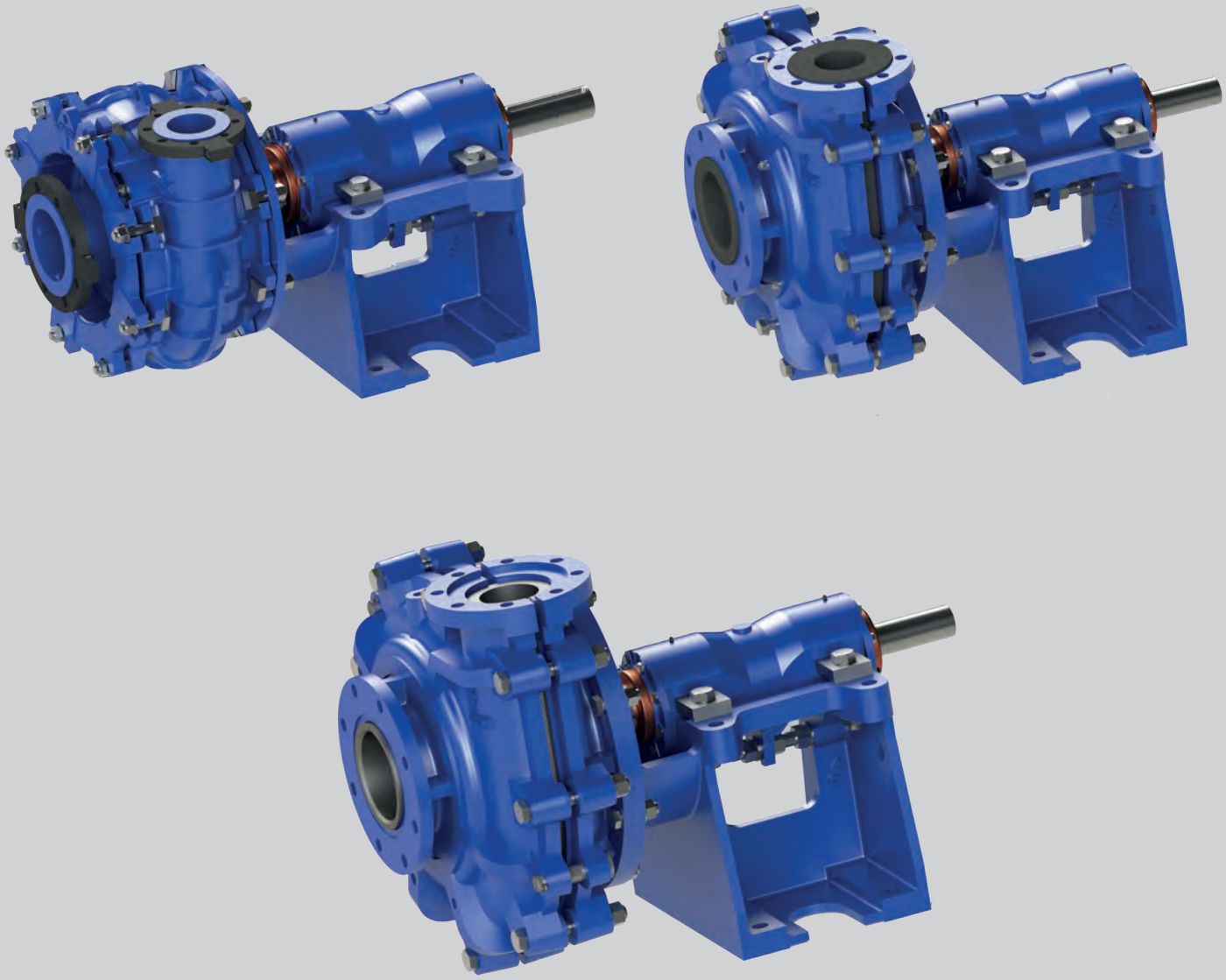
Standart

Pump • Fire Fighting Units • Booster Set



SSP-H

Extra Heavy Duty Slurry Pumps

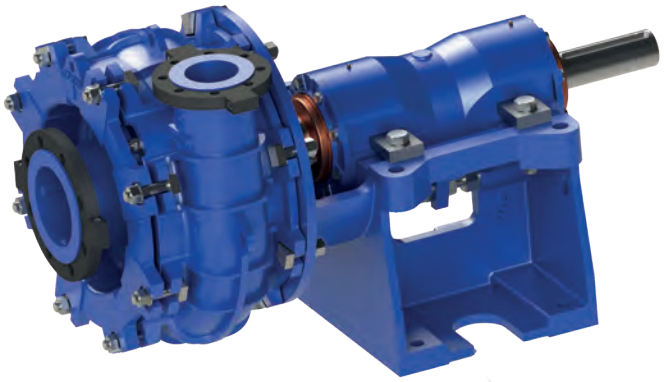
10.2020 / Rev. 0

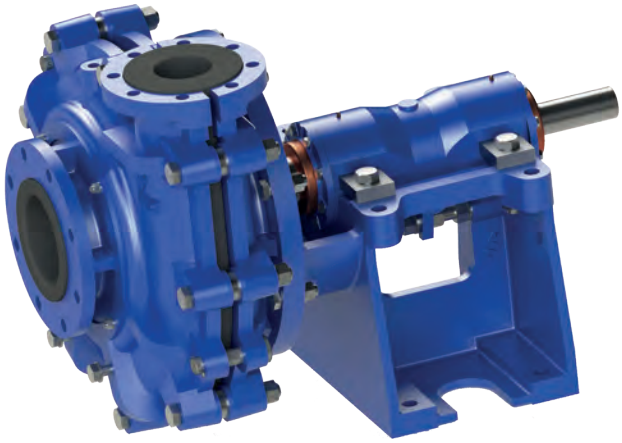
Standart

Pump • Fire Fighting Units • Booster Set

SSP-H

Extra Heavy Duty Slurry Pumps





Handled Liquids

Slurry, highly contaminated, viscous, corrosive and abrasive liquids with solid or fibrous particles.

Technical Data

Discharge Flange_____DN 50.....DN 350 mm

Capacity _____up to 3500 m^3/h

Head _____up to 100 m

Temperature Operation_____-10°C up to+110 °C

Generating Steam Temperature_____up to 300°C

Note: The Material of pump differs according to the type of pumped liquid, operating temperature and pressure. Contact for detailed information.

Fields of Application

- Mining and mineral processing
- Sand and gravel processing plants
- Abrasive slurry transfer
- Industrial plants
- Pulp and paper industry
- Cyclone feed
- Mine wastes transfer
- Fly ash and bottom ash transport
- Manure transfer
- Lime mud transport
- Waste water systems
- Chemical slurries

Design Features

- SSP-H pump series are carefully designed by taking into consideration years of production experience of STANDART POMPA and field experiences of our customers using process and slurry pumps. Hydraulic efficiency and hardwearing are considerate and optimised while hard solid particles were pumping.

- SSP-H pump series users are offered with advantages of resistant to extensive wear, high reliability, high hydraulic efficiency, cost effective spare parts and continous spare part supply in short lead time.

Bearing Design

- SSP-H pump series are produced with extra heavy duty (EHD) design. Grease lubricated bearings of EHD can be replaced with oil lubricated as well.

Pump Designation

SSP - H 80 3/2 HC

Pump Type

Installation Arrangement Horizontally (H) / Vertically (V)

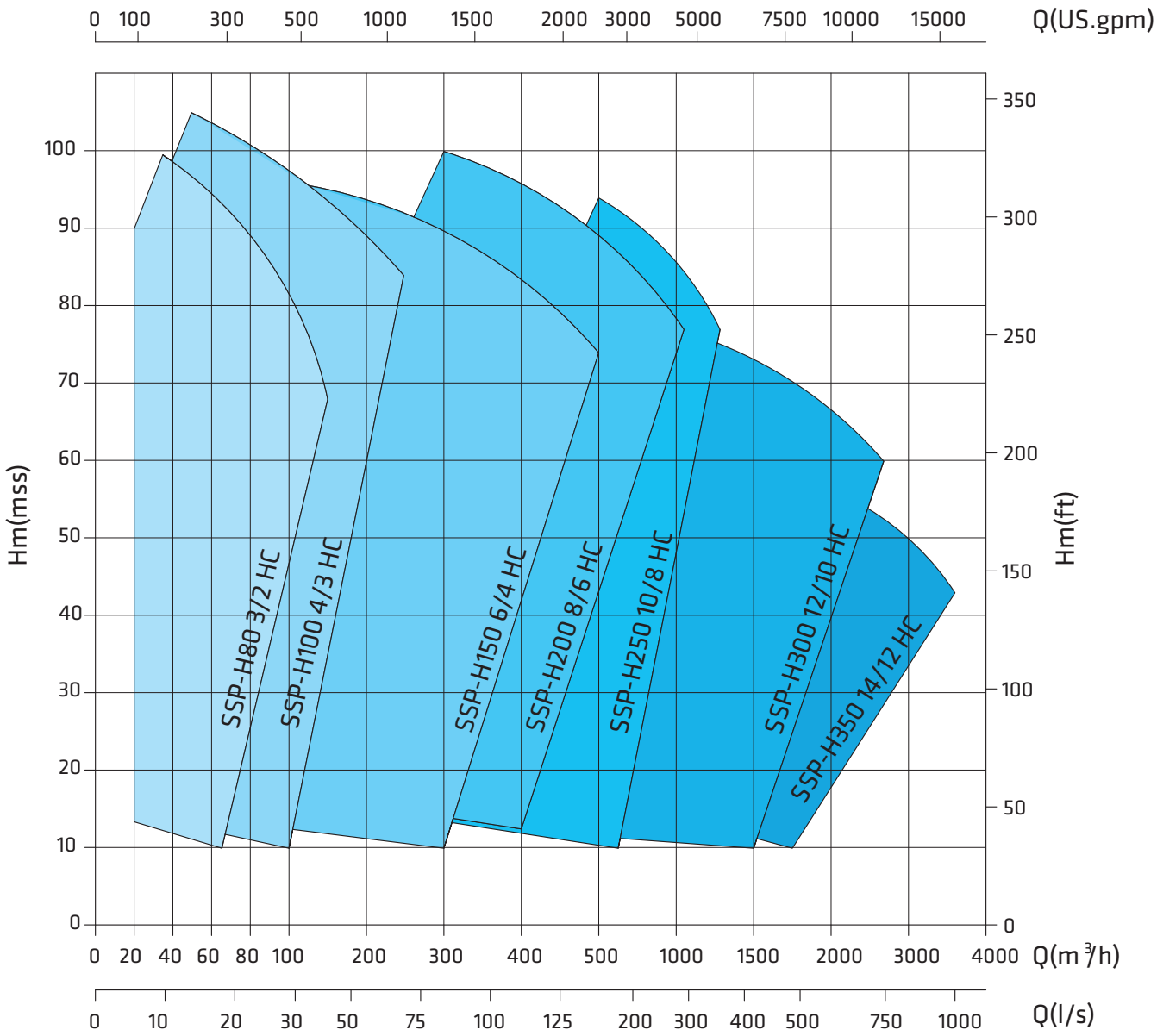
Discharge Nozzle (DN-mm)

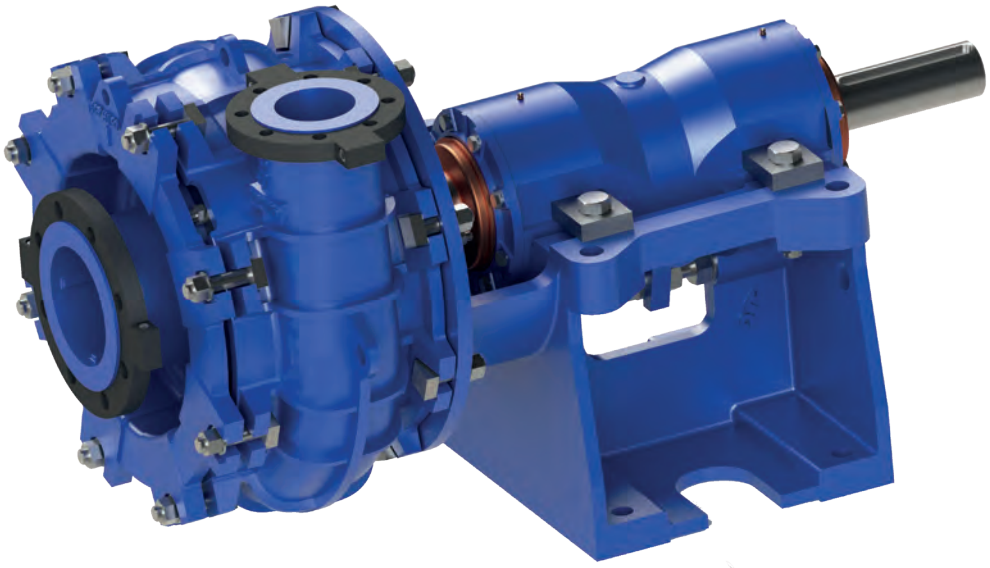
Pump Suction / Discharge Size (inch)

Pump Material Selection

HORIZONTAL SHAFT EXTRA HEAVY DUTY SLURRY PUMPS

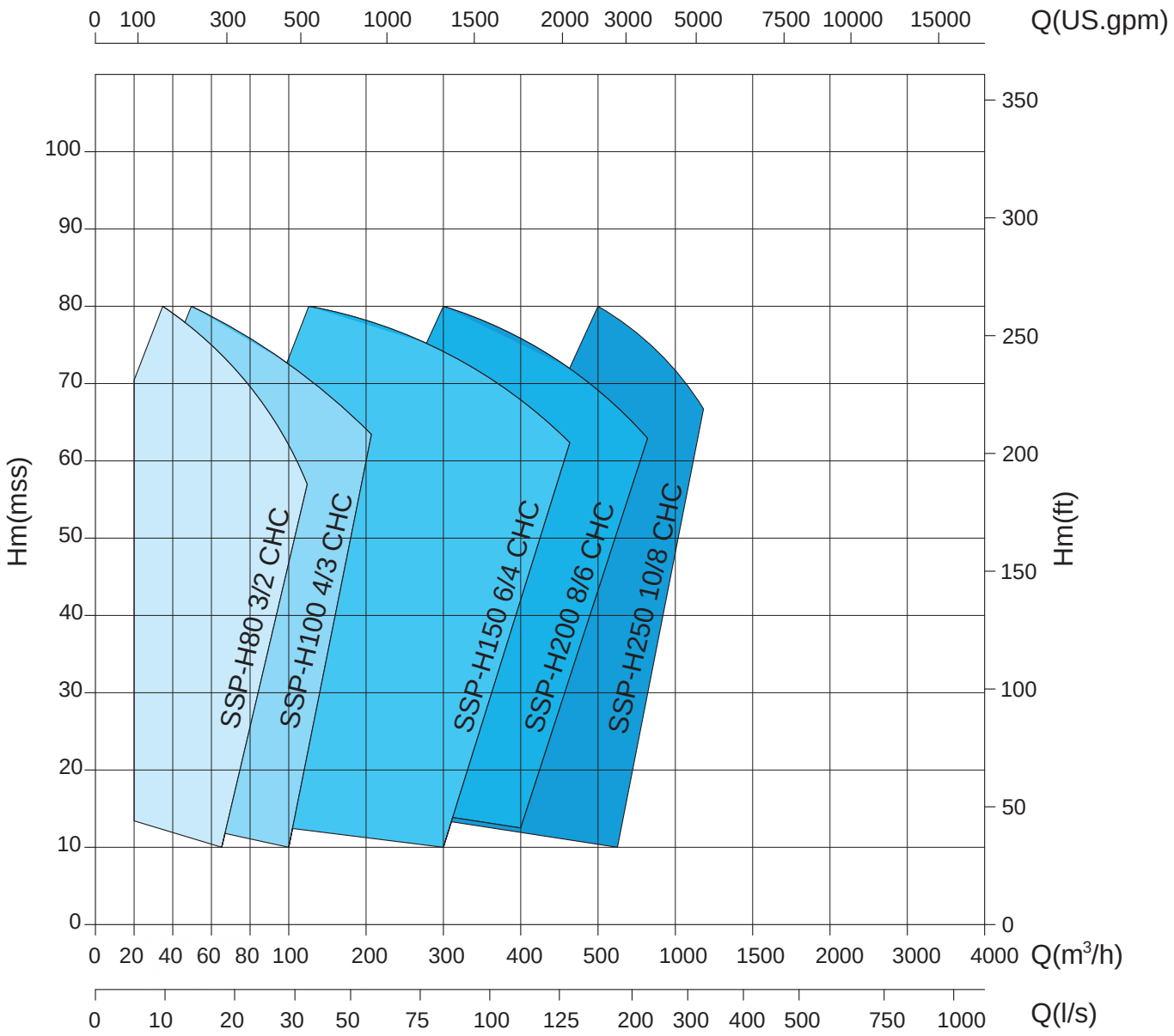
SSP-H FIELD CHART (HC)

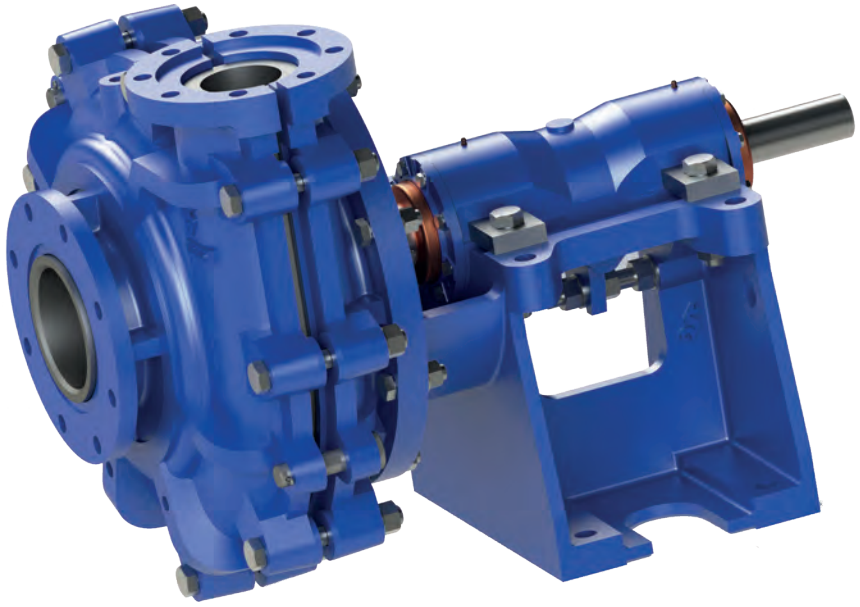




HORIZONTAL SHAFT EXTRA HEAVY DUTY METAL LINER SLURRY PUMPS

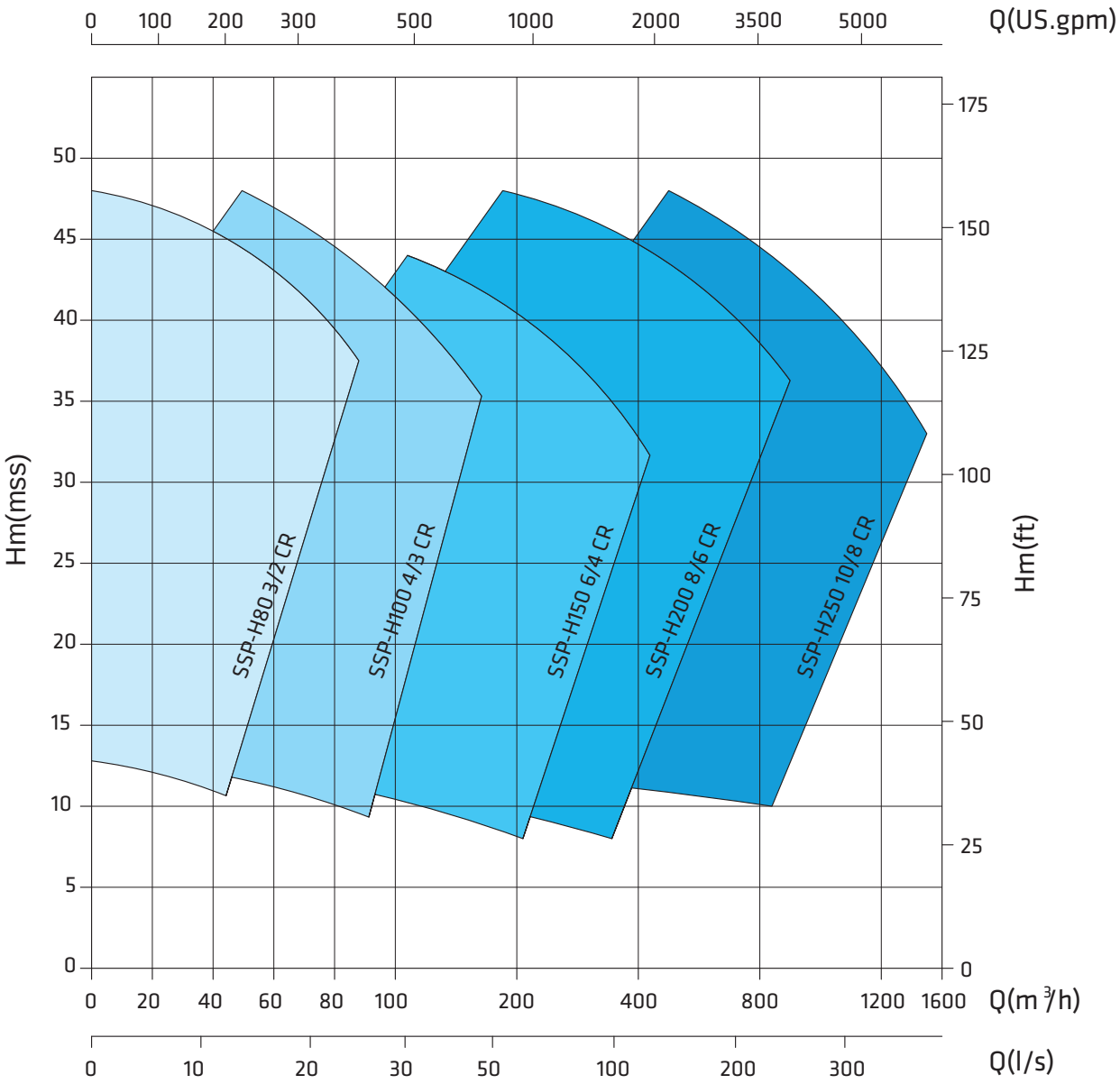
SSP-H FIELD CHART (CHC)

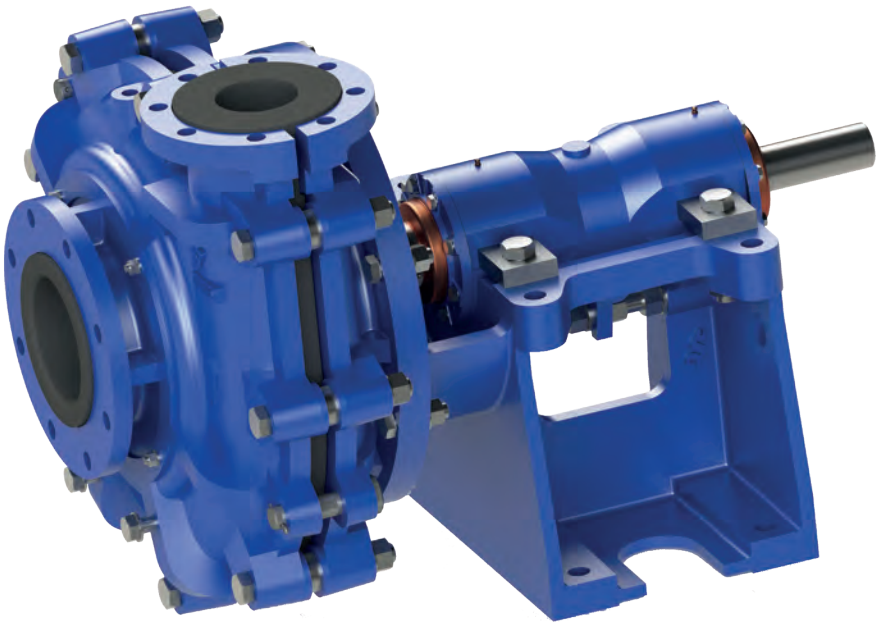




HORIZONTAL SHAFT EXTRA HEAVY DUTY RUBBER LINER SLURRY PUMPS

SSP-H FIELD CHART (CR)





Impeller Types

SSP-H series HC model pumps are centrifugal pumps that have horizontal shaft, volute casing, single stage and closed impeller. Semi-open or vortex impeller types can be applied in different requirements.



Standard Impeller

Small and medium solid particles are transferred with standard impeller type. On the other hand these impeller types are more efficient than the others. It offers high efficient and more durable solutions regarding material selection and abrasive properties of the handled fluid. It is used for high demanding heads and more efficiency.



Semi-open Impeller

Large and medium solid particles are transferred with semi-open impeller type. It offers high efficient and more durable solutions regarding material selection and abrasive properties of the handled fluid. Semi-open impellers prevent greater efficient loss in use of larger particles. It is preferred low and medium heads.



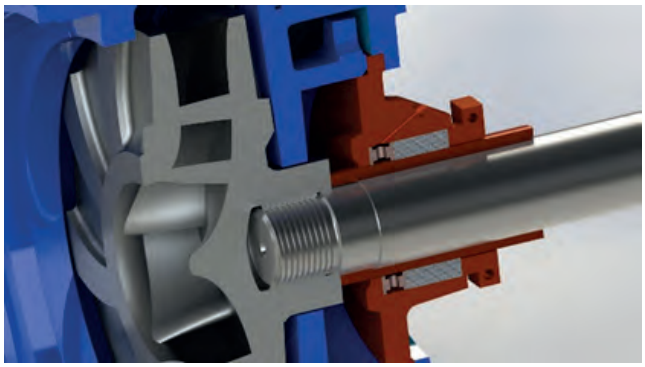
Vortex Impeller

Vortex impellers are used in transfer of fluids containing large solid particles at low head. More life time is offered since large solid particles would have less contact area with the vortex impeller. These impellers are less efficient than the others.

Recessed Vortex Impeller

Recessed Vortex impellers are applied when large, solid and fibrous particles involved in handled fluid. Minimum contact area is accomplished between solid particles in fluid and the impeller. These impeller types are preferred for preventing damages to solid particles in fluid.

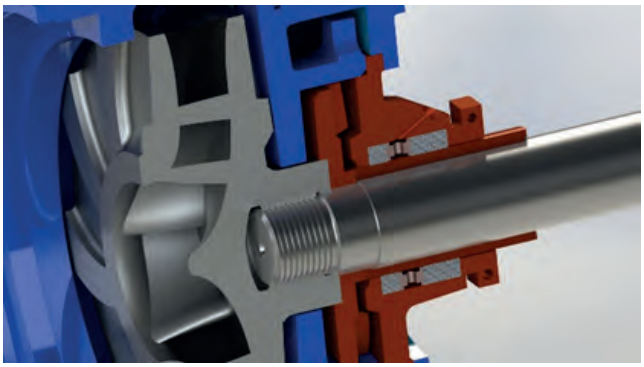
Shaft Sealing



SSP HC, CR, CHC Stuffing Box Sealing

• Shaft sleeve and stuffing box sealing can be cooled and lubricated by a external cooling system or the pumping liquid.

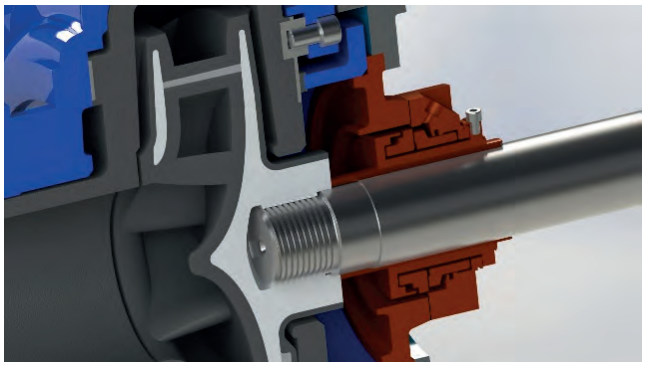
• Distance adjustment between wear plate and back vanes of the impeller can set the pressure on sealing.



SSP HC, CR, CHC Hydrodynamic and Stuffing Box Sealing

• Shaft sleeve and stuffing box sealing can be cooled and lubricated by a external cooling system or the pumping liquid.

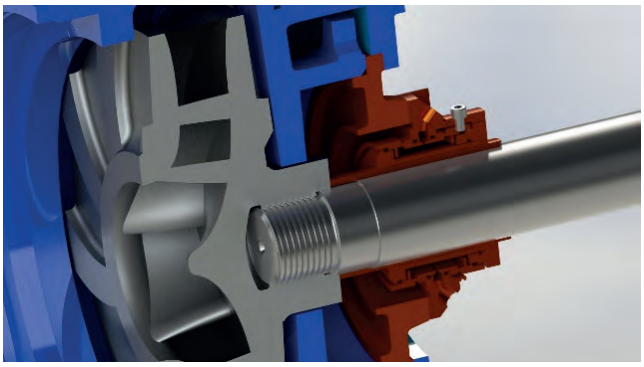
• Expeller provides hydrodynamic sealing by depressurizing on stuffing box sealing. It improves lifetime of shaft sleeve and the stuffing box sealing.



SSP HC, CR, CHC Cartridge Type Single Mechanical Sealing

• Hydraulic film between sealing surface elements is formed by pumping fluid or externally injected liquid which is the way of API 682 approved.

• Distance adjustment between wear plate and back vanes of the impeller can set the pressure on cartridge mechanical sealing.



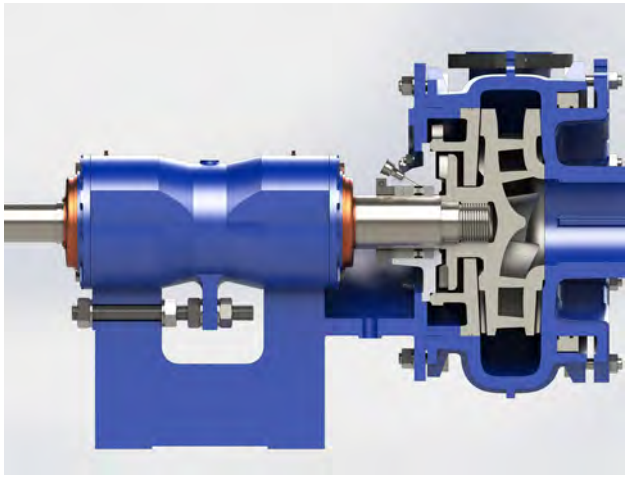
SSP HC, CR, CHC Cartridge Type Double Mechanical Sealing

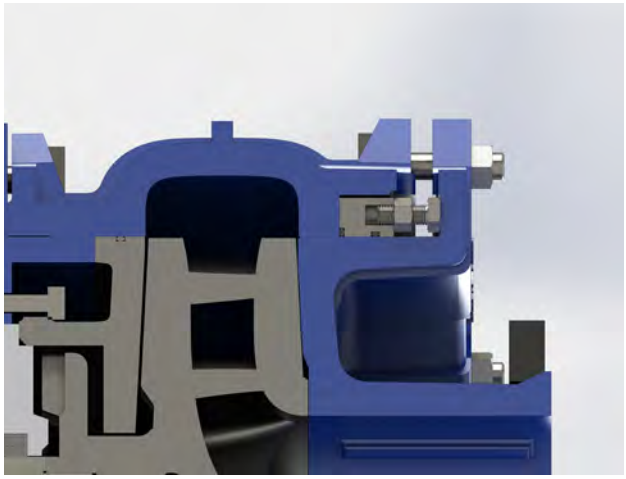
• Hydraulic film between sealing surface elements is formed by an pressured barrier liquid externally which is the way of API 682 approved.

• Distance adjustment between wear plate and back vanes of the impeller can set the pressure on cartridge mechanical sealing.

Adjustment Mechanism

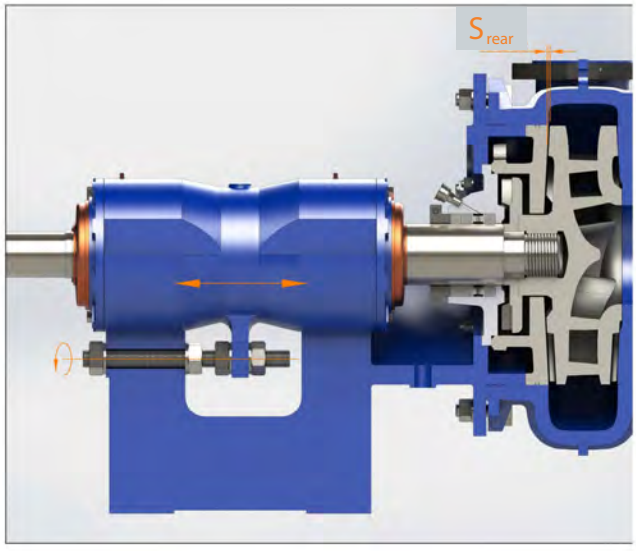
General





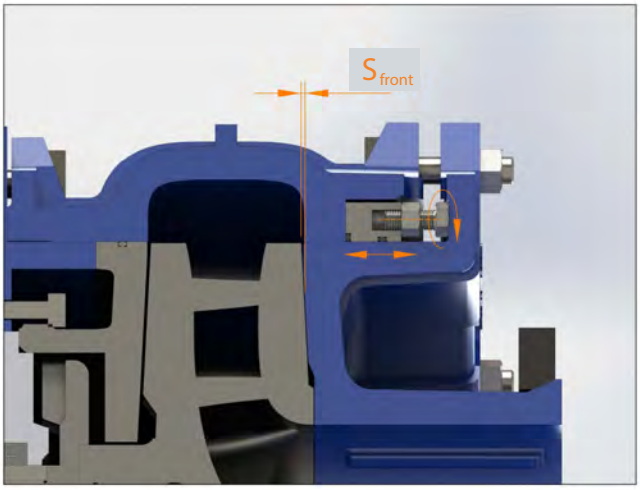
SSP-H pump series have major advantages to transfer fluid that has corrosive and abrasive properties. Even though these properties would have decrease pump performances in time, distance adjustment mechanisms on the SSP-H pump series can optimise the pump performances and improve service time.

Back-side Clearance



Stud bolts on bearing housing lead the movement of cartridge housing at SSP-H series HC/CR/CHC model pumps. Therefore distance between impeller and wear plate can be controlled. Rear clearance adjustment keep the pump performance up even wearing happens between the wear plate and the impeller.

Front-side clearance



SSP-H series HC model pumps have front gap adjustment. Stop bolts in front of volute casing can set the gap between inlet port and impeller. Therefore negative effects of wearing optimise and service time of the pump improves. Besides that there is no need disassembly of volute casing and time is saved accordingly.

Material Options (HC)

PART LIST	0.6025	0.7040	0.7043	0.7050	1.0619	1.0037	1.3505	1.4317	1.4525	1.4308	1.4412	1.4527	1.4468	1.4517	1.4469	5.5610	2.1050.01	2.0975.01	2.1096.01	2.0975	1.4021	1.4021(QT)	1.4301	1.4404	1.4460	1.4462	1.0503
Volute Casing	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Impeller	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Back Wear Plate	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Expeller Ring	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Stuffing Box	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Expeller	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Bearing Housing	●	○	○	○																							
Cartridge Housing	●	○	○	○																							
Shaft																					●	○	○	○	○	○	○
Shaft Sleeve							●														○	○	○	○	○	○	○
Pump Flanges	○	○	○	○		●										○											
Bolt, Nut and Washer																							●	○			

PART LIST	EPDM	VİTON	NR
O-Ring	●	○	○
Gasket	●	○	○

● Standard manufacturing
○ Optional

Material Options (CHC)

PART LIST	0.6025	0.7040	0.7043	0.7050	1.0619	1.0037	1.3505	1.4317	1.4525	1.4308	1.4412	1.4527	1.4468	1.4517	1.4469	5.5610	2.1050.01	2.0975.01	2.1096.01	2.0975	1.4021	1.4021(QT)	1.4301	1.4404	1.4460	1.4462	1.0503
Volute Casing	○	●	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○	○							
Inner Volute Lining	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Impeller	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Back Wear Plate	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Expeller Ring	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Stuffing Box	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Expeller	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Bearing Housing	●	○	○	○																							
Cartridge Housing	●	○	○	○																							
Shaft																					●	○	○	○	○	○	○
Shaft Sleeve							●														○	○	○	○	○	○	○
Pump Flanges	○	○	○	○		●										○											
Bolt, Nut and Washer																							●	○			

PART LIST	EPDM	VİTON	NR
O-Ring	●	○	○
Gasket	●	○	○

● Standard manufacturing
○ Optional

Material Options (CR)

PART LIST	0.6025	0.7040	0.7043	0.7050	1.0619	1.0037	1.3505	1.4317	1.4525	1.4308	1.4412	1.4527	1.4468	1.4517	1.4469	5.5610	2.1050.01	2.0975.01	2.1096.01	2.0975	1.4021	1.4021(QT)	1.4301	1.4404	1.4460	1.4462	1.0503
Volute Casing	○	●	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○	○							
Impeller (Cast)	○	●	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○	○							
Expeller Ring	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Stuffing Box	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Expeller	○	○	○	○	○			○	○	○	○	○	○	○	○	●	○	○	○	○							
Bearing Housing	●	○	○	○																							
Cartridge Housing	●	○	○	○																							
Shaft																					●	○	○	○	○	○	○
Shaft Sleeve							●														○	○	○	○	○	○	○
Pump Flanges	○	○	○	○		●										○											
Bolt, Nut and Washer																							●	○			

PART LIST	NR	CR	IIR	NBR	PU	UR	CSM	FKM	CIIR	EPDM
Inner Volute Lining	●	○	○	○	○	○	○	○	○	○
Impeller (Coating)	●	○	○	○	○	○	○	○	○	○
O-Ring	○							○		●
Gasket	○							○		●

● Standard manufacturing
○ Optional

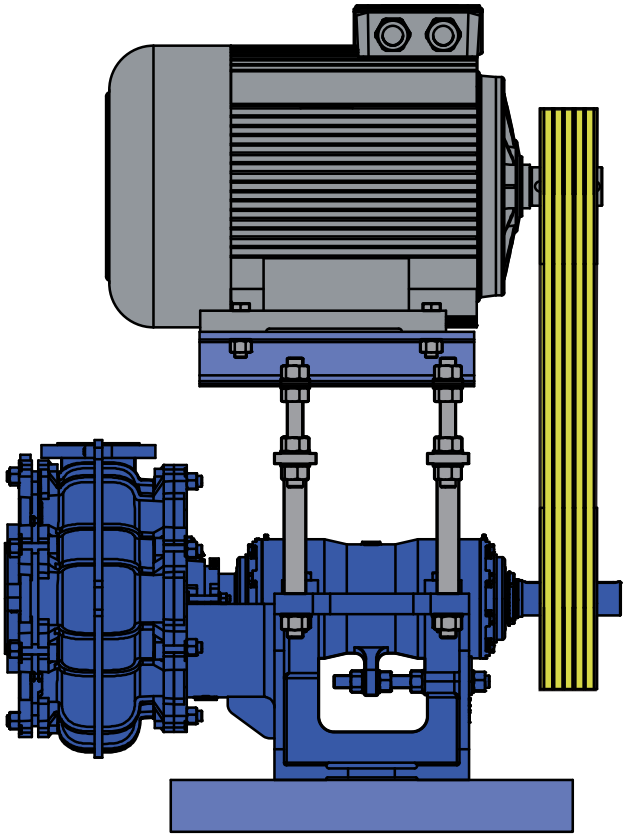
Material Equivalents

Description	DIN 17007	EN-DIN	AISI / SAE / ASTM
Cast Iron	0.6025	EN-GJL-250 (GG 25)	A48 Class 40B
Nodular Cast Iron	0.7040	EN-GJS-400-15 (GGG 40)	A536 60-40-18
Nodular Cast Iron	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A536 60-40-18
Nodular Cast Iron	0.7050	EN-GJS-500-7 (GGG 50)	A536 88-55-06
Cast Steel	1.0619	GP240GHGS-C25	A216 WCB
Steel	1.0037	St 37-2	A238Gr.C
Bearing Steel	1.3505	100Cr6	52100
Martenzitic Stainless Cast Steel	1.4317	G-X 4 CrNi 13 4	A743 CA-6NM
Martenzitic Stainless Cast Steel	1.4525	G-X 5 CrNiCu 16 4	A747 CB7Cu-2
Chrome Nickel Cast Steel (Heat Treated)	1.4308	G-X 6 CrNi 19 10	A743 CF-8
Austenitic Cast Steel (Heat Treated)	1.4412	C-X 5 CrNiMo 19 11 3	A743 CG-3M
Austenitic Cast Steel (Heat Treated)	1.4527	C-X 4 NiCrCuMo 30 20 4	A743 CN-7M
Duplex Steel (Austenitic-Ferritic, Heat Treated)	1.4468	G-X 2 CrNiMoN 25 6 3	A890 3A
Duplex Steel (Austenitic-Ferritic, Heat Treated)	1.4517	G-X 2 CrNiMoN 25 6 3 3	A890 1B
Duplex Steel (Austenitic-Ferritic, Heat Treated)	1.4469	G-X 2 CrNiMo 26 7 4	A890 5A
Wear Resistant Casts	5.5610	EN-GJN-HV600 (XCr23)	A532 Class III Type A
Cast Bronze (Tin Alloy)	2.1050.01	CuSn10	B427 C90700
Cast Bronze (Nickel Alloy)	2.0975.01	CuAl 10Ni	B148 C95500
Cast Bronze (Leaded)	2.1096.01	CuSn5ZnPb	B584 C83600
Cast Aliminium Bronze	2.0975	CuAl10 Fe5Ni5	B505 C95800
Carbon Steel	1.0503	C45	AISI 1045
Chrome Steel	1.4021	X20Cr13	A276 Type 420
Chrome Steel (Heat Treated)	1.4021(QT)	X20Cr13	A276 Type 420+QT
Chrome Nickel Steel	1.4301	X5CrNi18-10	A276 Type 304
Chrome Nickel Steel (Low Carbon)	1.4404	X2CrNiMo17-12-2	A276 Type 316
Duplex (Austenitic-Ferritic) Steel	1.4460	X3CrNiMoN27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2CrNiMoN22-5-3	UNS S32205

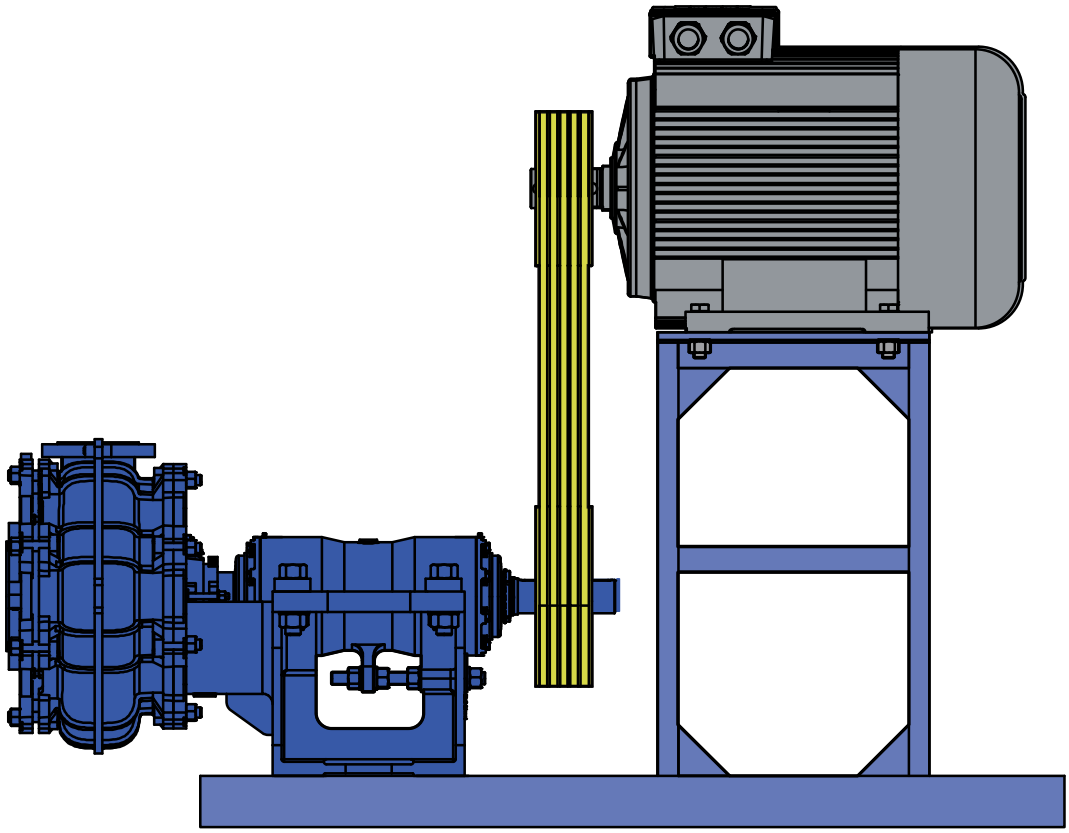
RUBBER MATERIALS			
Natural Rubber	NR	Urethane	UR
Neoprene	CR	Hypalon	CSM
Synthetic Rubber (Butyl)	IIR	Viton	FKM
Nitril Rubber	NBR	Chlorobutyl	CIIR
Polyurethane	PU	Ethylene Propylene Diene	EPDM

Installation Types

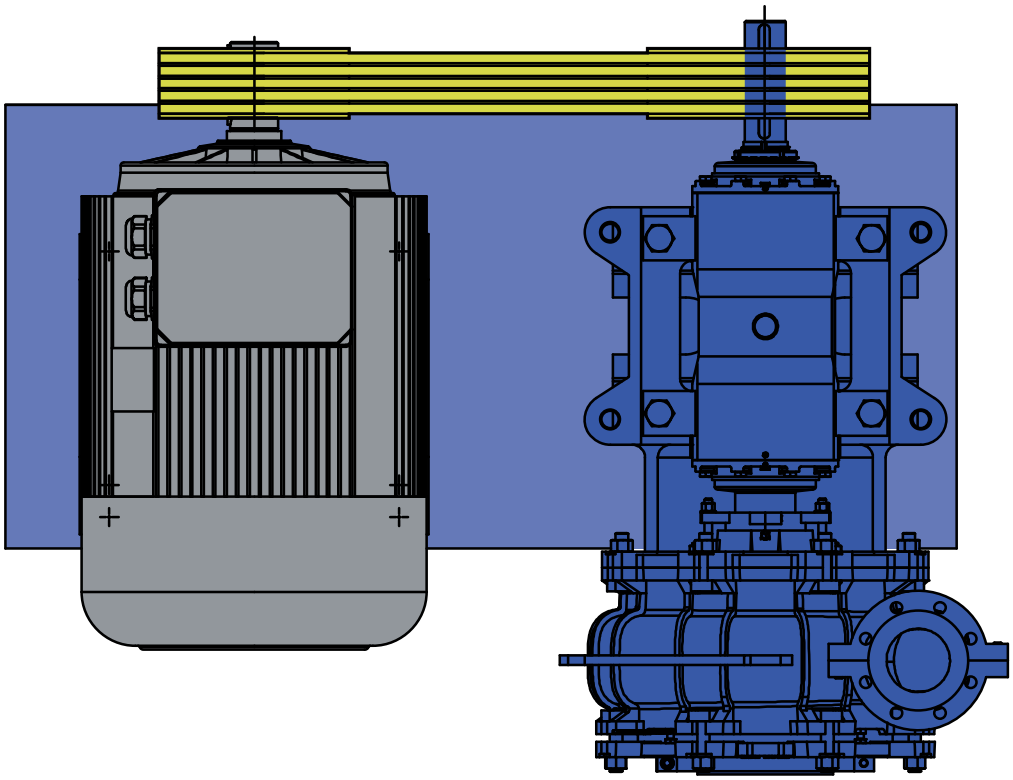
TP 01



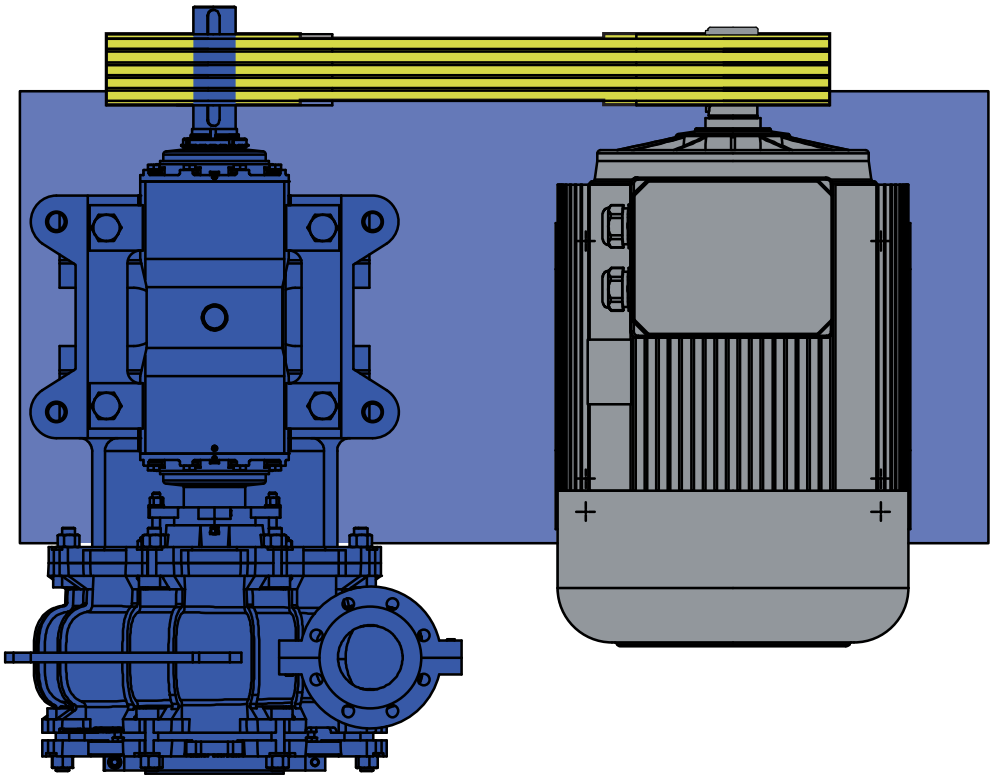
TP 02



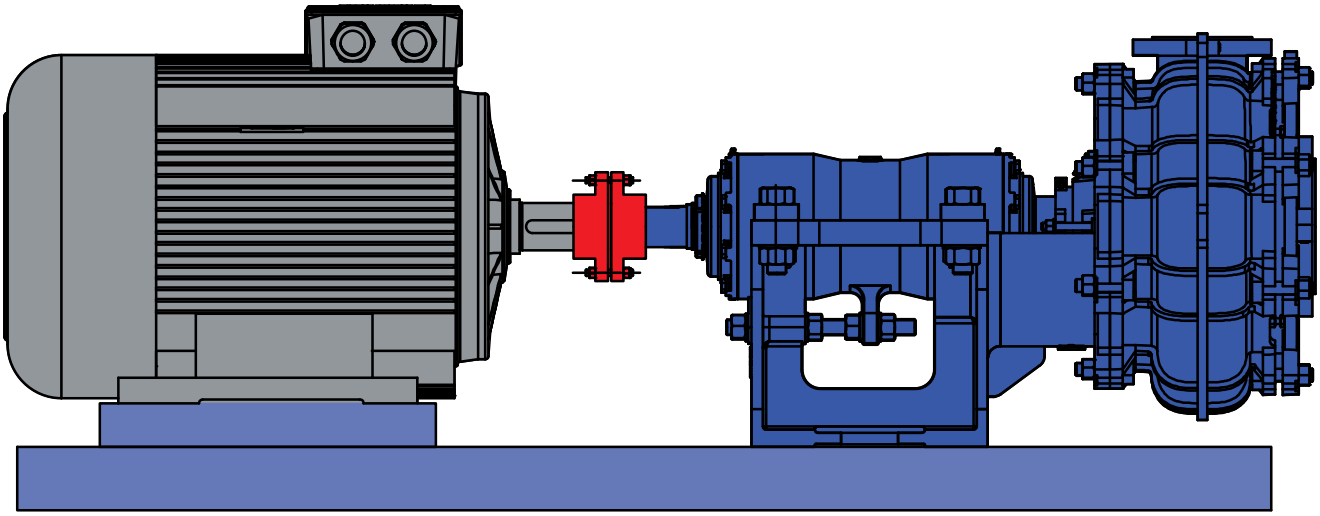
TP 03



TP 04



TP 05



Manual or hydraulic slide base is applied optionally at chassis manufacturing.



STANDART POMPA VE MAKİNA SANAYİ TİC. A.Ş.

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