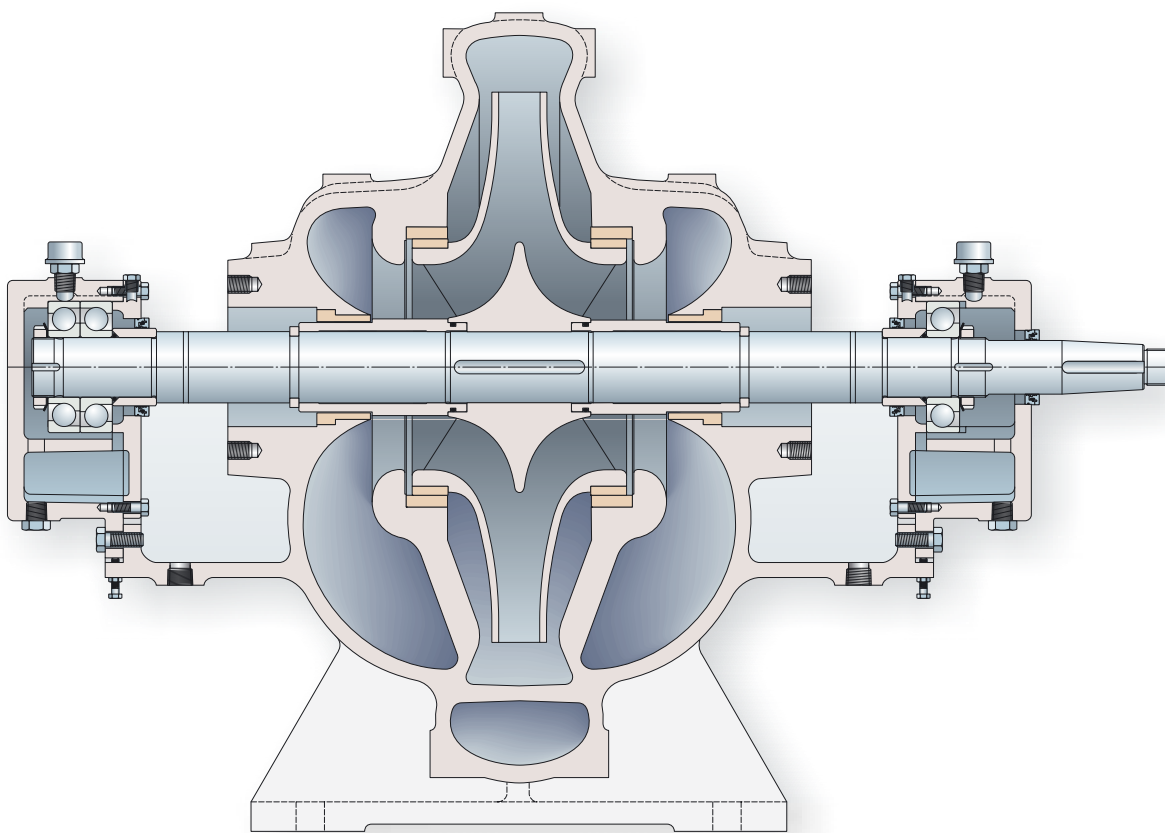


SMH Axially-Split Single Stage Pumps API 610 (ISO 13709)



Sulzer Pumps

Sulzer Pumps combines more than 135 years of experience in pump development and manufacturing with a core commitment to fully understand the needs of our customers.

Our detailed process and application knowledge has allowed us to develop innovative pumping

solutions for our focus segments including tailor made systems if required. Our active research & development supports this customer-oriented approach.

Sulzer Pumps has sales and service facilities in all the major markets of the world to provide fast and flexible response and support.

Sulzer pumps has a long history of providing innovative pumping solutions to business partners in the following industries

- Oil & Gas
- Hydrocarbon Processing
- Pulp and Paper
- Power Generation
- Food, Metals and Fertilizers
- Water and Wastewater

Design and Manufacturing

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.

The Sulzer plants involved in the manufacture and packaging of the SMH are all specialized in the supply of equipment into these markets. Their quality control, manufacturing, testing and project management systems are all designed to deliver the high level of service demanded by the market. This goes beyond simply 'meeting the standard', everyone involved in the production process has an understanding of the application the pump is destined to fulfil. This

in depth knowledge results in a pump package not merely engineered to meet the customers specification, but designed and built to deliver the highest levels of performance and reliability in real world operating conditions.



Design Features and Benefits

Bearings

- Heavy duty specification for extended life
- Back to back angular contact thrust and single ball bearing journal bearing

Shaft Seal

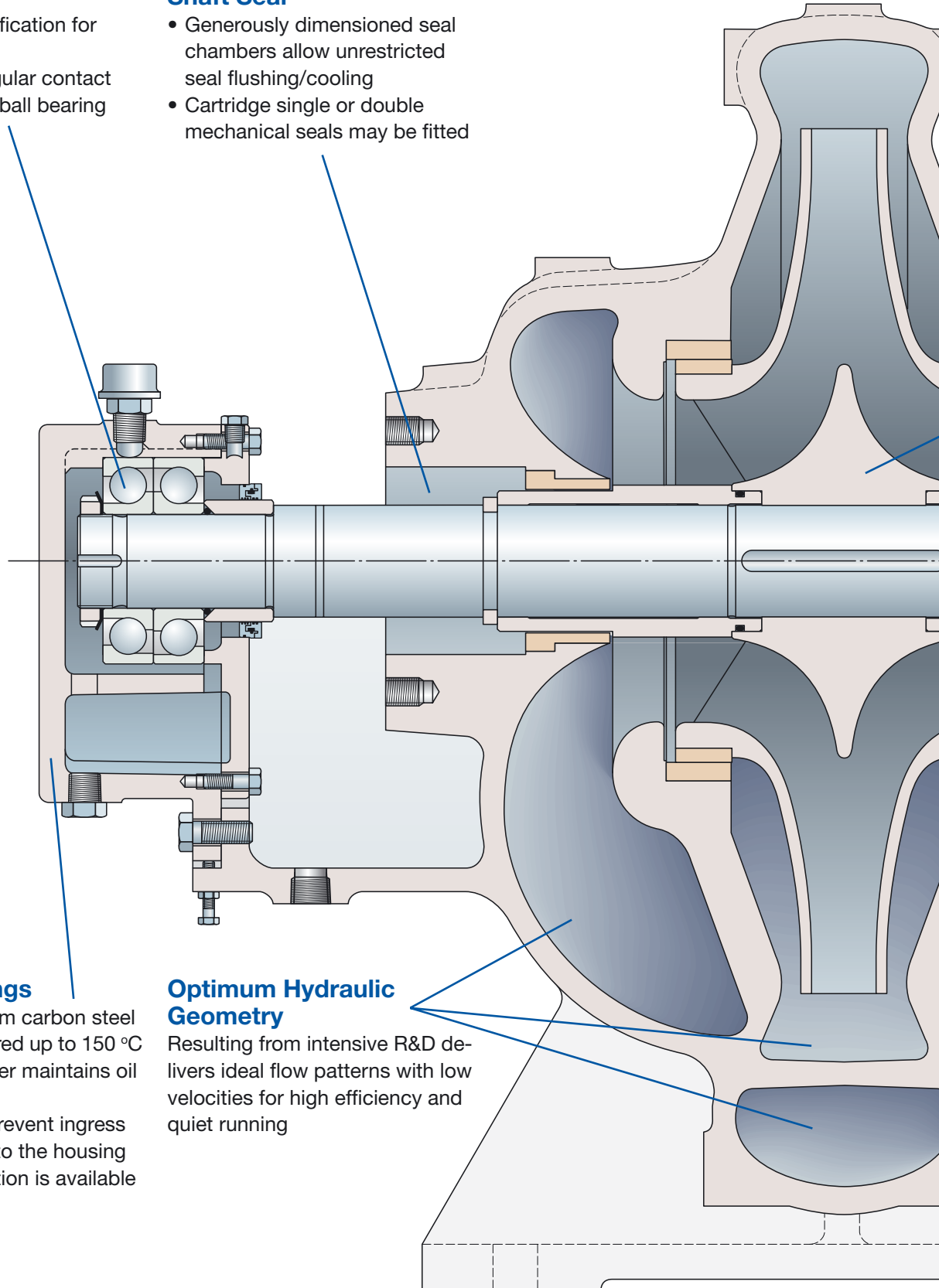
- Generously dimensioned seal chambers allow unrestricted seal flushing/cooling
- Cartridge single or double mechanical seals may be fitted

Bearing Housings

- Manufactured from carbon steel
- Cooling not required up to 150 °C
- Constant level oiler maintains oil level
- Labyrinth seals prevent ingress of contaminants to the housing
- Pure mist lubrication is available

Optimum Hydraulic Geometry

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



Casing

- Axial split for ease of maintenance
- Branches in the lower half only
- The complete rotor may be inspected/replaced without disconnecting the main pipework

Double Entry Impeller

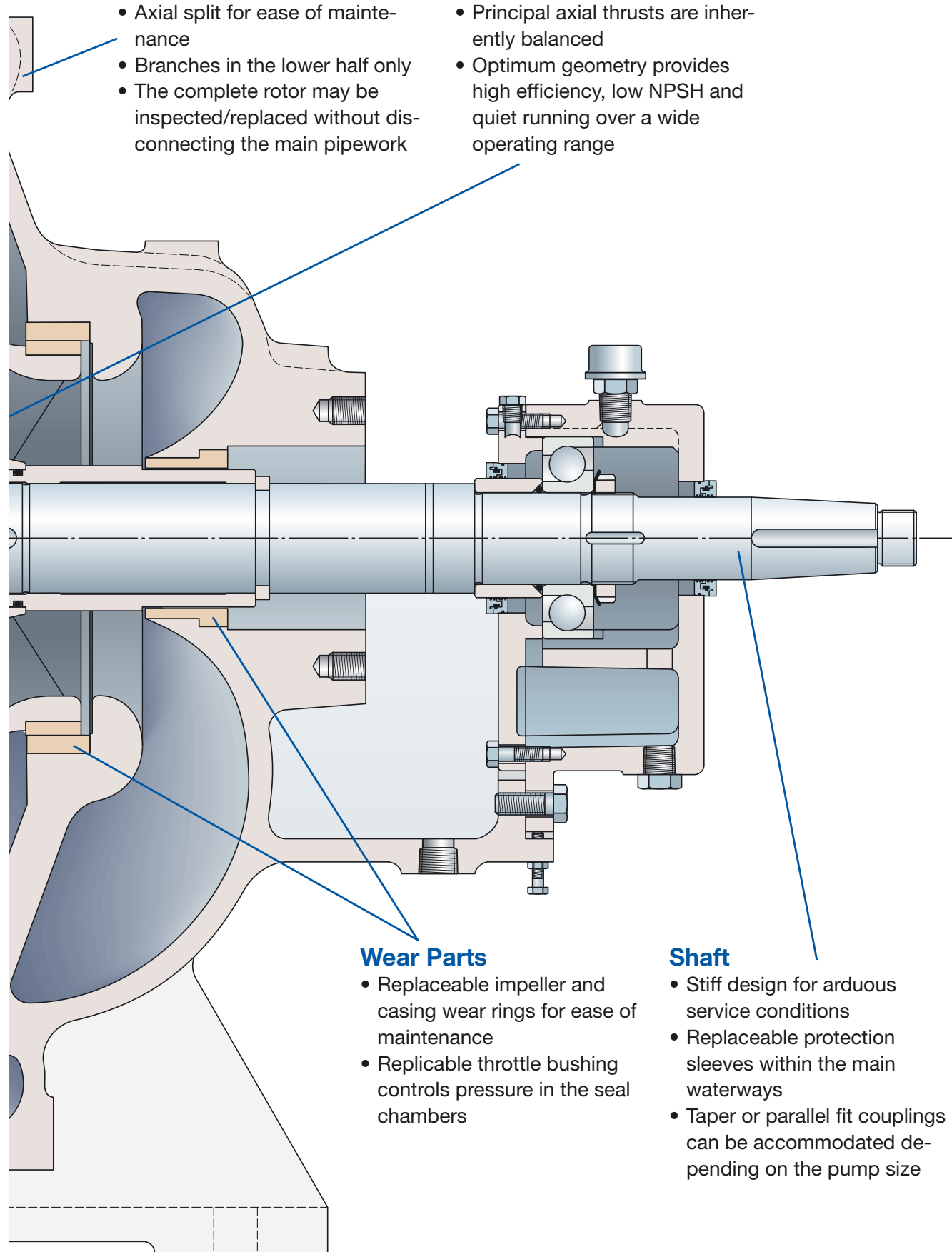
- Principal axial thrusts are inherently balanced
- Optimum geometry provides high efficiency, low NPSH and quiet running over a wide operating range

Wear Parts

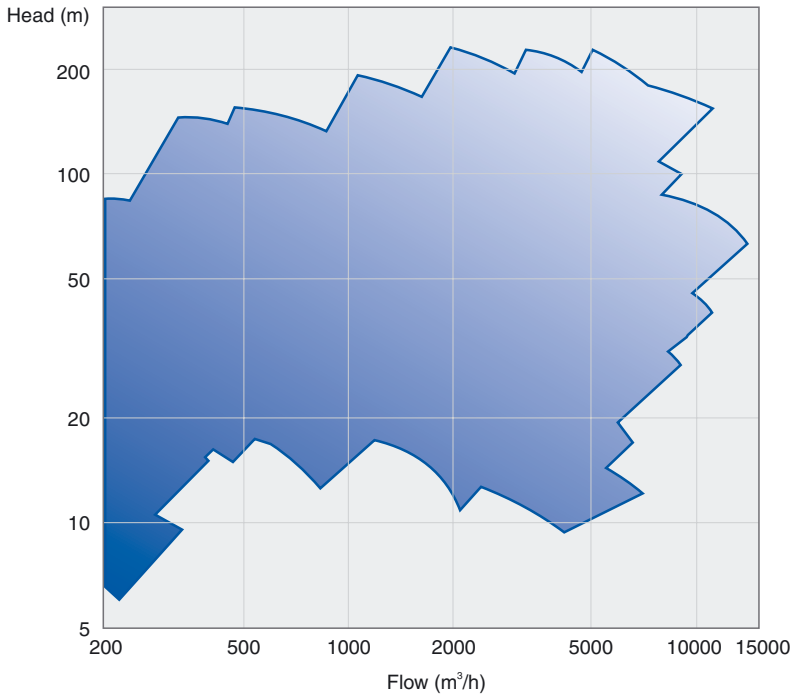
- Replaceable impeller and casing wear rings for ease of maintenance
- Replicable throttle bushing controls pressure in the seal chambers

Shaft

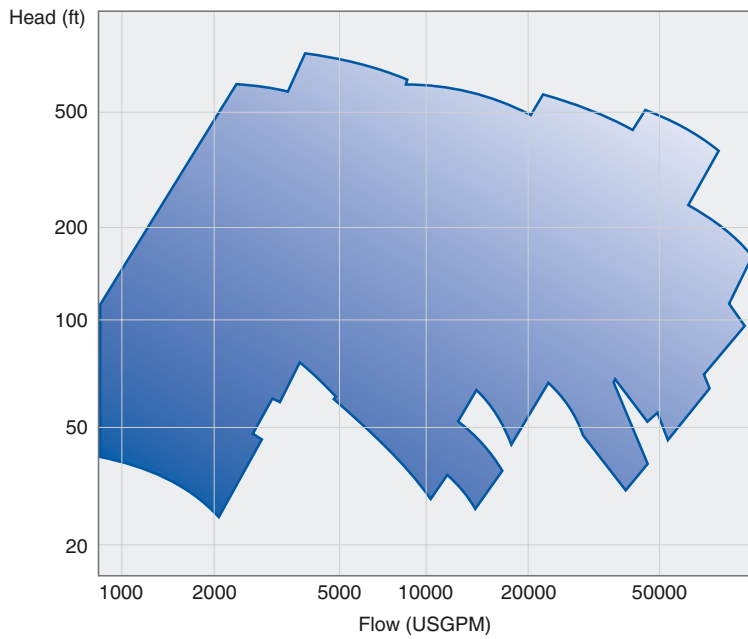
- Stiff design for arduous service conditions
- Replaceable protection sleeves within the main waterways
- Taper or parallel fit couplings can be accommodated depending on the pump size



Performance Range



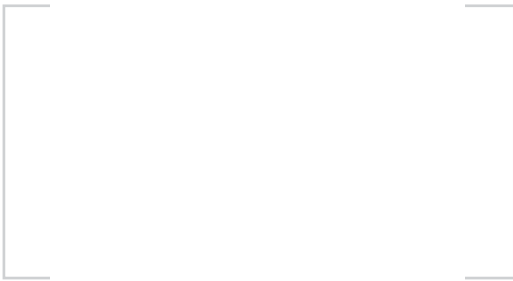
SMH 50 Hz



SMH 60 Hz

Operating Data

	SMH 50 hz	SMH 60 hz
Pump sizes	150 to 800 mm	6 to 32 inches
Capacity	150 to 10,000 m³/h	660 to 44,000 USGPM
Head	10 to 200 m	32 to 650 ft
Pressure (size dependant)	up to 25 bar	up to 362 psi
Temperature	-10 to 150 °C	15 to 302 °F



Check our worldwide offices at
www.sulzerpumps.com