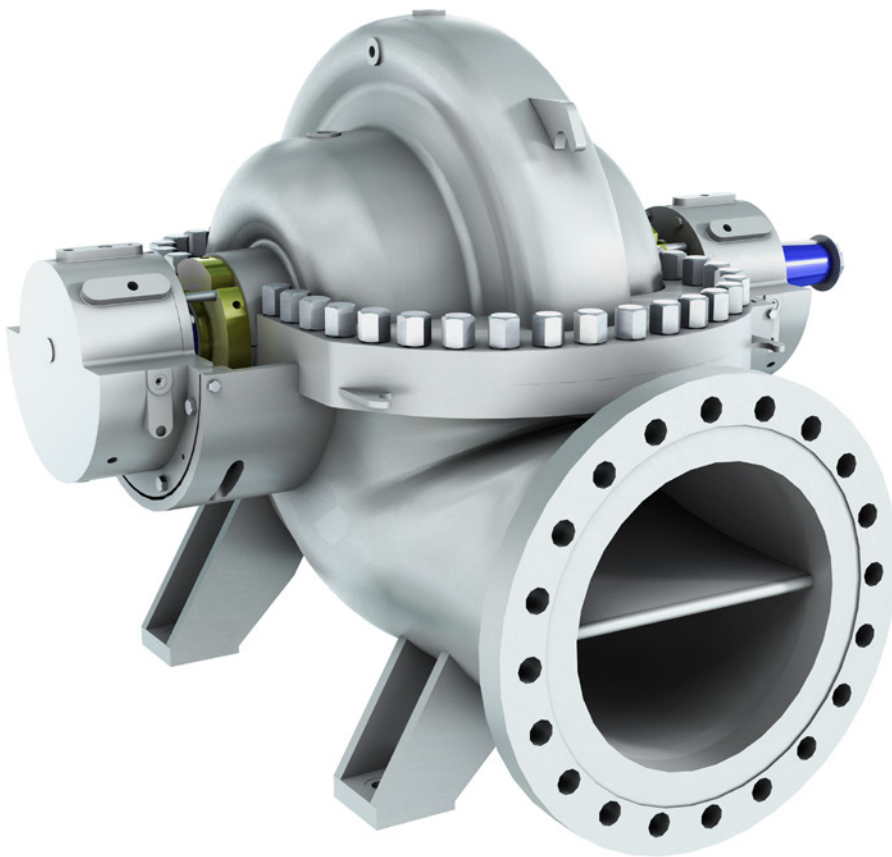


SULZER

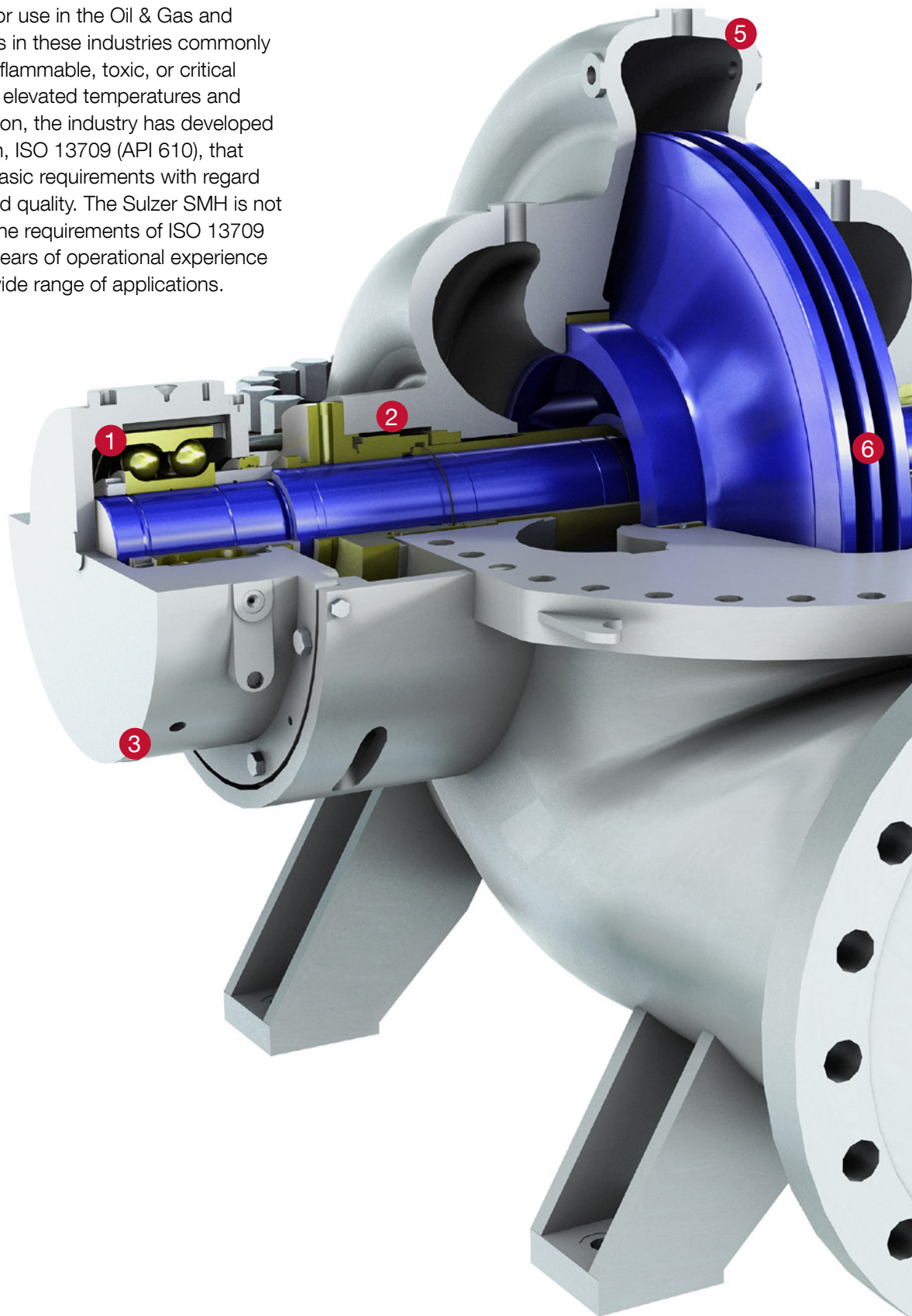
LENNTECH
WATER TREATMENT Solutions

SMH/SMHv API 610 (ISO 13709) Type BB1 Axially Split Single Stage

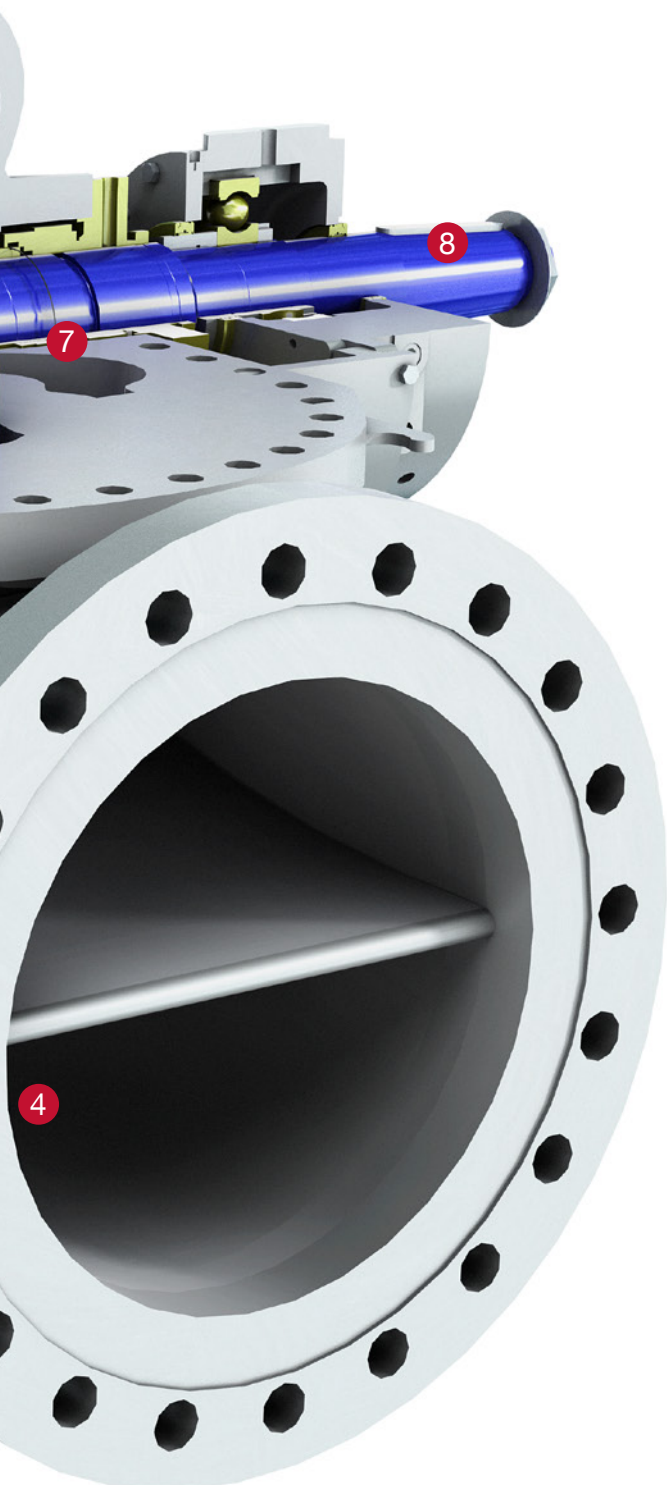


Main Applications

The SMH is designed for use in the Oil & Gas and HPI markets. Processes in these industries commonly require the pumping of flammable, toxic, or critical cooling liquids, often at elevated temperatures and pressures. For this reason, the industry has developed a standard specification, ISO 13709 (API 610), that ensures pumps meet basic requirements with regard to materials, design, and quality. The Sulzer SMH is not just designed to meet the requirements of ISO 13709 but also benefits from years of operational experience in the field covering a wide range of applications.



Features and Benefits



1 Bearings

- Oil lubricated with constant level oilers
- Angular contact BECBM thrust bearing with machined brass cages
- 6000 series ball or roller radial

2 Mechanical seal

- Generously dimensioned seal chamber for unrestricted seal flush flow
- Cartridge type mechanical seals may be fitted

3 Bearing housings

- Carbon steel housings
- Constant level oilers maintain oil level
- Inpro bearing isolators prevent ingress of contaminants to the housing
- Pure mist lubrication is available on ball bearings
- Fan cooling available

4 Optimum hydraulic geometry

- Resulting from intensive R&D, delivers ideal flow patterns with low velocities for high efficiency and quiet running

5 Casing

- Axially split for ease of maintenance
- Branches in the lower half only
- The complete rotor may be inspected/replaced without disconnecting the main pipework
- SMHv is vertical shaft version for confined spaces

6 Double entry impeller

- Principal axial thrusts are inherently balanced
- Optimum geometry provides high efficiency, low NPSH, and quiet running over a wide operating range
- Balanced to ISO 1940-1 G2.5

7 Wear parts

- Integral impeller wear surfaces standard
- Replaceable impeller wear rings optional
- Casing wear rings standard
- Replaceable throat bushings control pressure in the seal chamber

8 Shaft

- Stiff design for arduous service conditions
- Replaceable protection sleeves within the main waterways
- Taper or parallel fit couplings can be accommodated depending on the pump size

SMH Axially-Split Single Stage Pump

API 610 (ISO 13709)



Oil and gas



Hydrocarbon
processing



Power
generation



Pulp and
paper



General
industry



Chemical
process

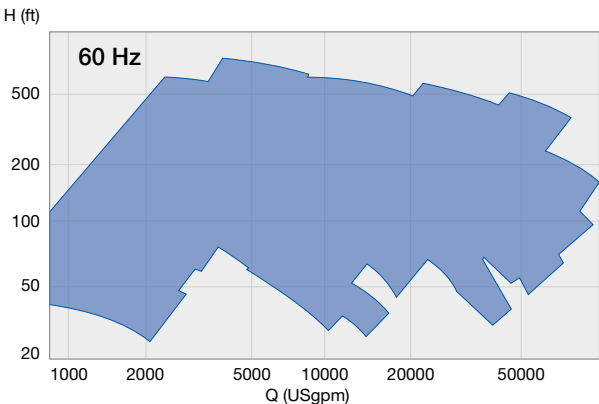
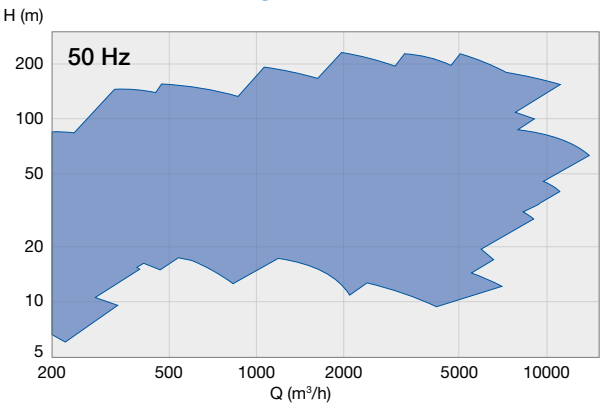


Water and
wastewater

Operating data

50 Hz		60 Hz
150 to 800 mm	Bowl sizes	6 to 32 in
150 to 10,000 m ³ /h	Capacities	660 to 44,000 USgpm
10 to 200 m	Heads	32 to 650 ft
up to 25 bar	Pressures	up to 362 psi
-10 to 120°C	Temperatures	15 to 250°F

Performance ranges



Materials

Pump part	Material
Bowl	NACE, carbon steel, chrome steel, other material as required
Impeller	NACE, carbon steel, chrome steel, other material as required
Shaft	NACE, carbon steel, other material as required
Can, column, discharge head	NACE, carbon steel, other material as required

We Do What We Say

Customer partnership

- We are a **reliable partner**
- 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.



● Sulzer headquarters,
Winterthur, Switzerland



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