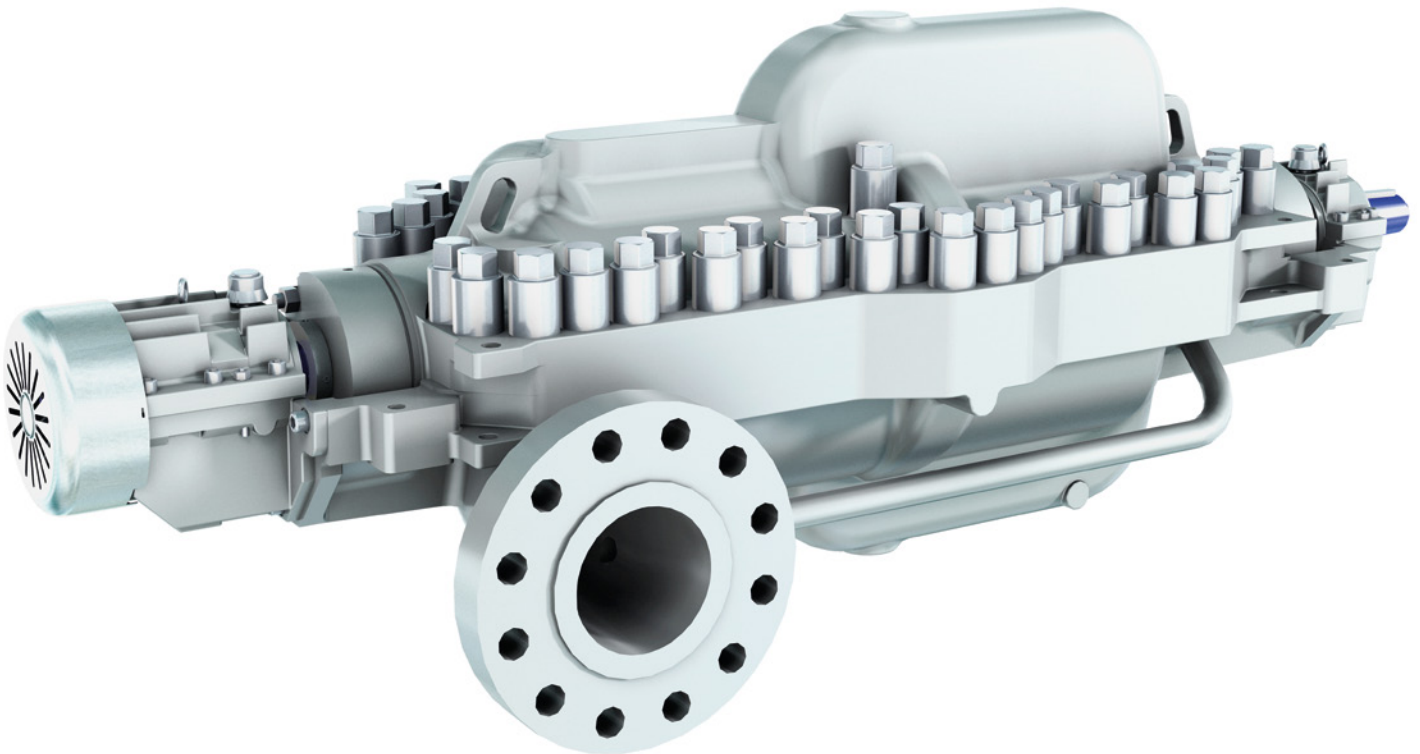


SULZER

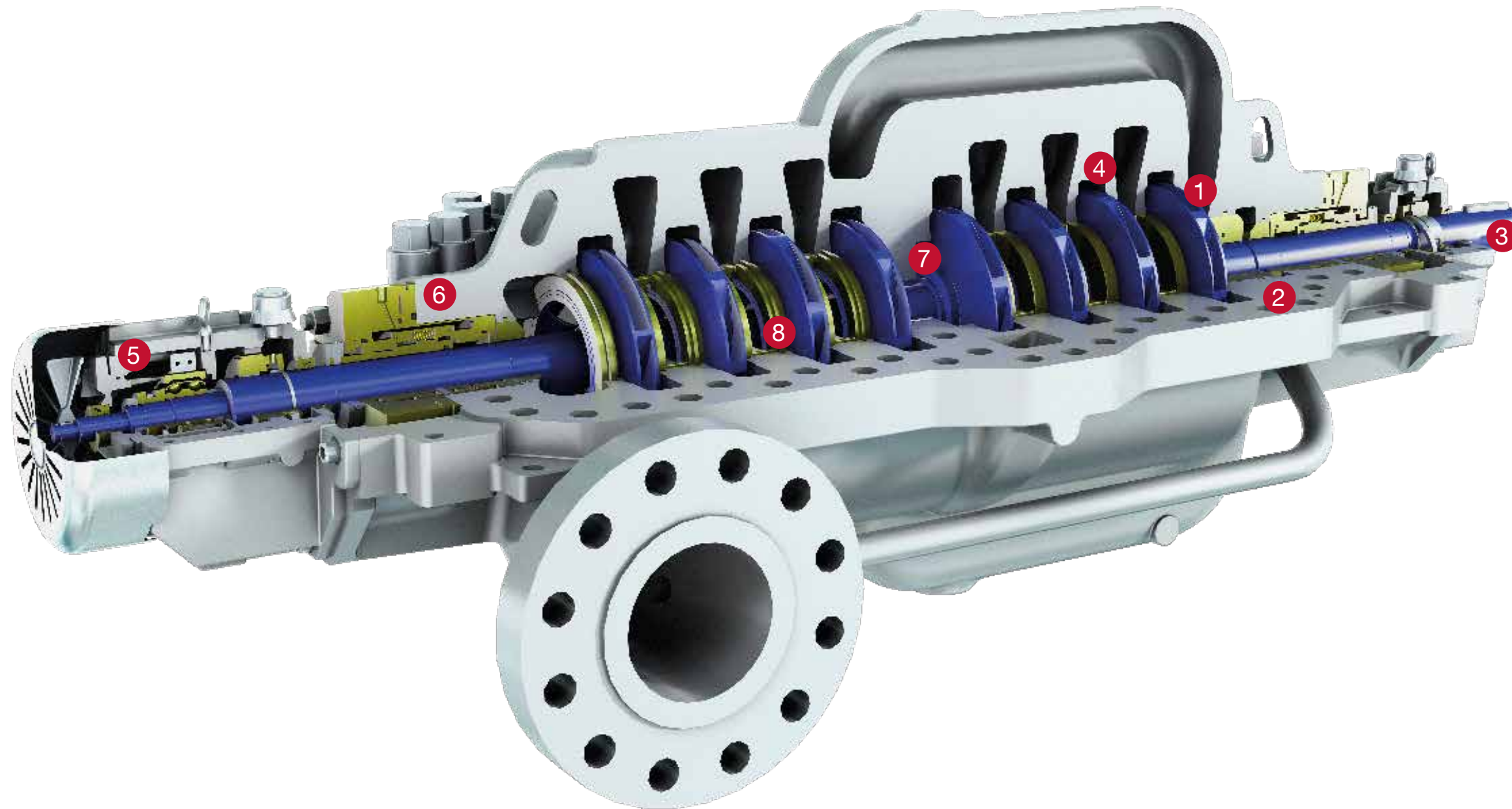
LENNTECH
WATER TREATMENT Solutions

MSD/MSD2 Axially Split Multistage Pump



Main Applications

- Boiler feed in all industries; auxiliary feed in nuclear power
- Reverse osmosis feed
- Offshore crude oil shipping
- Refined product pipeline
- Supercritical Liquefied Petroleum Gas (LPG), Ethylene and CO₂ compressible services down to 0.25 sp.gr.



Features and Benefits

- 1 Impellers**
 - Shrink fit, precision cast, dynamically balanced and individually secured
- 2 Axially split casing**
 - Simplifies rotor balancing, inspection and installation, case passageway inspection and modification, and spare rotor retrofits
 - Support is near centerline for alignment
 - Full range of design pressures to suit applications
- 3 Large diameter shaft**
 - Stepped for ease of assembly
 - Sized to satisfy rotor dynamics and power transmission with worn clearances
 - Optimized for hydraulic performance
- 4 Double volute construction**
 - Minimum radial thrust for less shaft deflection and less bearing loading
- 5 Bearings**
 - Ball radial and 7300 series ball thrust bearings are standard; sleeve/ball and sleeve/pivot shoe bearings are optional. INPRO™ isolators are standard
- 6 Seal chambers**
 - Easy access for maintenance
 - Space for tandem and double mechanical seals
 - Compliance with ISO-13709 (API610) dimensions
- 7 Split center bushing**
 - Facilitates rotor dynamic balance, inspection, removal and replacement
- 8 Replaceable wear rings**
 - Pinned and axially retained impeller and case wear rings are standard

MSD/MSD2 Axially Split Multistage Pump



Oil & Gas



Hydrocarbon
Processing
Industry



Power
Generation



Pulp and
Paper



General
Industry



Chemical
Processing
Industry



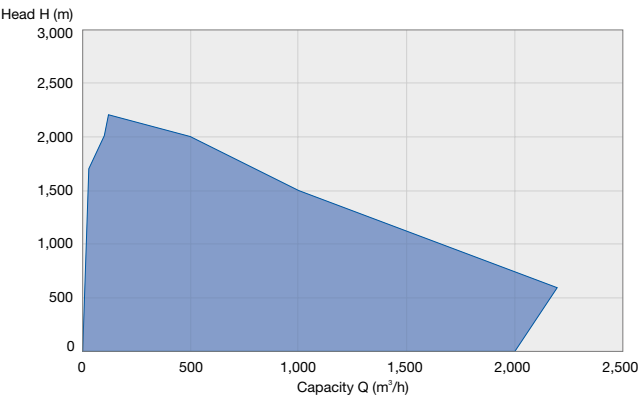
Water

Operating Data

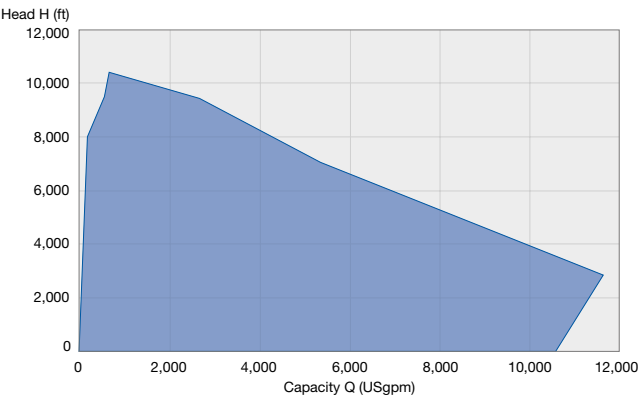
50 Hz		60 Hz
80 to 400 mm	Pump sizes	3 to 16 inches
up to 3,200 m ³ /h	Capacities	up to 14,000 USgpm
up to 2,900 m	Heads	up to 9,500 feet
up to 300 bar	Pressures	up to 4,400 psi
up to 200°C	Temperatures	up to 400°F
over 6,000 rpm	Max. speed of rotation	over 6,000 rpm

Performance Ranges

50 Hz



60 Hz



Materials

Material classes	Material
API610	S-5, S-6, S-8, 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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