

Super High Temperature & Pressure Boiler Feed Pumps

energy API CE

ST

Applications

- Boiler feed
- Mine drainage
- Chemical process
- Other high pressure services

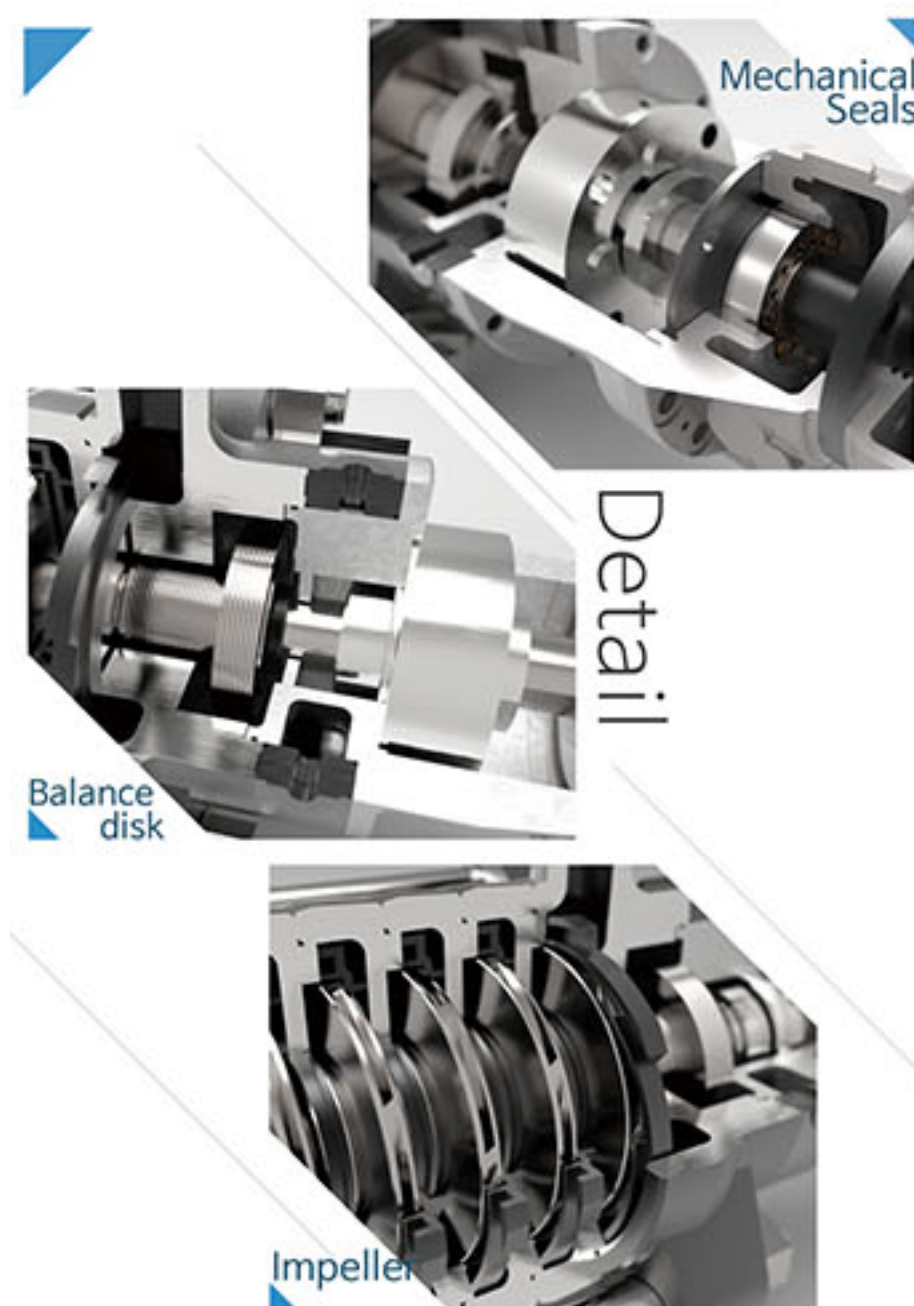
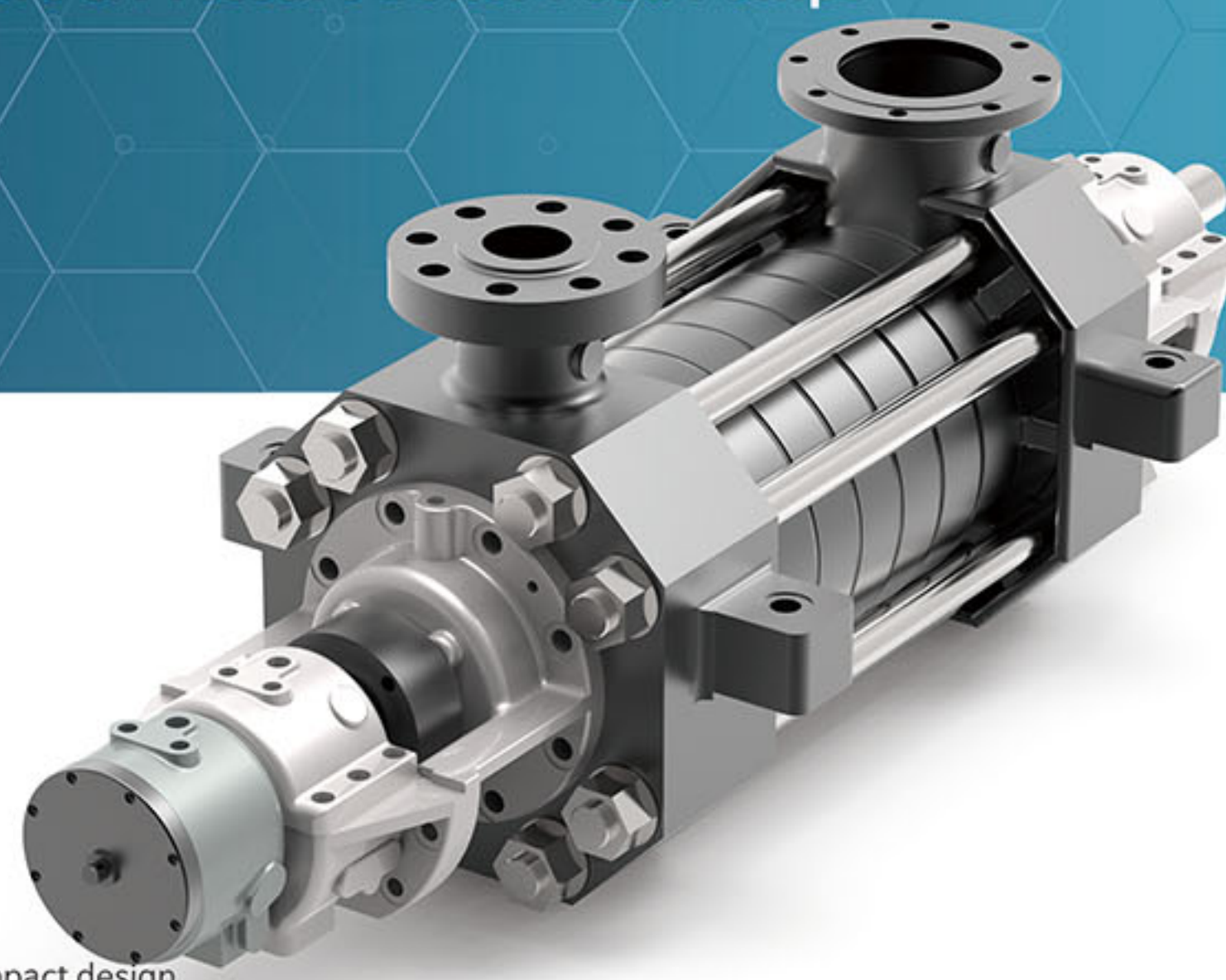
Feature

- ✓ Centerline supported and compact design
- ✓ High efficiency, high reliability
- ✓ Flexibility of design handles wide range of liquids
- ✓ All components have been designed for High interchangeability
- ✓ Low NPSHr. Performance
- ✓ API standard 610 (API Code : BB4)

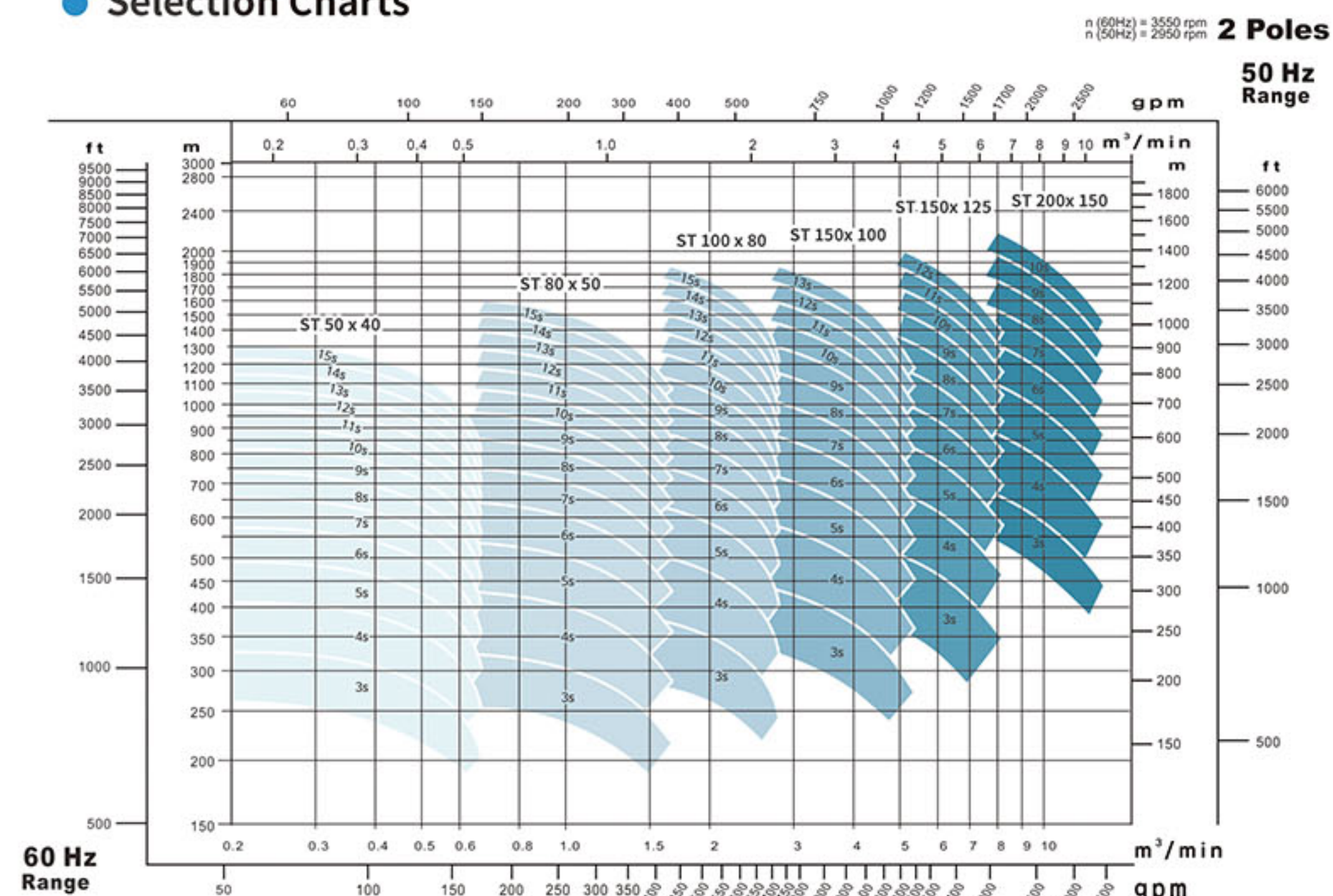
Ratings

Capacity	Up to 20 m ³ /min (5,283 US GPM)
Head	Up to 3,000m (9,842ft)
Discharge Pressure	Up to 200 kgf/cm ² (2844 PSIG)
Allowable Suction Pressure	Up to 300 kgf/cm ² (4267 PSIG)
Revolution 60Hz (50Hz)	3550 min ⁻¹ (2950 min ⁻¹)
Rotation	Clockwise viewed from inboard side
Temperature	250°C (482°F)
Nozzle-Rating	ANSI 1500 Class other standards also available
Nozzle-Facing	Raised Face
Nozzle-Location	Top Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

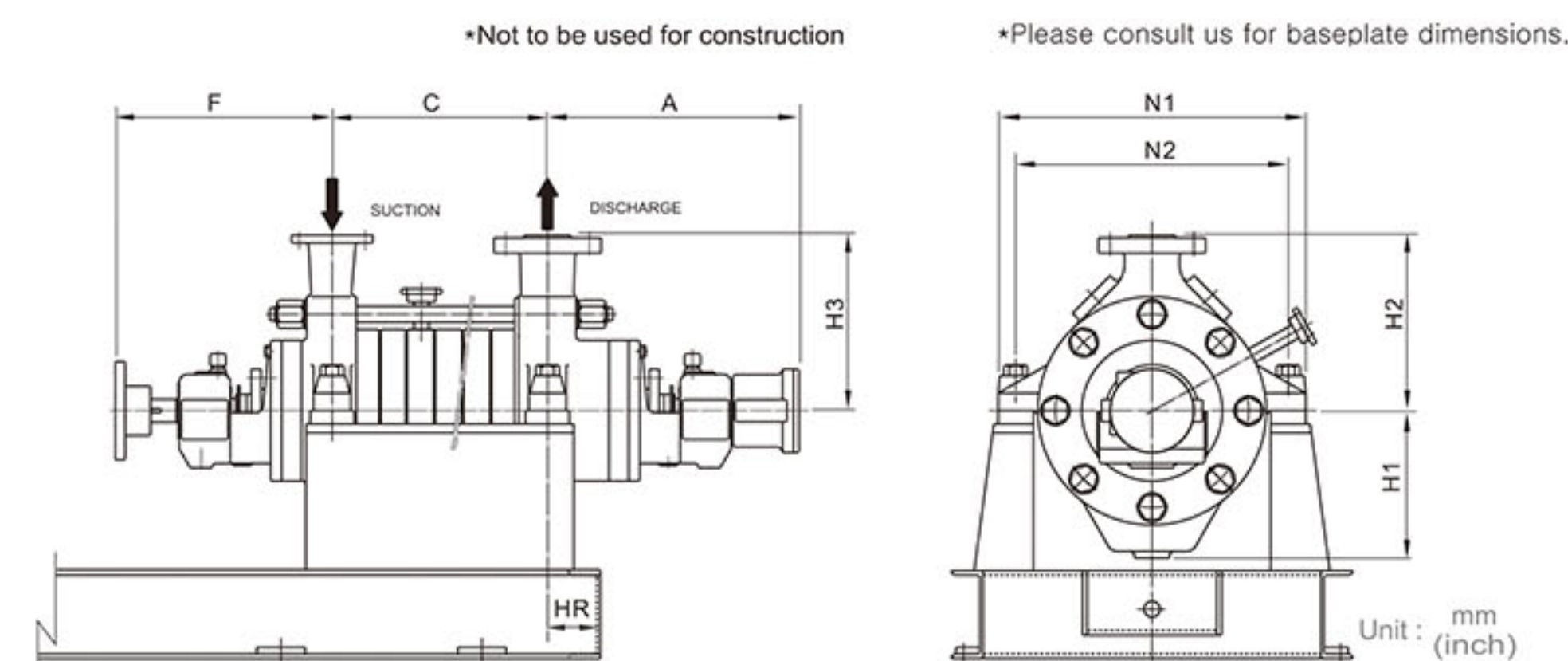
*API610 latest edition is available on request



Selection Charts



Installation Dimension



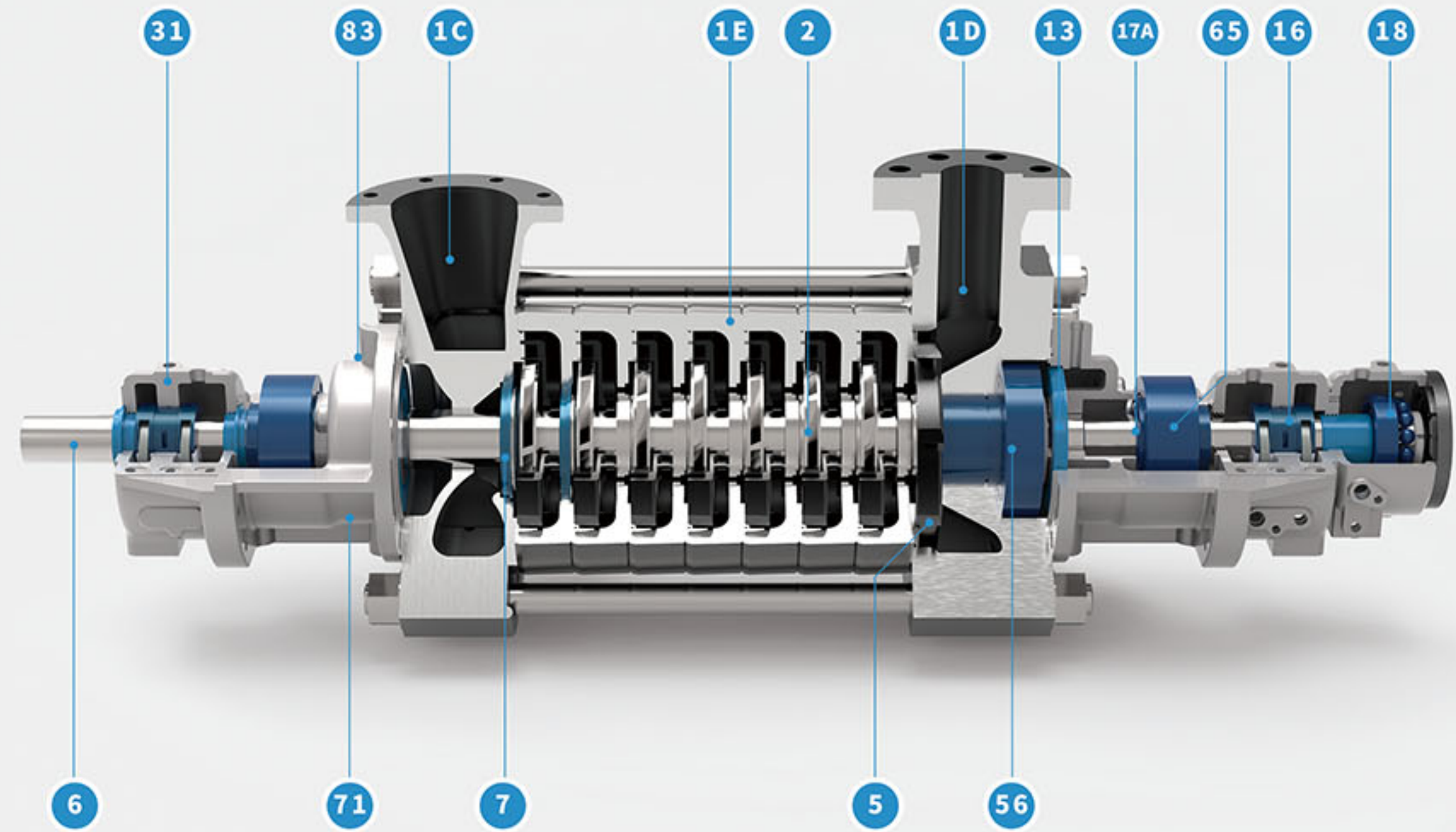
Model	A	C	F	N1	N2	H1	H2	H3
50x40	522 (20.55)	35+(SX50) (1.38+(SX1.97))	430 (16.93)	380 (14.96)	300 (11.81)	200 (7.87)	250 (9.84)	224 (8.82)
80x50	595 (23.43)	89+(SX68) (3.50+(SX2.68))	460 (18.11)	405 (15.94)	360 (14.17)	165 (6.50)	270 (10.63)	270 (10.63)
100x80	660 (25.98)	65+(SX72) (2.56+(SX2.83))	510 (20.08)	680 (26.77)	600 (23.62)	267 (10.51)	410 (16.14)	360 (14.17)
150x100	810 (31.89)	95+(SX90) (3.74+(SX3.54))	730 (28.74)	820 (32.28)	700 (27.56)	310 (12.20)	450 (17.72)	400 (15.75)
150x125	820 (32.28)	110+(SX105) (4.33+(SX4.13))	740 (29.13)	1010 (39.76)	850 (33.46)	365 (14.37)	520 (20.47)	455 (17.91)
200x150	960 (37.80)	120+(SX115) (4.72+(SX4.53))	950 (37.40)	1200 (47.24)	1000 (39.37)	425 (16.73)	580 (22.83)	520 (20.47)

ST 125x100 is available. Other flange sizes are available upon request.

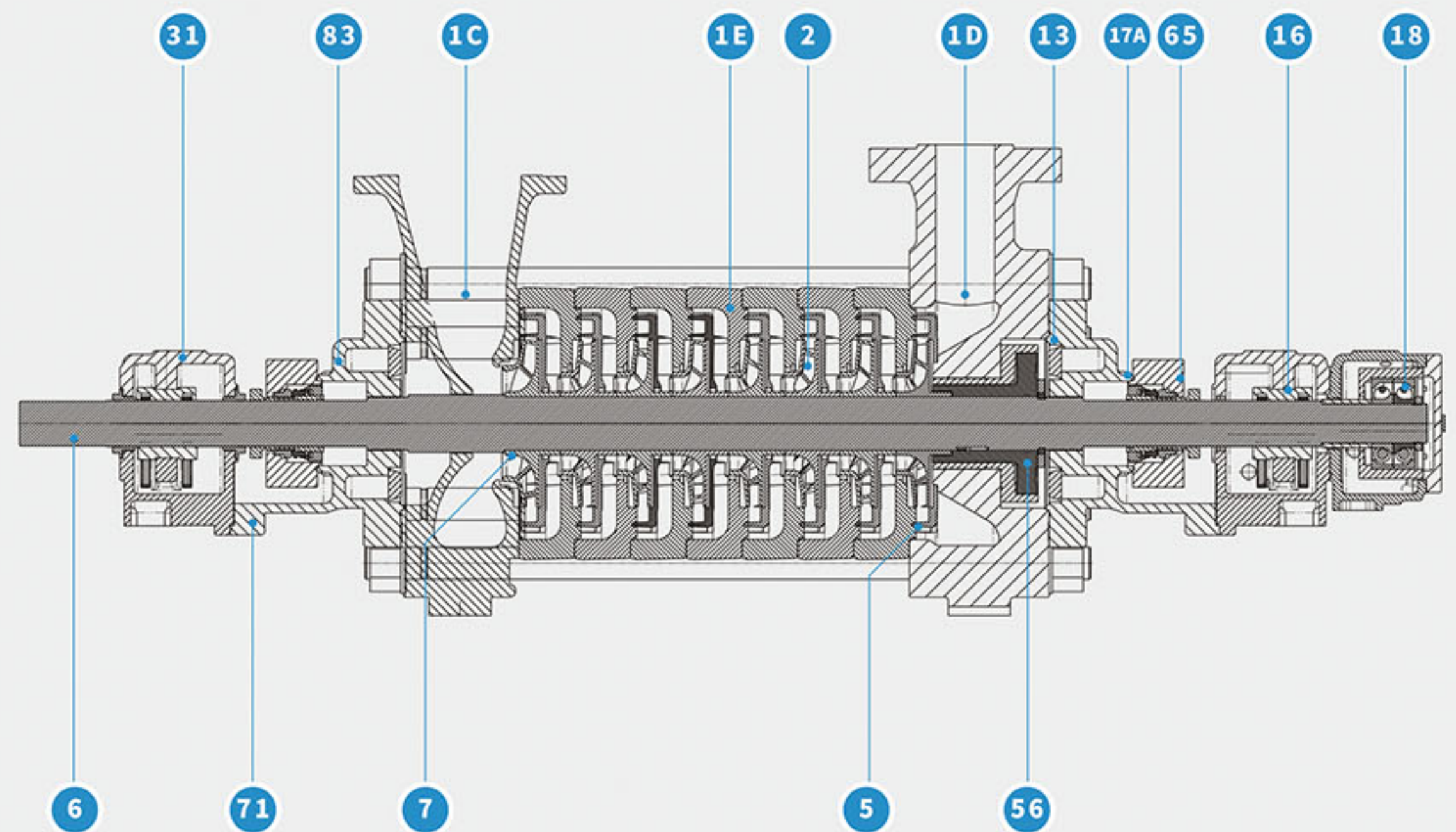
* S : Stage Number.

Model. ST

● Parts List and Materials



3D drawing



2D drawing

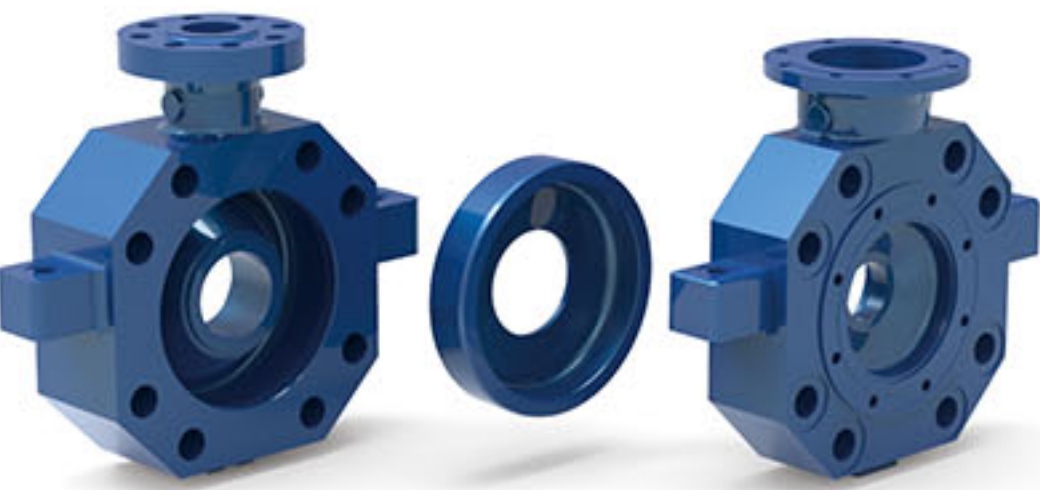
Model. ST

● Parts List

Name of Parts	Materials		
	KS	JIS	ASTM
1C Suction Casing	SCPH2	SCPH2	A216 WCB
1D Discharge Casing	SCPH2	SCPH2	A216 WCB
1E Stage Casing	SCPH2	SCPH2	A216 WCB
2 Impeller	SSC1	SCS1	A743 CA15
5 Diffuser	SSC1	SCS1	A743 CA15
6 Pump Shaft	STS410	SUS410	A276 410
7 Casing Ring	STS420J2	SUS420J2	A276 420
13 Packing or Seal	TEFLON	TEFLON	TEFLON
14 Shaft sleeve	STS420J2	SUS420J2	A276 420
16 Bearing	BABBIT	BABBIT	BABBIT
17 Packing Gland	SSC13	SCS13	A743 CF8
17A Seal Gland	SSC13	SCS13	A743 CF8
18 Thrust Bearing	STEEL	STEEL	STEEL
31 Bearing Housing	GC200	FC200	A48 CL30
56 Balance Drum Bushing/ Balance Disk Seat	STS420J2	SUS420J2	A276 420
65 Mechanical Seal	-	-	-
71 Drip Pocket	GC200	FC200	A48 CL30
83 Stuffing Box	SCPH2	SCPH2	A216 WCB
115 Balance Drum/ Balance Disk	STS420J2	SUS420J2	A276 420

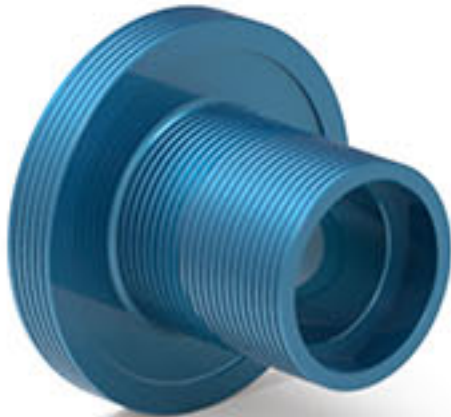
Optional Material Code
- API Material class code.
- Other materials are available on request.(DCI, 12% Cr., 304SS, 316SS, 316LSS, etc)

● Construction



● Casing

-Casing is designed to stand for high temperature/pressure.



● Balance Device

-Axial Thrust, which is happened by impeller, is balanced by Hydraulic balance device.



● Impeller

-Replaceable Wearing is installed on each impeller as closed type.



● Bearing

-Radial bearing is Journal bearing of sleeve type. Thrust bearing is tilting pad type.and Bearings are lubricated by 'Oil Ring' or Forced Lubrication System.