



CATALOGUE

2014

TTAAK- Series of Horizontal multistage pumps



PRODUCT BROCHURE

TORONTECH™
PUMPS

TORONTECH.COM



Torontech™ is a leading North American based international manufacturer and supplier of pumps, pipes, valves & actuators. The Torontech™ group has established an extensive network in the USA as well as international markets and remains to be a preferred vendor of choice supplying quality pumps for today's leading corporations.

Creating comprehensive solutions for our clients has always been the core value of our company. From sales, to order execution, and post-sales support; every staff member is here to assist you in selecting the solution that best suits your unique requirements and budget.

The Torontech™ group offers a complete range of quality pumps that are ANSI to ISO approved and engineered to last, ensuring your company continuous production without interruptions.

Since the beginning, we have succeeded in only offering quality manufactured pumps that are currently being used worldwide. We offer the best value for your investment and provide world-class support.

Due to the demand for our quality pumps, Torontech™ has experience explosive growth primarily in the oil & gas, water filtration and chemical refinery industries.

We offer an extensive range of solutions and products for oil & gas projects, refineries, petrochemical plants, and marine applications. Our main class of pumps includes API (American Petroleum Institute) Standard, Mining, Water & Sewage and Firefighting applications. The pumps are offered in various configurations depending on orientation of the pump, required head and type of fuel used for operation.



TTAAK- Series of Horizontal multistage pumps

Performance range

- Dimension DN: 40~200mm
- Capacity Q: ~700m³/h
- Head H: ~2200m
- Pressure P: ~25.0MPa
- Temperature T: ~80℃~450℃

Model description

- TDC 80 – 240 / 10
- TDC--- Horizontal Double Casing Barrel Centrifugal Pump
- 80 —Discharge diameter (mm)
- 240 —Nominal impeller diameter (mm)
- /10 —Impeller stages

Design feature

- Hydraulic model: Each type has two or three hydraulic model, best choice can be assured according to the working condition.
- Balance structure: adopt the balancing drum structure, balance the axial force.
- Barrel: double shell structure, pull-out type design, inside shell is a sectional multi-stage centrifugal pump. barrel is centerline mounted. With a position hole at the bottom of barrel. The barrel can be forged in high pressure working condition (more than 15 Mpa)
- Support: rigidity shaft, heavy working condition of bearing capacity of bearing design; Ring lubrication of roller bearing with water cooling or forced circulation lubrication of the sliding bearing.
- Nozzle: same pressure levels for suction pipe and discharge pipe, vertical layout, the nozzle load is according to standard API610.
- Shaft seal: the size for seal chamber is according to API682 standard, with cartridge mechanical seal , single or double, Shaft seal only bear the suction pressure.
- Pumps rotation is clockwise viewed from motor end.

Material

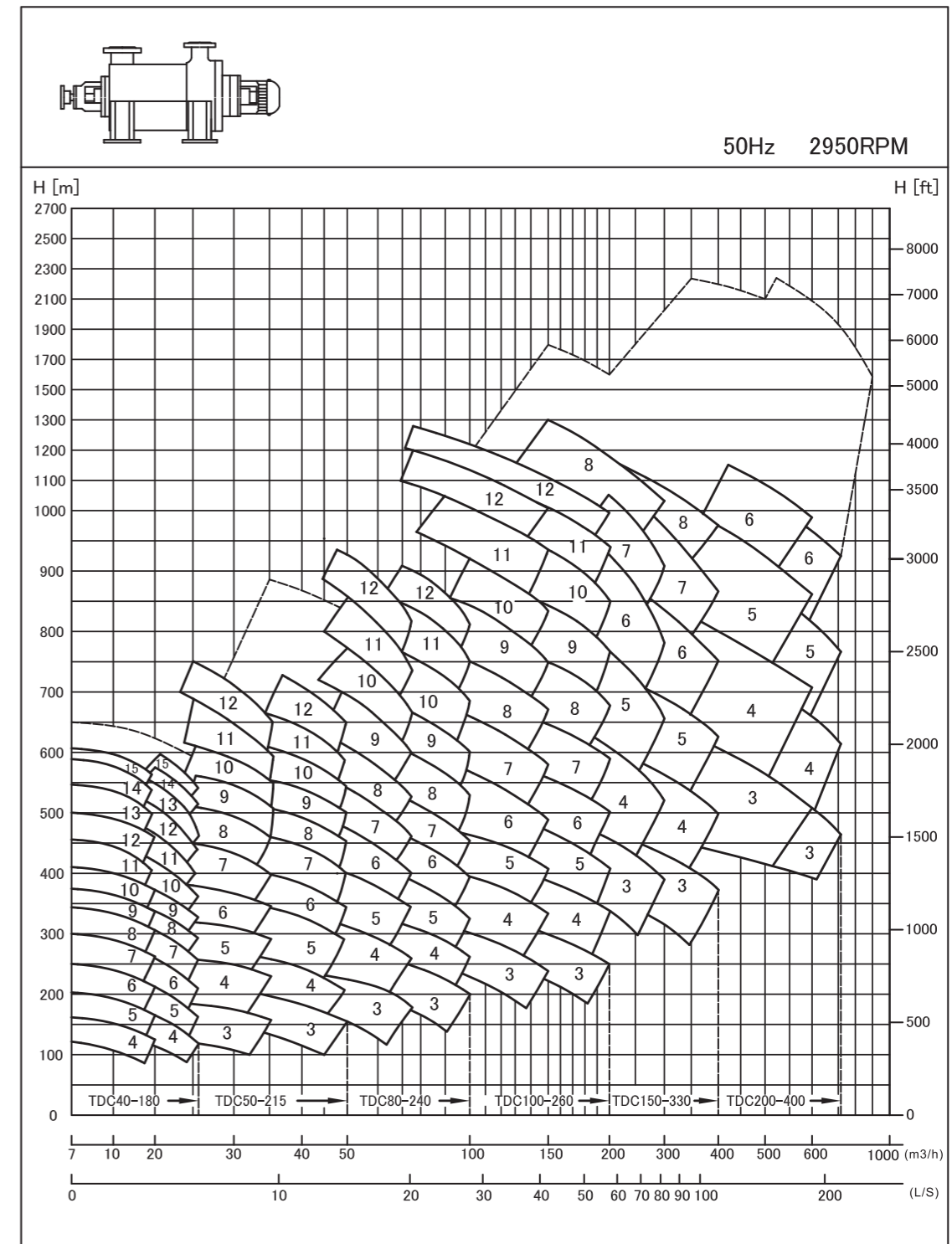
- Carbon steel, chrome steel, chrome – nickel – molybdenum stainless steel
- Materials standard of API610: S-5,S-6,C-6,A-7,A-8,D-1,D-2.
- Other materials can be used according to the fluid specification

Advantage comparing with type BB4.

Technology advantage compared with Sectional multi-stage BB4 centrifugal pump:

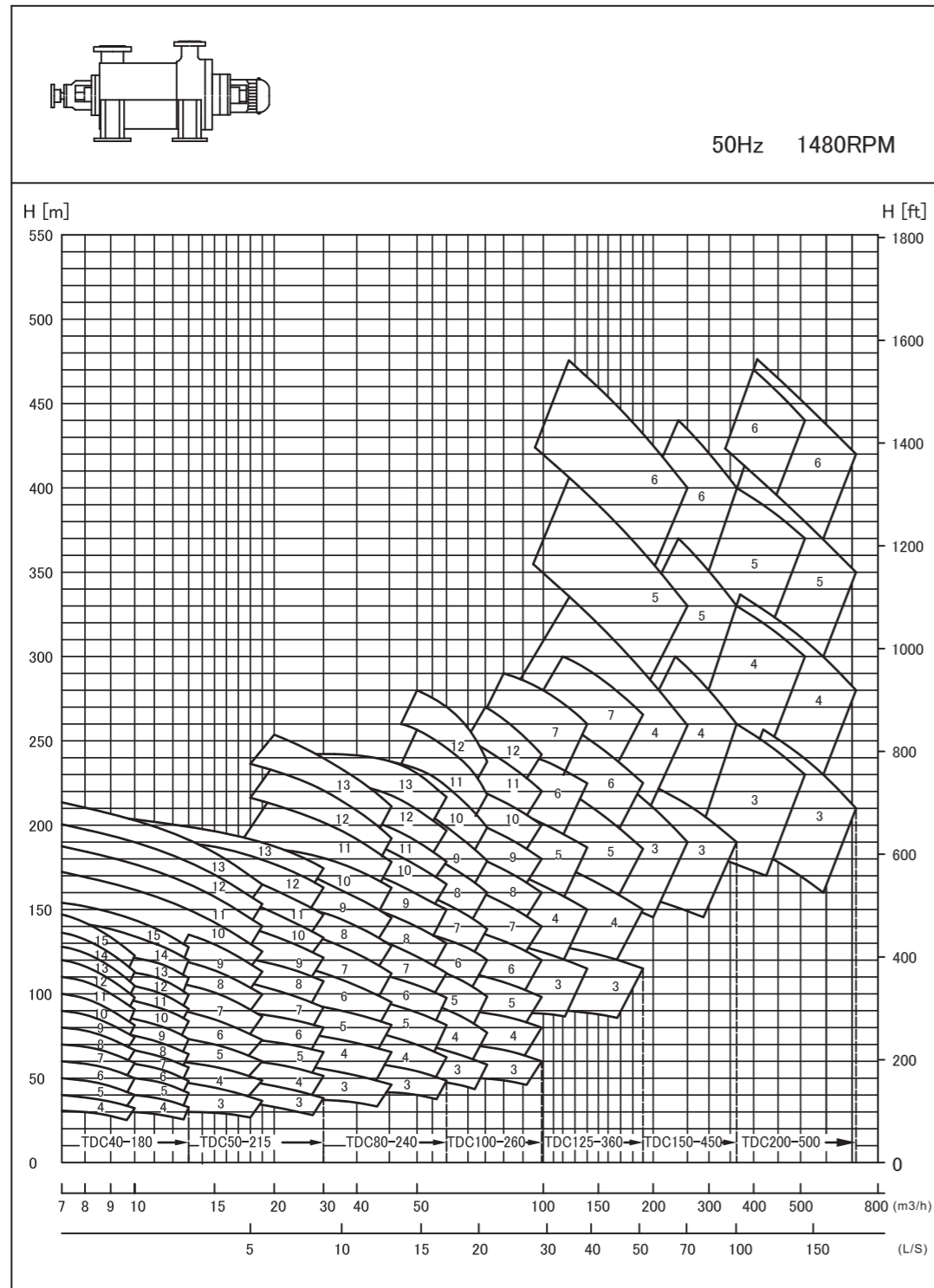
- Can bear a higher pressure. only the outer barrel and pump cover bear the discharge pressure, sectional inner shell can bear the difference of pressure, to avoid the leak between the segments. Have reliable bearing spacer between the pump cover and casing.
- To avoid the thermal shock and high temperature deformation, the inner shell is soak into the medium completely, heated with rotor uniformly, and the pump shape will not deformed, pump can start directly without pre-heating in high temperature
- Easy to disassembly and maintenance, pull-out structure, inner shell and rotor parts are can all pulled out, not necessary to remove the suction and discharge pipe.
- Good safety. When transporting the dangerous medium, due to have the outer shell structure, the leakage ways and leakage possibilities can be reduced

Performance Charts(50HZ)

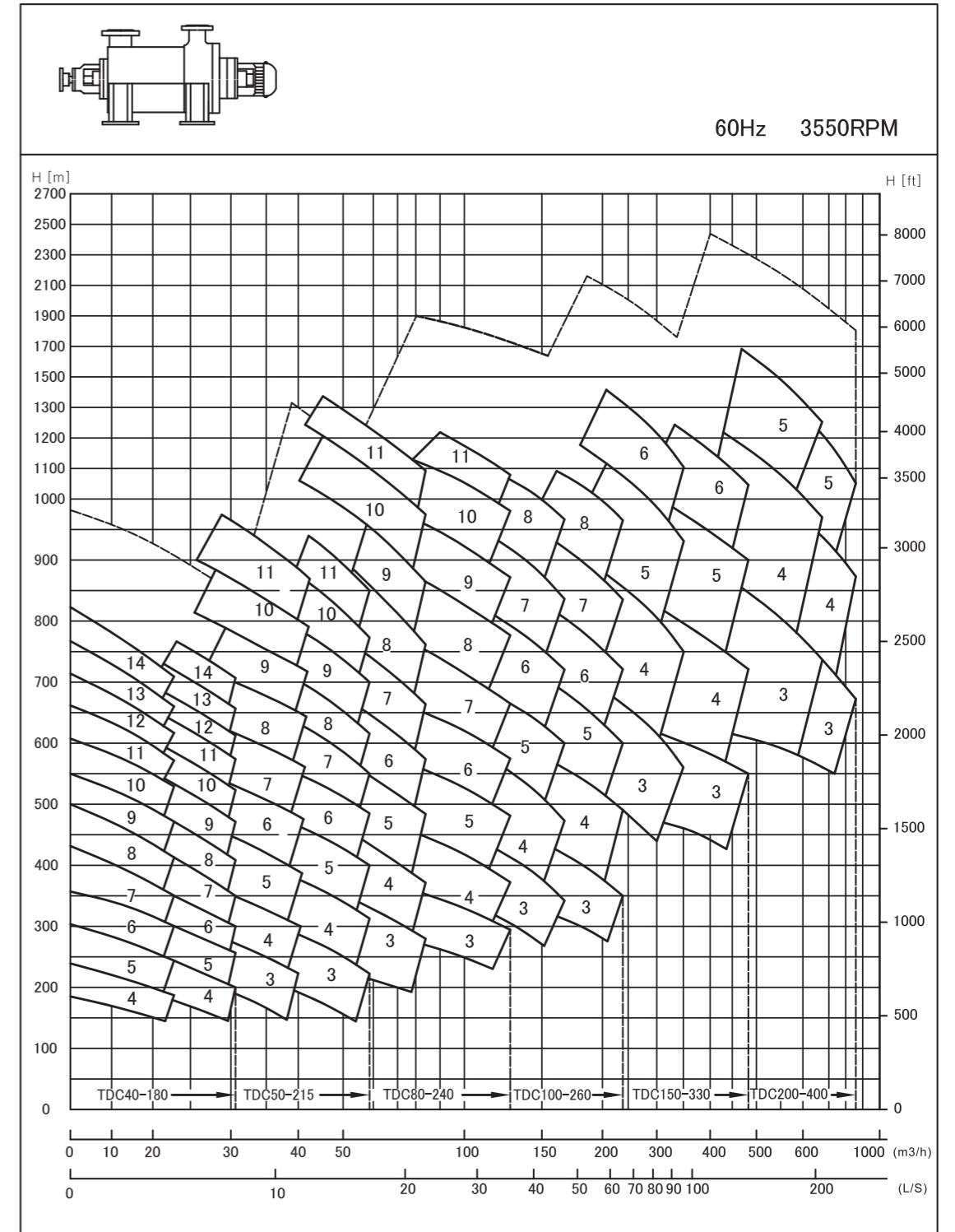




Performance Charts(50HZ)



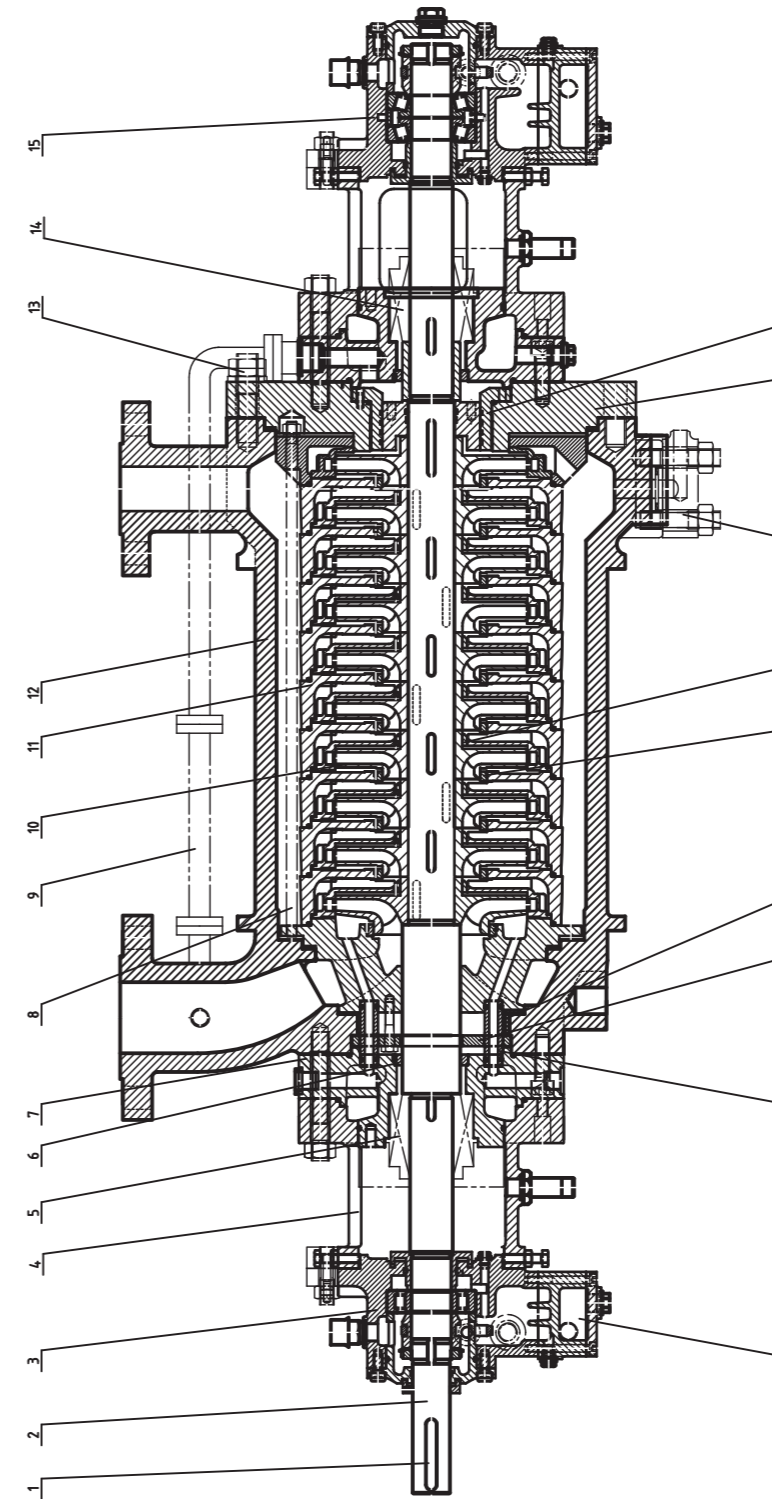
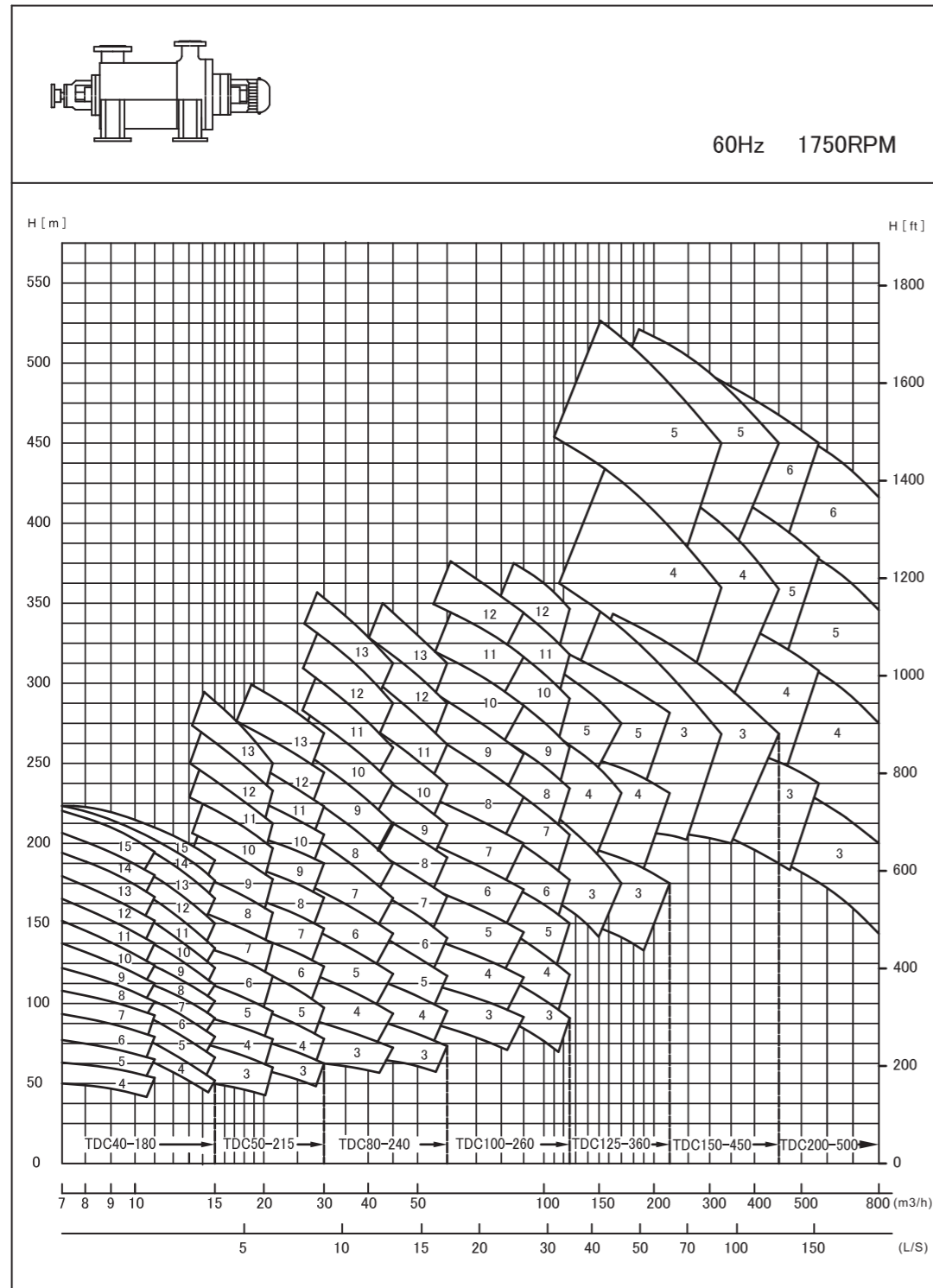
Performance Charts(60HZ)





Performance Charts(60HZ)

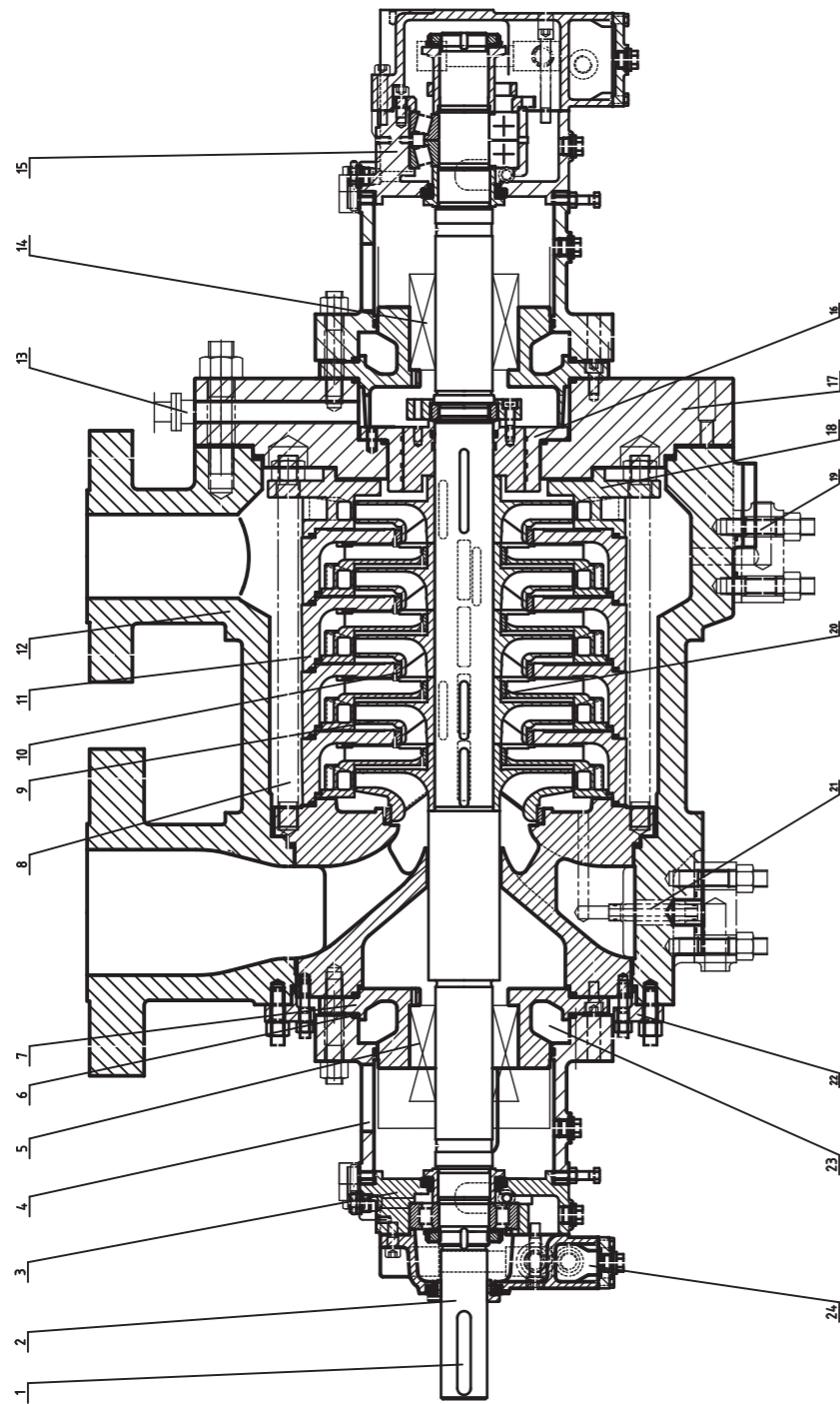
Structure Drawing



NO.	Name of Parts	NO.	Name of Parts
24	Water cooling device	16	Balance drum sleeve
23	Short pipe	15	Non-driver end bearing assembly
22	Platen	14	Non-driver end mechanical seal
21	Lkey	13	Stud
20	Casing wear ring	12	Barrel
19	Diffuser cover	11	Middle section
18	Drain connection	10	Impeller
17	Barrel cover	9	Balance pipe
NO.	Name of Parts	NO.	Name of Parts
8	Draw bar	7	Suction mechanical seal house
7	Suction mechanical seal house	6	Throat bushing
6	Throat bushing	5	Driver end mechanical seal
5	Driver end mechanical seal	4	Bearing bracket
4	Bearing bracket	3	Driver end bearing assembly
3	Driver end bearing assembly	2	Shaft
2	Shaft	1	Key
1	Key	NO.	Name of Parts

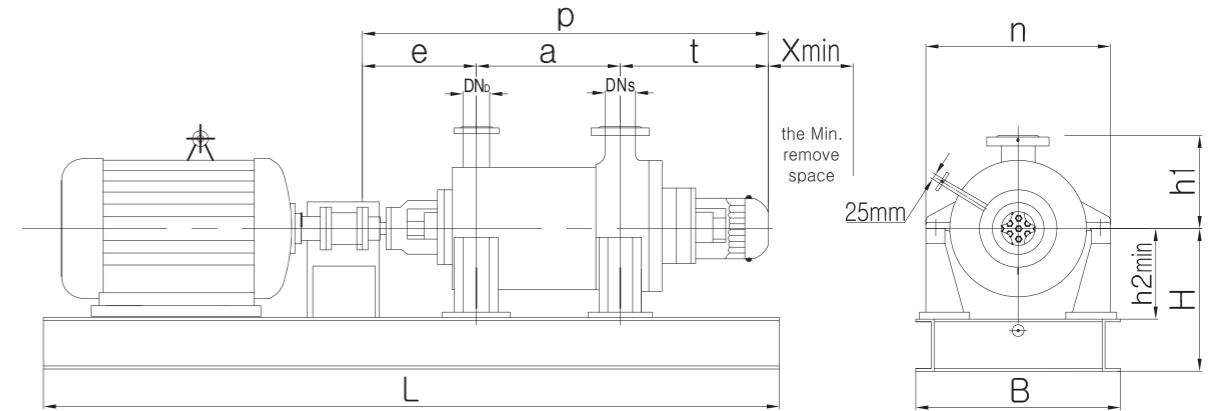


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7	Suction mechanical seal house	6	Throat bushing
6	Throat bushing	5	Driver end mechanical seal
5	Driver end mechanical seal	4	Bearing brachet
4	Bearing brachet	3	Drive end bearing assembly
3	Drive end bearing assembly	2	Shaft
2	Shaft	1	Key
NO.	Name of Parts	NO.	Name of Parts

Dimension Drawing



Model	stages	Size		Pump dimensions(mm)										
		DNd	DNs	B	H	P	L	a	e	f	h1	h2	n	x
40 -180	4	40	50	650	410	1235	2000	230	530	475	320	266	550	875
	5					1235		230						875
	6					1280	275	920						
	7					1325	320	965						
	8			1370		365	1010							
	9			1415		410	1055							
	10			1460		455	1100							
	11			1505		500	1145							
	12			1550		545	1190							
	13			1595		590	1235							
	14			1640		635	1280							
15	1685	680	1320											
50 -215	3	50	80	720	440	1335	2240	265	555	515	350	299	670	950
	4					1335		265						950
	5					1390	320	1005						
	6			1445		375	1060							
	7			1500		430	1115							
	8			1555		485	1170							



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Pumps and Valves

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Torontech™ – North America
TEL: +1 (416) 368-2721
FAX: +1 (416) 981-7652
E-MAIL: sales@Torontech.com
WEB: www.Torontech.com

Please contact us for your nearest local office or distributor