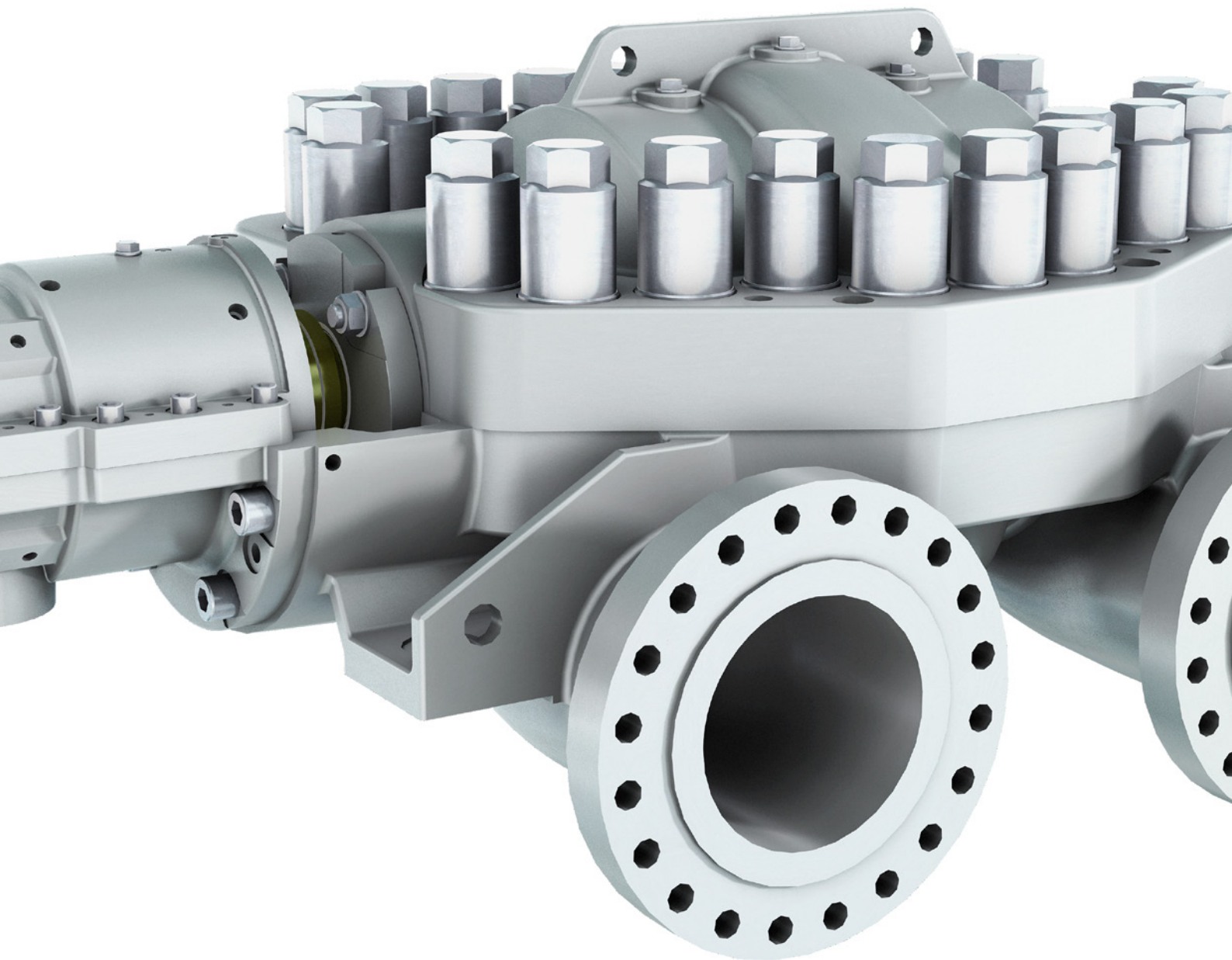


HPDM axially split between bearing
single or multistage pump



Main industries and applications

HPDMs are tailor-made axially split between bearing single or multistage pumps extensively used to transport large volumes of liquid over long distances and high geodetic heights. They are mainly used in:

- Water transport
- Desalination
- Transport of crude oil
- Any other high flow, high head application

HPDM pumps combine high efficiency, high reliability and sturdiness, are easy to install, operate and maintain and are famous for their longevity.



Water and
wastewater



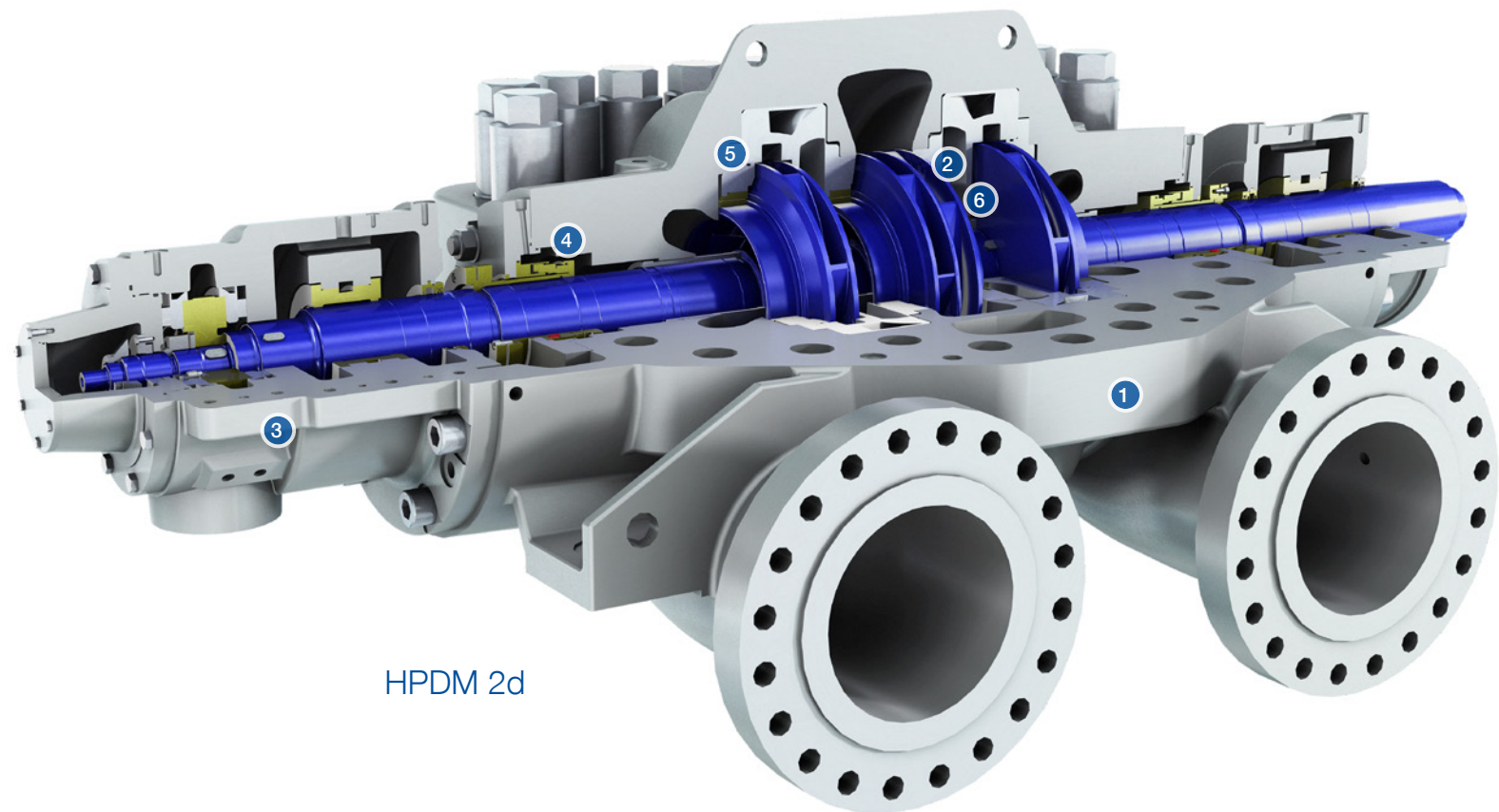
Oil and gas



Hydrocarbon
processing



Power
generation

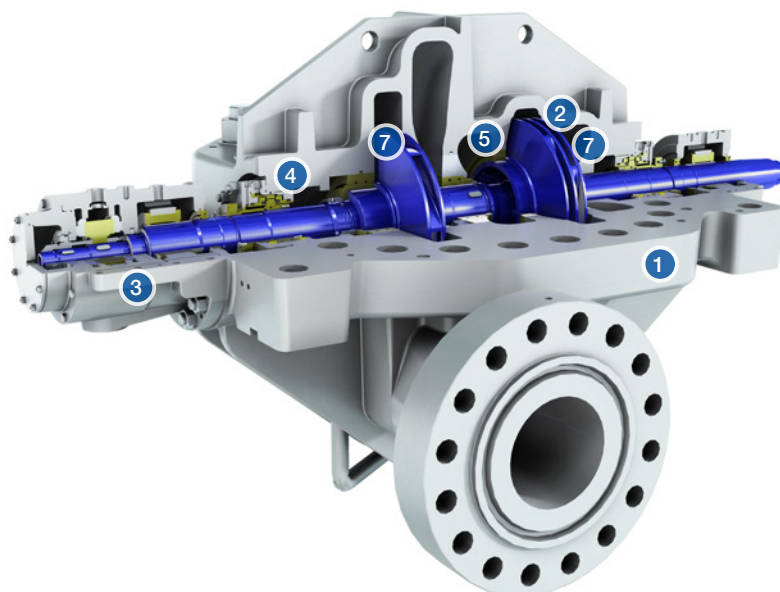


HPDM 2d

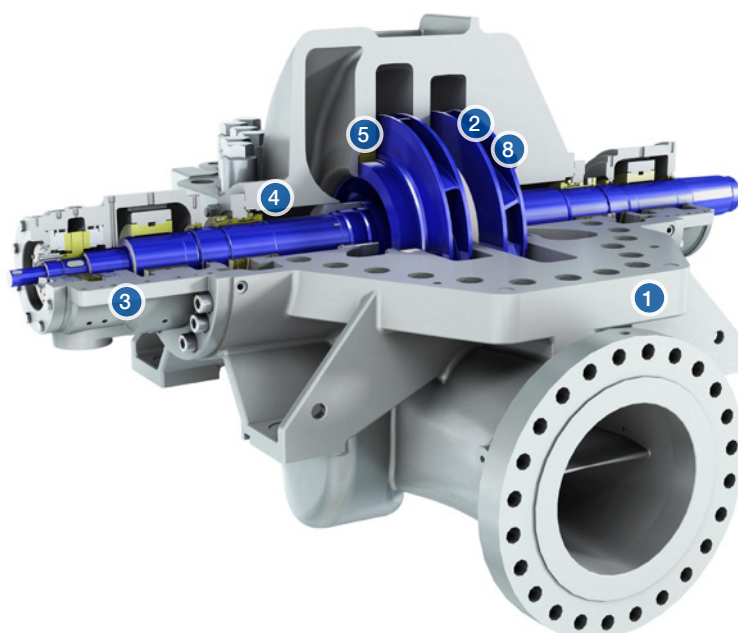
Features and benefits

Pump part	2d	d+s	s+s	1d
1 Casing - Weight optimized casing by FEA - Casing integrity and tightness ensured by different split flange sealings like gasket or o-ring	✓	✓	✓	✓
2 Hydraulics - Wide choice of proven hydraulics - High efficiency and optimum suction performance	✓	✓	✓	✓
3 Bearings Various bearing options depending on different operation conditions and load: - Anti-friction bearings (self-lubricated) - Sleeve-ball bearings (self-lubricated) - Sleeve / tilting-pad bearing (pressure lubricated or self-lubricated)	✓	✓	✓	✓
4 Shaft seals Mechanical seal is standard, gland packing is optional	✓	✓	✓	✓
5 Wear protection - Renewable casing wear rings and integral impeller wear rings - Renewable impeller wear rings as option	✓	✓	✓	✓
6 Twin suction impellers on first stage and double suction, staggered vane second stage impeller - Assures low Net Positive Suction Head Required (NPSHR) and balance of axial thrust, low pressure pulsation - Diffusers on first stage and double volute on second stage to balance radial thrust	✓			
7 Double suction, staggered vane first stage impeller, single suction second stage impeller - Assures low NPSHR and low pressure pulsation - Double volute on both stages to balance radial thrust and enable high efficiency - Balance drum at Non-Driving End (NDE) to balance axial thrust and reduce pressure at the shaft seal - Compact cross-overs		✓		
8 Two stage construction with back-to-back single suction impellers - Cost effective and highly efficient for installations equipped with a booster pump - Back-to-back arrangement to balance axial thrust - Double volute to balance radial thrust and enable high efficiency - Compact cross-overs			✓	

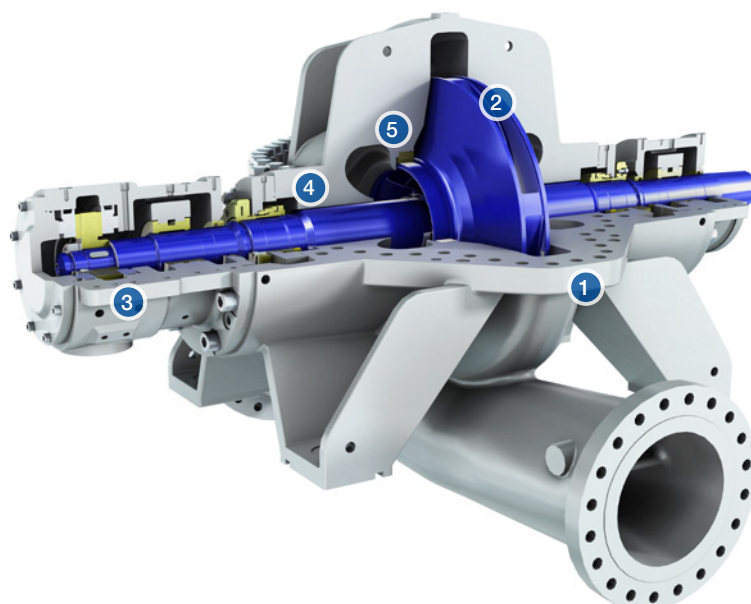
HPDM d+s



HPDM s+s



HPDM 1d



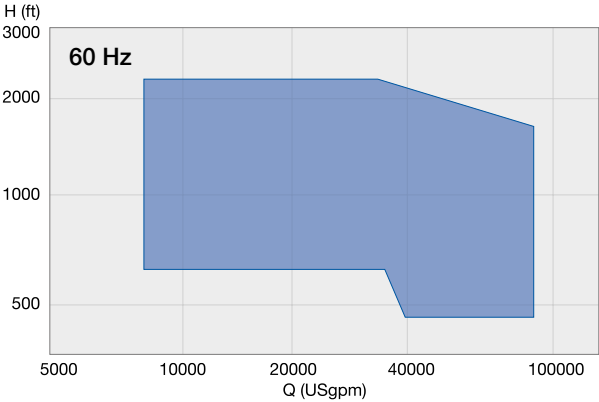
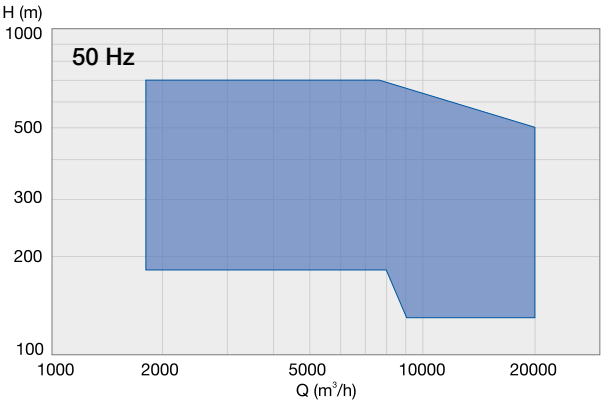
Materials

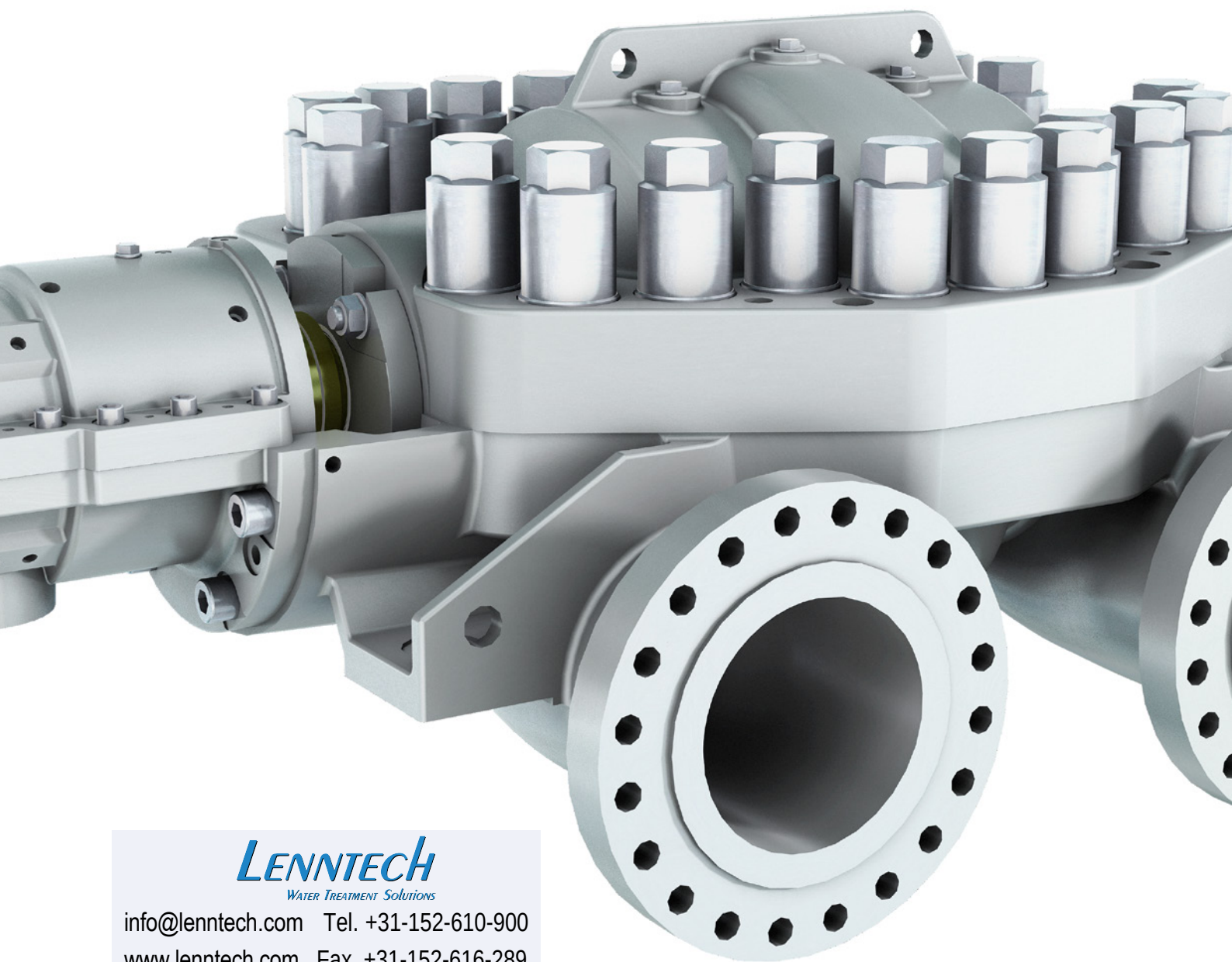
Pump part	Material
Casing	Ductile iron, cast carbon steel, duplex, super duplex
Impeller	Chrome steel, stainless steel, duplex, super duplex
Shaft	Chrome steel, duplex, super duplex
Stationary wear ring	Chrome steel, stainless steel, duplex, super duplex

Operating data

	50 Hz	60 Hz
Pump sizes	250 to 1'600 mm	10 to 64 in.
Capacities	1'000 to 20'000 m³/h	4'400 to 88'000 USgpm
Heads	up to 700 m	up to 2'300 ft.
Pressures	up to 175 bar	up to 2'500 psi
Temperatures	up to 150°C	up to 302°F

Performance ranges





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