single mechanical seal - API and plan 23 - with jacket cooling

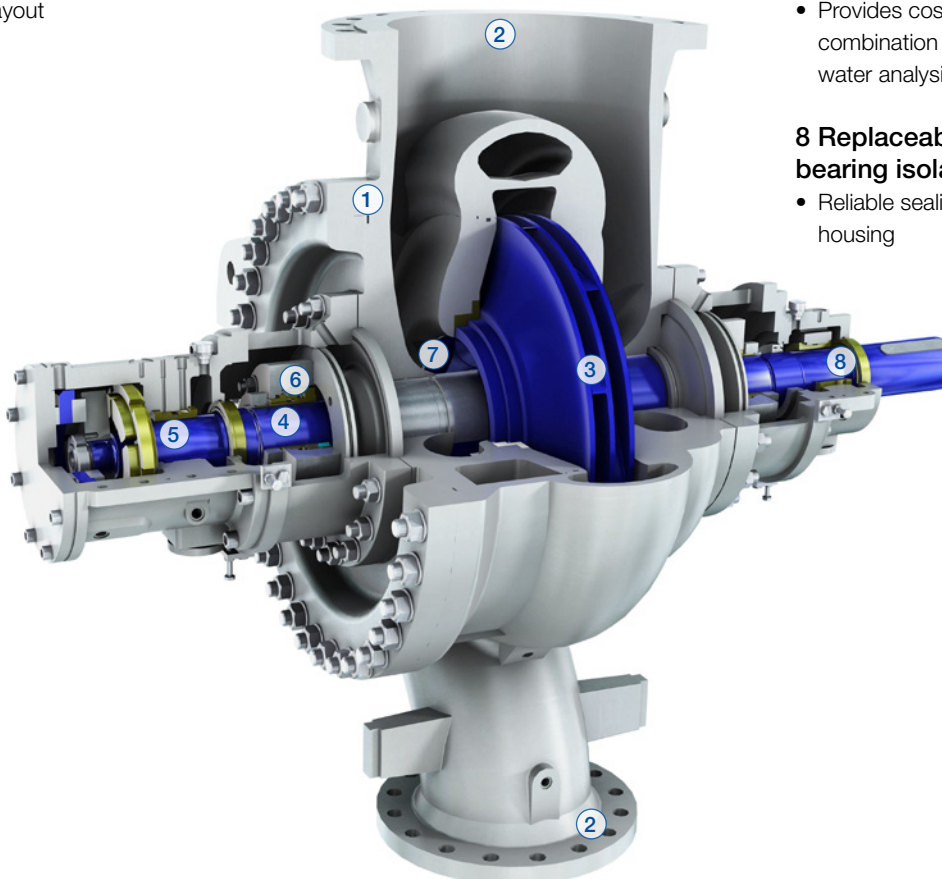
- Provides utmost reliability

7 Chrome steel pressure casing, impeller and shaft

- 2.5% chrome steel material for pressure casing is optional
- Offers good corrosion resistance and excellent mechanical properties
- Provides cost effective material combination according to the feed water analysis

8 Replaceable, metallic bearing isolators

- Reliable sealing of the bearing housing



Specifications

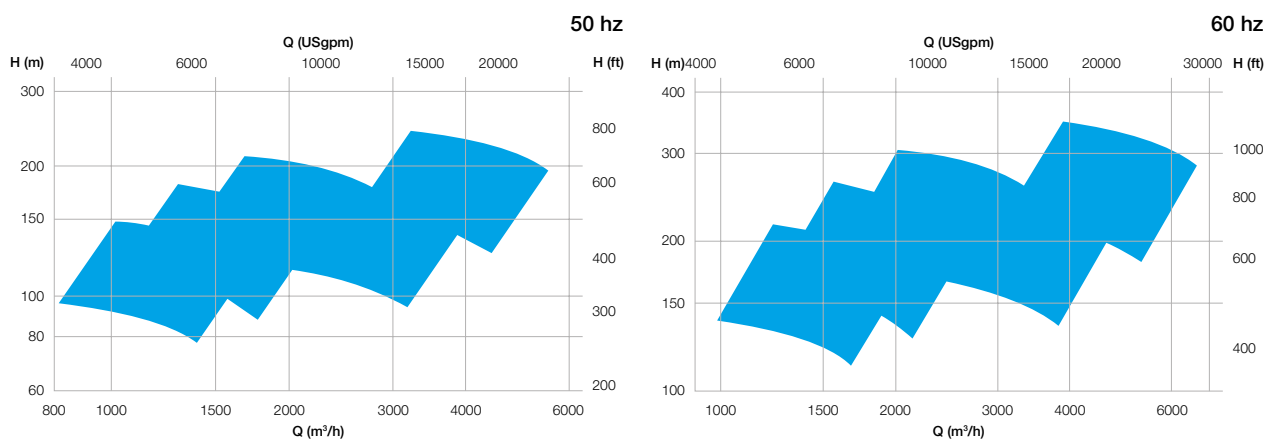
Materials

Pump part	Material
Casing	2.5% Cr carbon steel, 12% chrome steel
Impeller	12% chrome steel
Shaft	12% chrome steel
Wear rings	12% chrome steel with heat treatment

Operating data

	50 Hz	60 Hz
Pump sizes	up to 400 mm	up to 16 in.
Capacities	up to 5'500 m ³ /h	up to 29'000 USgpm
Heads	up to 340 m	up to 1'115 ft.
Pressures	up to 48 bar	up to 700 psi
Temperatures	up to 220°C	up to 428°F

Performance range





We keep your processes flowing

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

Our offer

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

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

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.



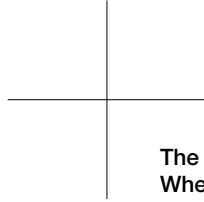
Compressors and aeration

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

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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