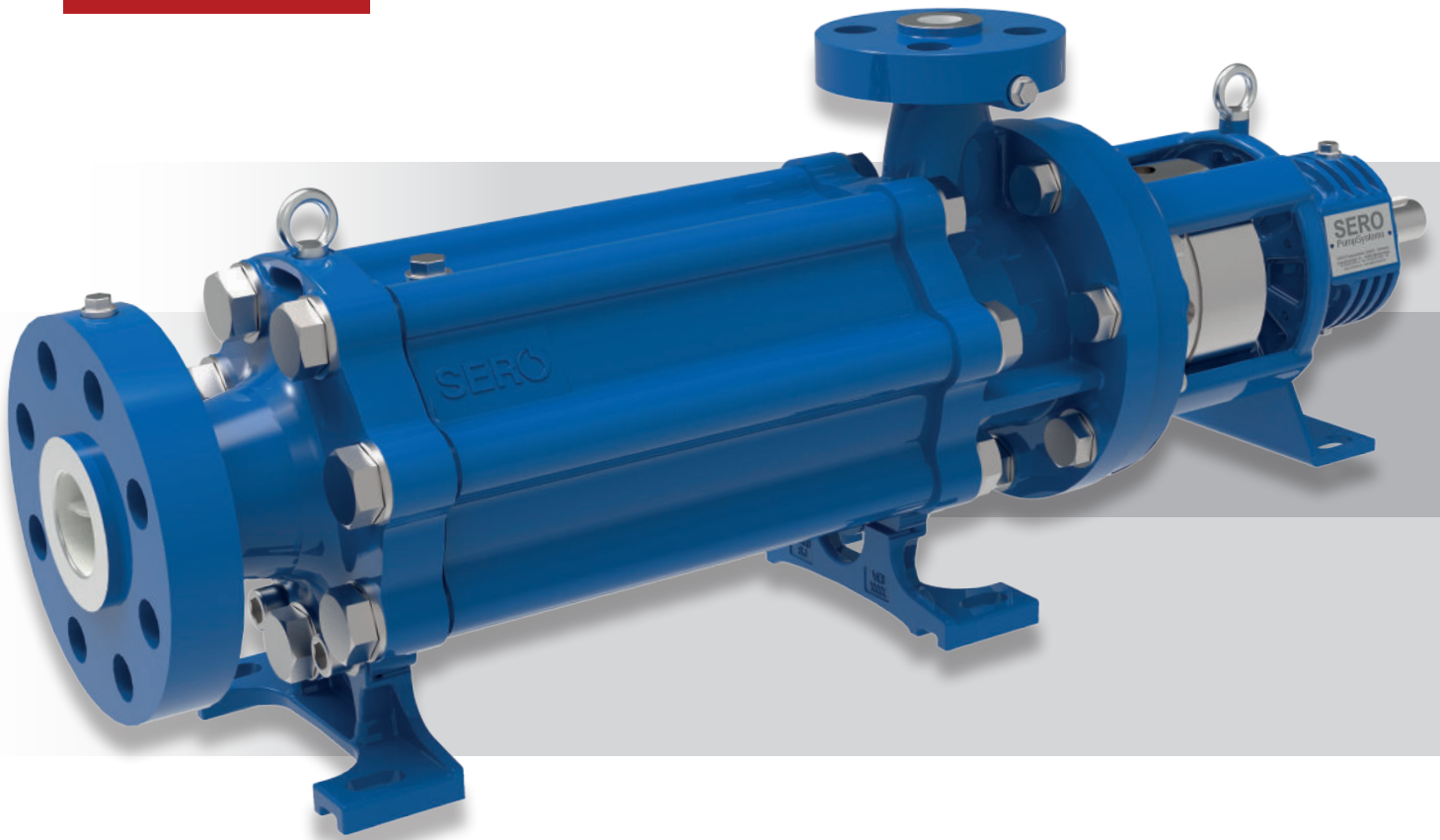


SHP®

SERO
PumpSystems



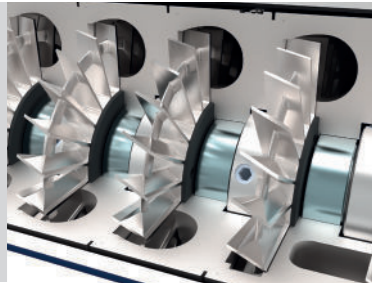
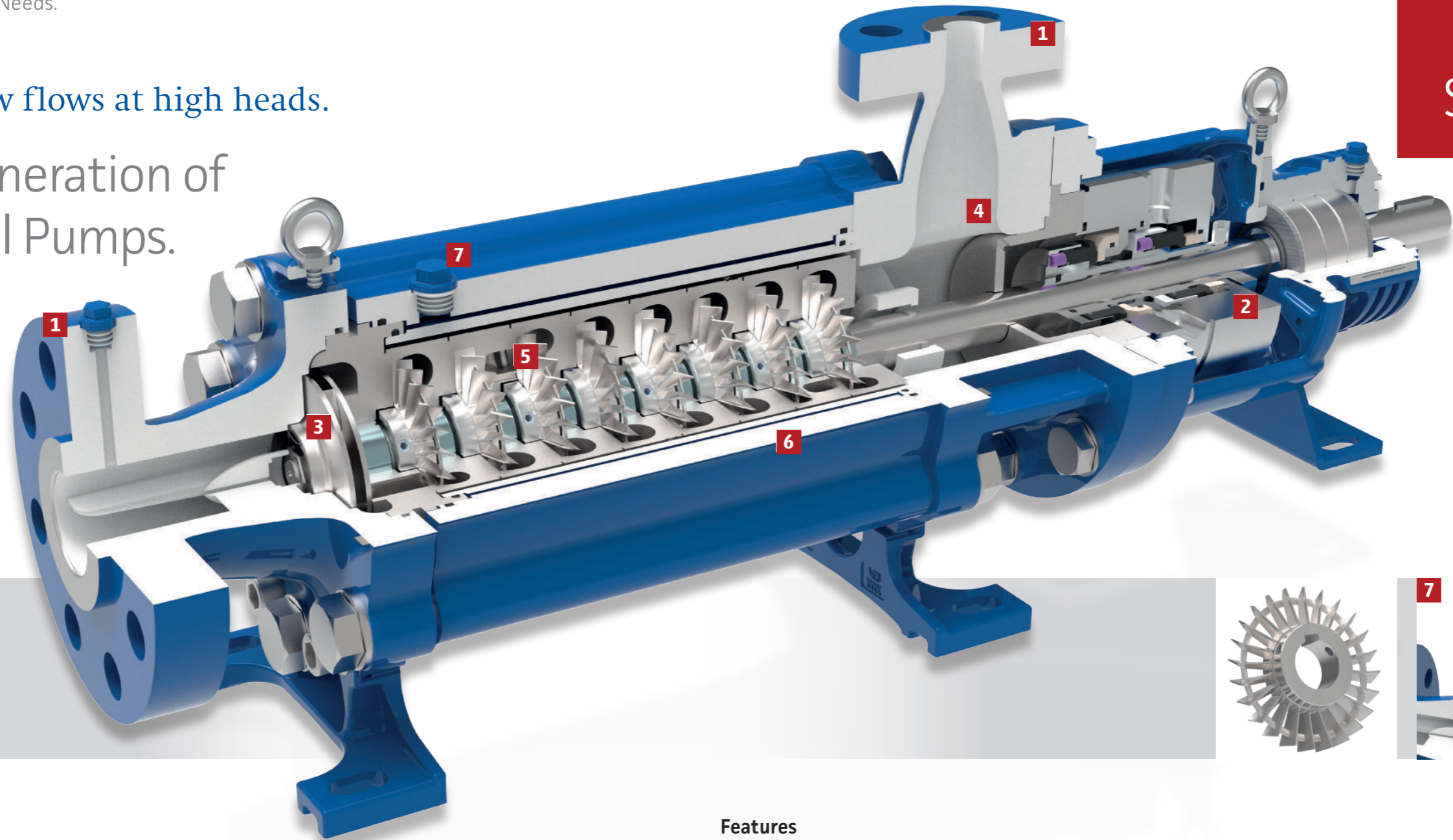
High Pressure Side Channel Pump SHP®.

Exceptional Process Safety
at High Pressures.

- Low Flow and High Heads
- Low NPSH requirements
- Incorporating many API features
- Rugged multi-stage pump with barrel design

Secure delivery of low flows at high heads.

The New Generation of Side Channel Pumps.



Construction

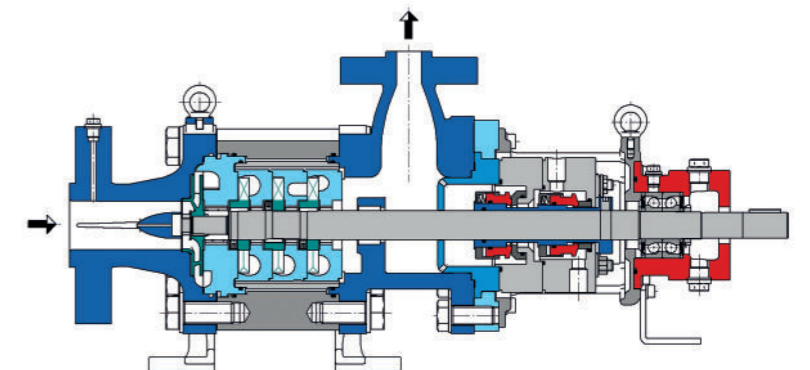
SHP 110	
Nozzle position	End suction: axial inlet (50 mm / 2 inches) Top discharge: radial outlet (25 mm / 1 inch)
Flanges	ASME B 16.5 - 900 lbs RF or DIN EN 1092.1 - PN 100
Shaft seal	Mechanical cartridge seal single or dual API plan: - for max. 100 bar (based on API 682) - according to API 682 - industrial standard
Bearing (hydraulic end)	Based on required specific application metal-jacketed silicon carbide (SiC) or carbongraphite, resin-impregnated or antimony-impregnated
Bearing	Heavy angular ball bearings with lifetime grease-filling, based on configured application two in row (standard) or multiple design (heavy duty).
Direction of rotation	counterclockwise (seen from drive-end)

Operating data

SHP 110	
Flow rates	0,4 to 8,5 m ³ /h
Heads	up to 1150 m
Speed	up to 3600 1/min
Temperature	-60 °C up to +170 °C
Nom. Pressure	100 bar
NPSH	0,2 up to 1,2 m

Features

- 1** Heavy duty pressure casings meeting API 610 nozzle load standards.
- 2** Different shaft seal options according to API 682.
- 3** Due to special suction stage speed independent NPSH-values of 0,2m are achievable.
- 4** The materials of all wetted parts are according to API 610. The pumps are tailor-made in the material classes C-6, A-8 or specific options for low temperatures, with short lead times.
- 5** The high performance hydraulics is free of pulsation. The SHP is not self-priming, but ideal for handling vapour laden process fluids.
- 6** The barrel is also a benefit for lower system pressures and ensures highest operational safety. This secondary containment is sealed with a second set of O-rings.
- 7** The interspace between inner and outer barrel can be monitored with a pressure gauge or inerted.



Material Specification

	C-6	A-8	TT-6	TT-8
	SERO Standard for hydrocarbon services down to -20° C	API 610 „full compliance“ down to -20° C	Ambient temperature down to -50 °C	Liquid temperature down to -60 °C
Pressure casings	A487 Gr CA6NM	A351 Gr CF3M	A351 Gr CF3M	A351 Gr CF3M
Stages	A743 Gr CA6NM	A743 Gr CF3M	A743 Gr CA6NM	A743 Gr CF3M
Impellers	A743 Gr CA6NM	A743 Gr CF3M	A743 Gr CA6NM	A743 Gr CF3M
Shaft	EN 10088 - 1.4021 [420]	EN 10088 - 1.4571 [316Ti]	EN 10088 - 1.4021 [420]	EN 10088 - 1.4571 [316Ti]
Pressure sleeve (Inner barrel)	EN 10220 - 1.0580 [1024]	EN 10220 - 1.4571 [316Ti]	EN 10220 - 1.4571 [316Ti]	EN 10220 - 1.4571 [316Ti]
Barrel (2nd containment)	A216 Gr WCB	A216 Gr WCB	A216 Gr WCB	A216 Gr WCB
Seal housing and bearing housing	A216 Gr WCB/ EN 10083 - 1.0501 [1035]	A216 Gr WCB/ EN 10083 - 1.0501 [1035]	A216 Gr WCB/ EN 10083 - 1.4301 [304]	A216 Gr WCB/ EN 10083 - 1.4301 [304]

[Subject to modifications]

Performance range

