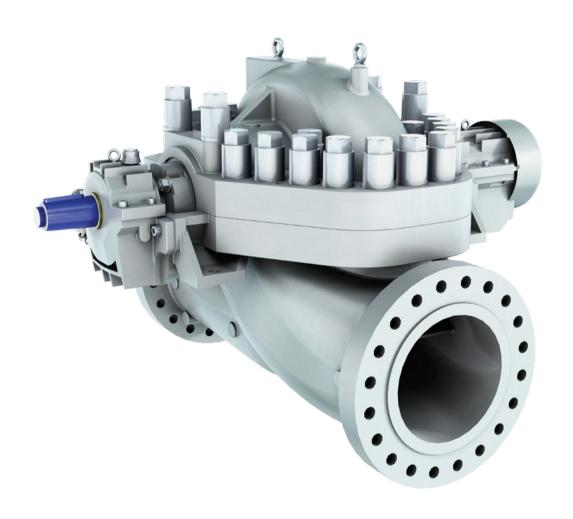
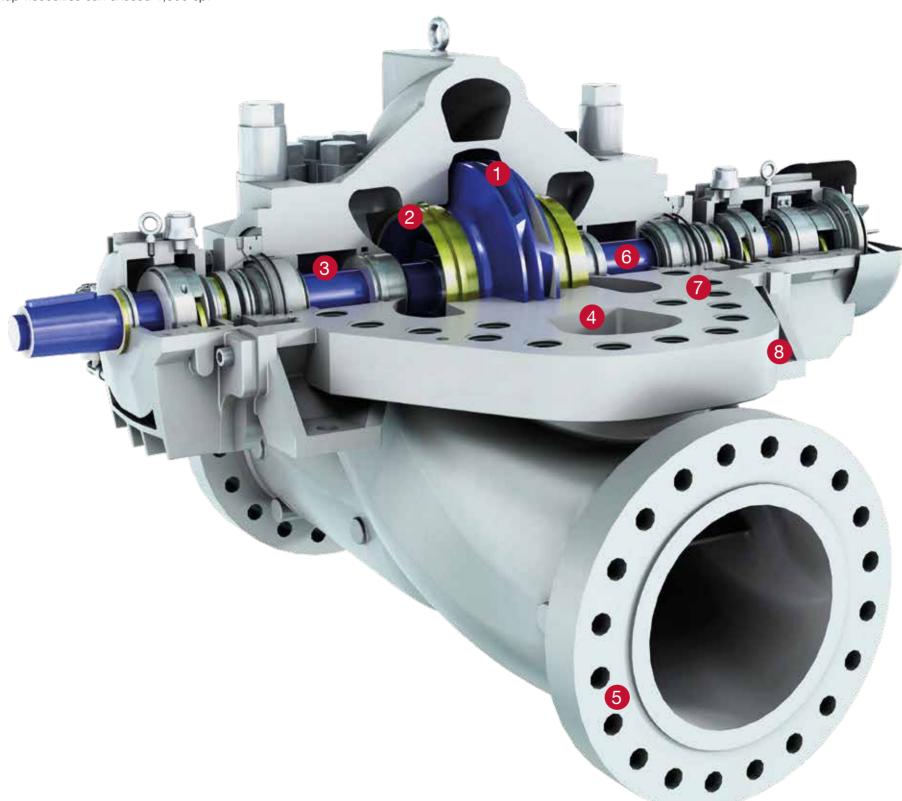


# **HSB Horizontal Axially Split Single Stage Double Suction Pump**



## **Main Applications**

Thousands of Sulzer HSB pumps are found on crude oil pipelines throughout the world. Some of the larger crude lines may have over 200 HSBs with a 3 to 4.4 MW (4,000 to 6,000 hp) motor on each pump. Other HSBs are pumping condensate in power plants, potable water over rough terrain, and even light hydrocarbons. HSBs are driven by electric motors, VFD-motors, motor-fluid couplings, gas turbines, diesel engines, and Sulzer HST power recovery turbines. HSB pumps are commonly used for fluids with viscosities from 0.1 cp to over 600 cp. In some cases, cold crude oil startup viscosities can exceed 1,000 cp.



### **Features and Benefits**

- Dynamically balanced double suction impeller
- Smooth running / axial thrust balanced
- Low NPSH
- 2 Replaceable case and impeller rings
- Simple, low cost efficiency renewal
- 3 Integral seal chamber, operating at suction pressure; designed for mechanical seals of all configurations
- Minimizes emissions and leakage
- 4 Double volute casing
- Minimizes shaft deflection
- Longer mechanical seal life
- 6 Horizontal suction and discharge nozzles cast integral with bottom half of the casing
- Two times API 610 nozzle load capacity
- 6 Large shaft diameter with minimum bearing span
- More power capacity
- Improved mechanical seal life
- Axial split casing
- Ease of disassembly for inspection and maintenance
- 8 Near centerline or nozzle mounting
- Near centerline mounted for alignment on warmer services
- Nozzle mounted for ambient services with heavy nozzle loads

## HSB Horizontal Axially Split Single Stage Double Suction Pump







Hydrocarbon processing



Power generation



Pulp and paper



General industry



Chemical processing

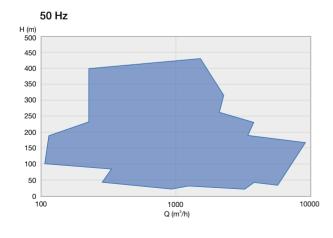


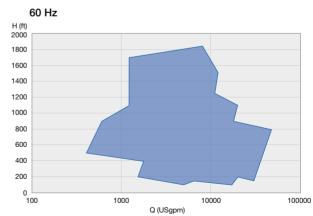
Water and wastewater

#### Operating data

50 Hz		60 Hz
6" to 30" nozzles	Pump sizes	6" to 30" nozzles
up to 10,000 m³/h	Capacities	up to 48,000 USgpm
up to 430 m	Heads	up to 1,900 ft
150 bar	Pressures	2,200 psi
up to 200°C	Temperatures	up to 400°F
up to 5,000 rpm	Speeds	up to 5,000 rpm

#### Performance ranges





#### **Materials**

Material classes	Material
API 610	S-4, S-5, S-6, C-6, A-8, D-1, D-2

## We Do What We Say

#### Customer partnership

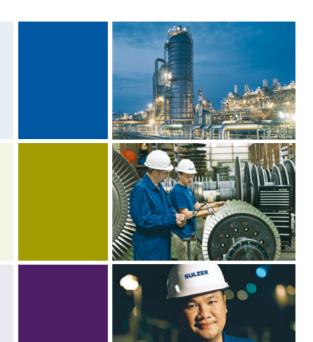
- We are reliable partners
- We provide a high level of service
- We make our customers more competitive

#### Committed people

- We drive accountability
- We are **open** and **transparent**
- We are team players

#### Operational excellence

- We focus on results
- We take initiative and work within established processes
- We act safely



## A Global Specialist at Your Doorstep

Sulzer serves clients worldwide through a network of over 150 production and service sites and has a strong footprint in emerging markets.





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