



Pumps & Systems



SOW

Chemical Axial Flow Pumps



Source Pumps & Systems Co., LTD.

www.sourcegroup.com.cn

● Instruction

SOW series imposed-circulating pump is designed by GB/T13008-1992 and developed by ourselves referring to the advanced pump product home and abroad according to the features of alkali, salt, citric acid and Na_2SO_4 industries. The series of products have been recognized since 1996 when it was brought into the market.

● Performance

—Flow	Q: up to 30000m ³ /h
—Pressure	P: up to 1.6MPa
—Head	H: up to 10m
—Temperature	T: up to 180 °c

● Applications

Mainly applied in the imposed circulation of Various of crystable saturated solution in the course of evaporation/concentration in alkali, salt, citric acid and Na_2SO_4 manufacture industries.

● Features

SOW imposed circulation pump has two kinds structures one is typically applicable for the installation supported by ground . It has axial suction and radial discharge. In order to repair easily, the rotation part s composed by impeller shaft can be drawn from pump casing. The re is no need to disassemble the suction and discharge piping. The other is half-suspending structure applicable for the pump part suspending on the piping and the motor installed on the ground. In order to reduce the w eight of the part suspending, front-open structure is taken.

The impeller of the imposed circulation pump locate s in the impeller housing which clearance can be adjusted according to impeller's factual location in order to ensure the impeller clearance locate in the optimal location and improve the operation efficiency.

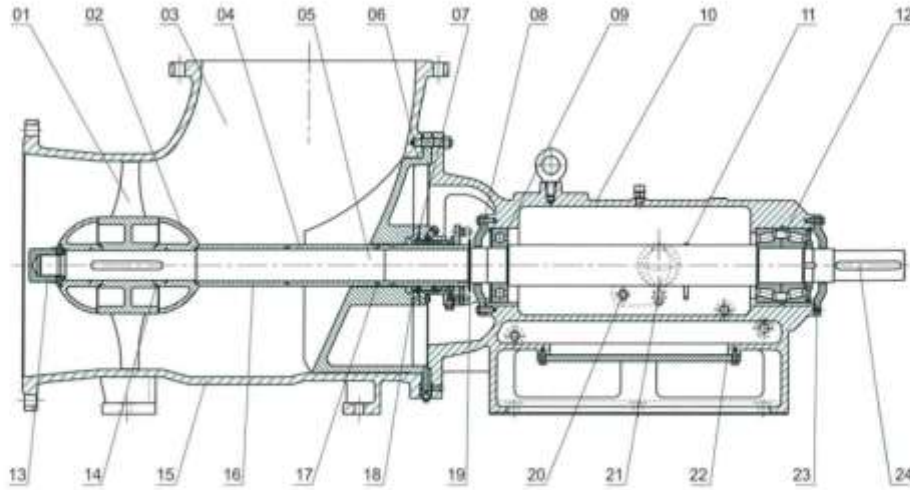
There are two seal structures: double-action stuffing box (operation stuffing seal and shutdown stuffing seal are respectively assembled) and double end cartridge mechanical sea l (which is propitious to seal's assembly& disassembly).

Bearing is lubricated by oil with a cooling device to cool the oil so that the operation environment of the bearing can be changed .

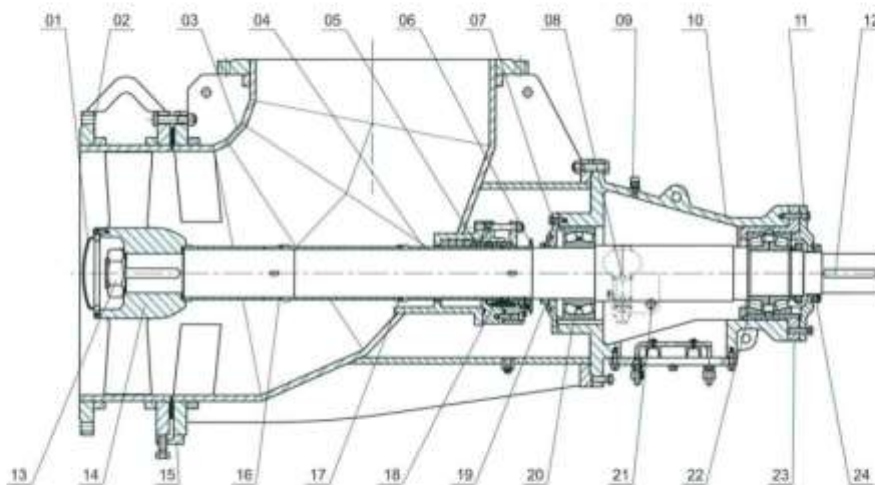
The performance of the pump can be adjusted by changing impeller's emplacement angle and pump speed according to technology requirement to satisfy different evaporation device.

The parts contacting with the fluid are made of 304, 304L, 316, 316L and 804 etc material. 22 types of material can be selected in our plant, which is as per different medium.

SOW Section Drawing

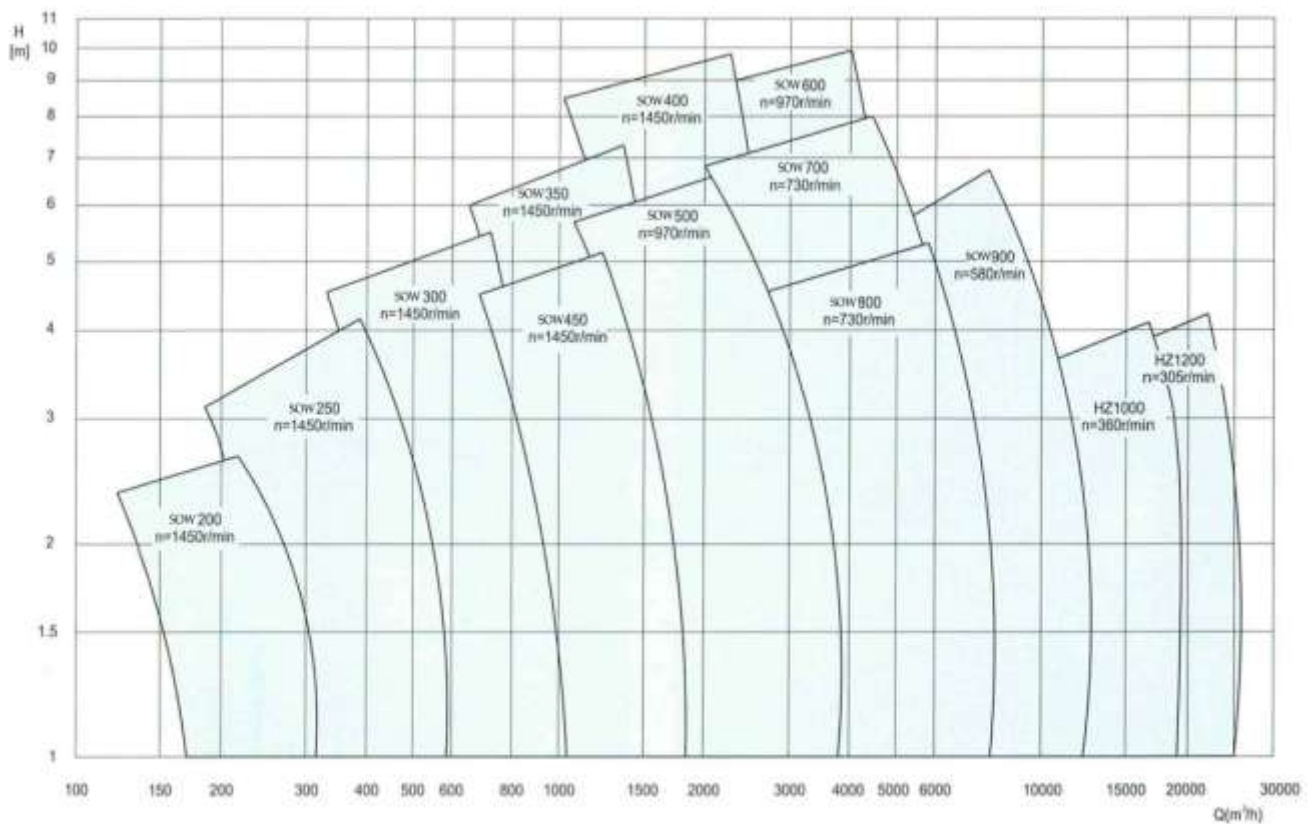


01	Impeller	05	Shaft	09	Bearing	13	Impeller Nut	17	O Ring	21	Constant Level Oiler
02	Impeller Cover	06	Pump Cover	10	Bearing House	14	O Ring	18	Mechanical Seal	22	Oil Cover
03	Pump Casing	07	Stuffing	11	Lubricating Ring	15	Discharge Pipe	19	Deflector	23	Bearing Cover
04	Shaft Sleeve	08	Bearing Cover	12	Bearing	16	Shaft Sleeve	20	Sight Glass	24	Key



01	Impeller Cover	05	Stuffing	09	Vent Plug	13	Impeller Nut	17	Seal Housing	21	Sight Glass
02	Impeller House	06	Deflector	10	Bearing House	14	Impeller	18	Mechanical Seal	22	Bearing
03	Pump Casing	07	Bearing Cover	11	Bearing Cover	15	Shaft Sleeve	19	Deflector	23	Bearing Casing
04	Shaft Sleeve	08	Constant Level Oiler	12	Shaft	16	Mechanical Seal	20	Bearings	24	Deflector

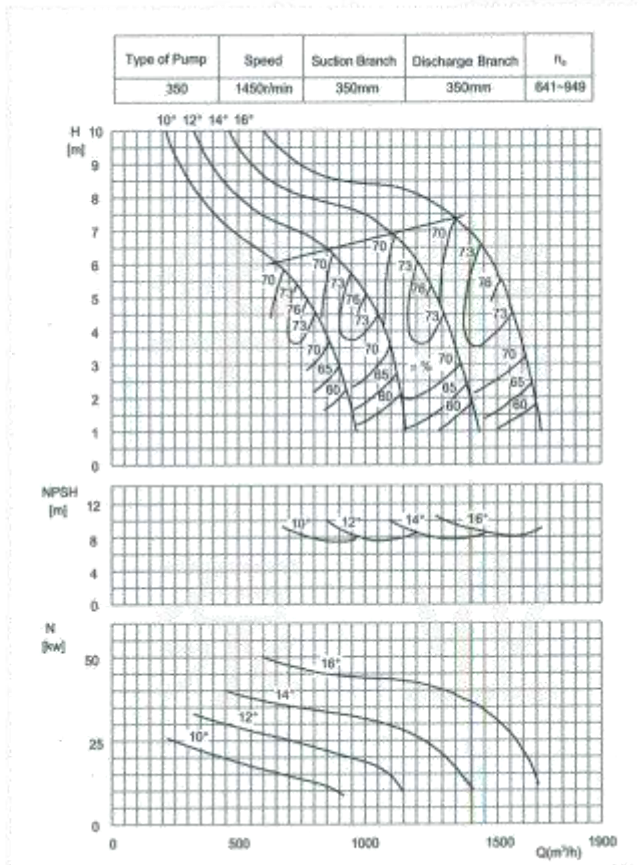
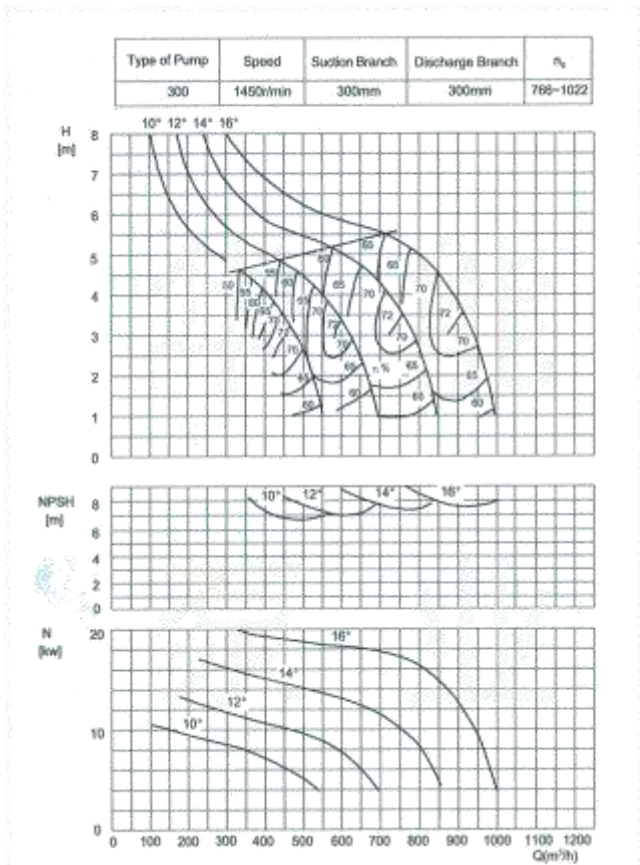
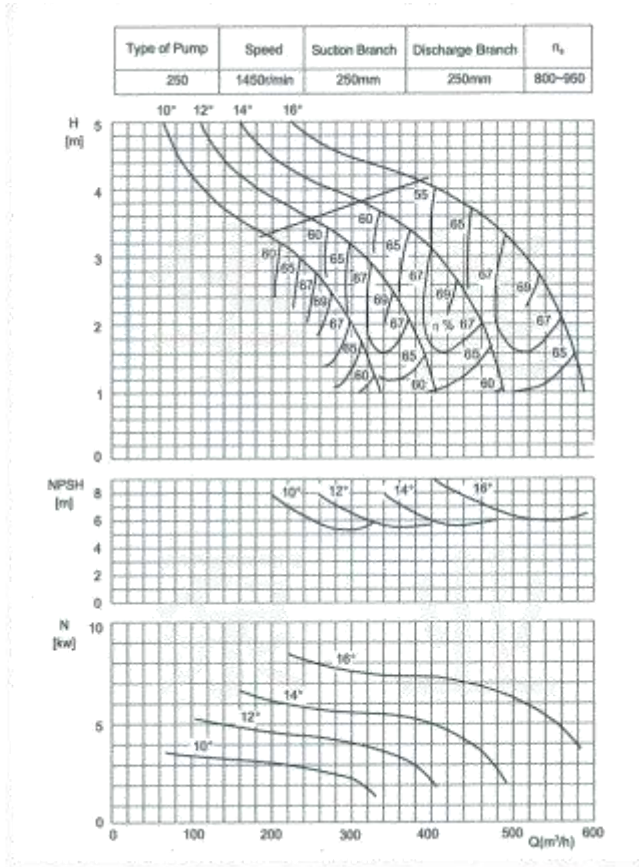
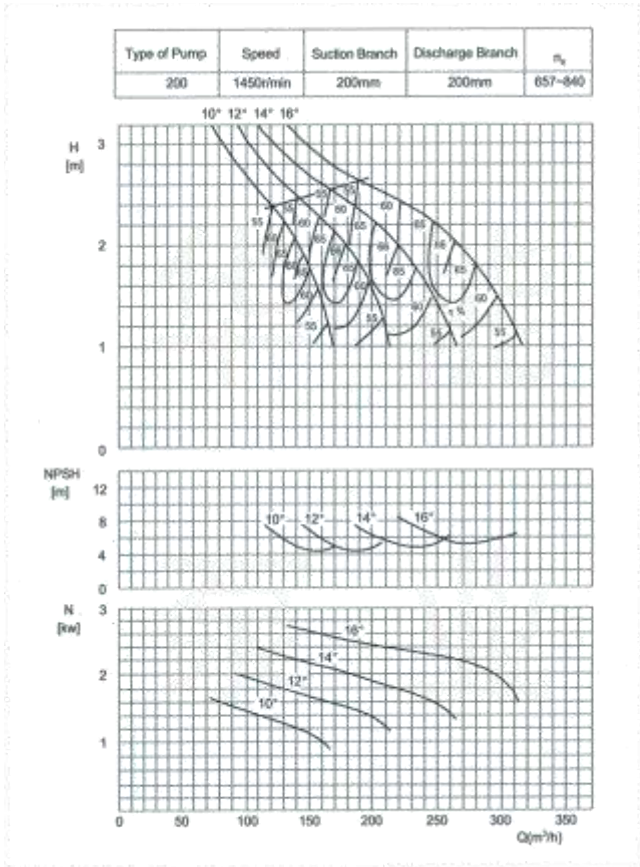
SOW Range of Performance



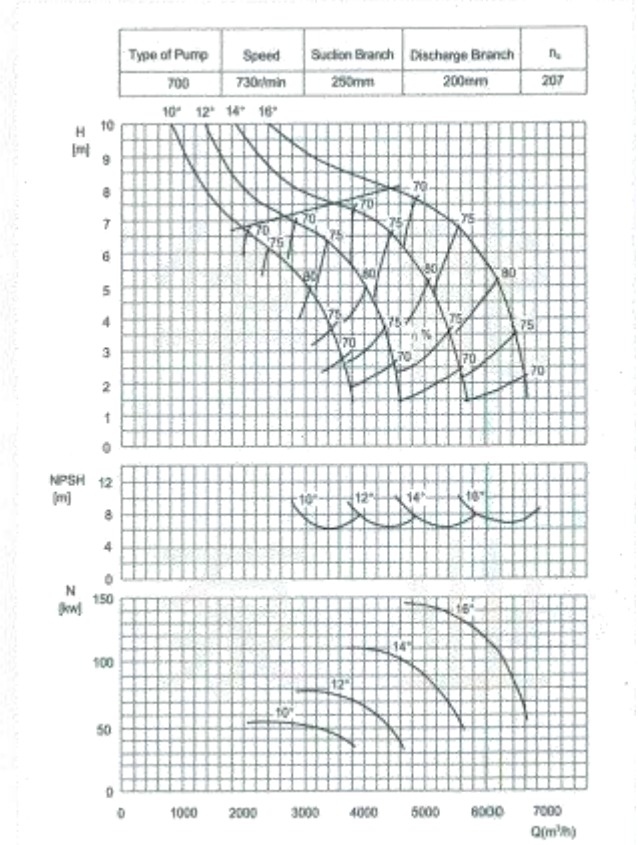
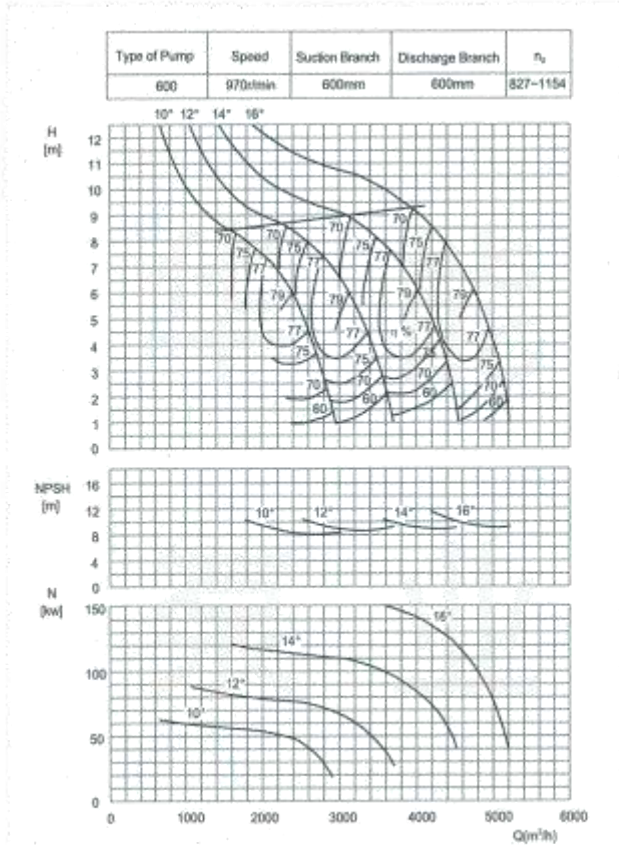
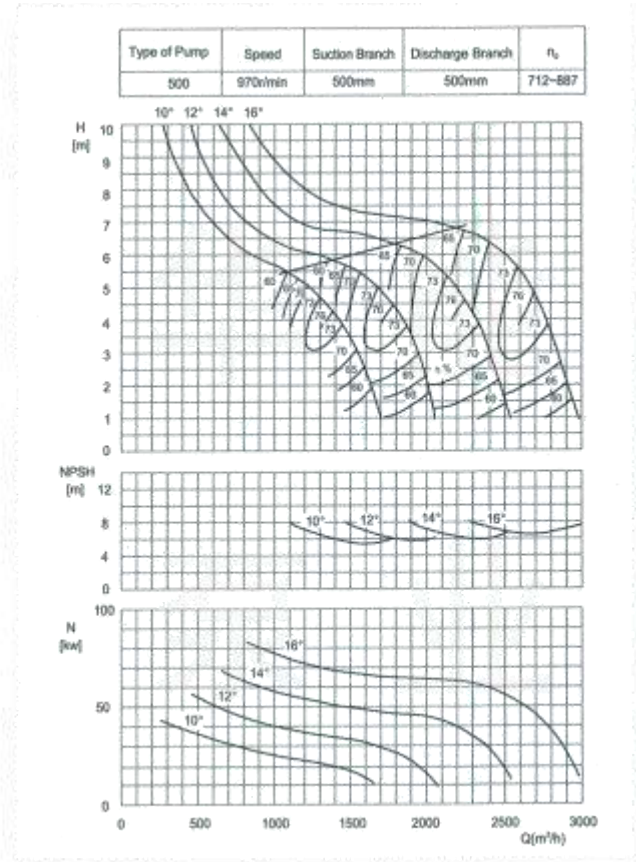
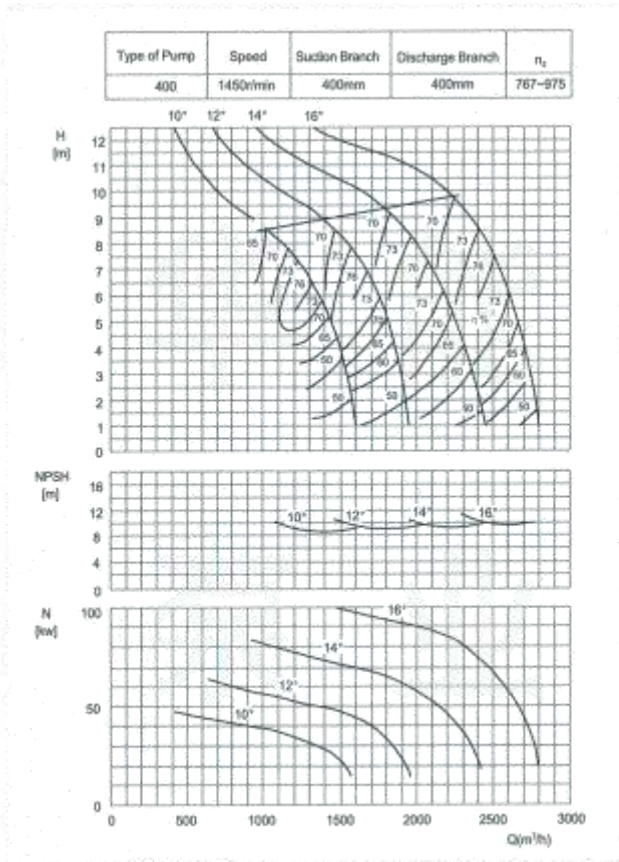
SOW Table of Standard Performance

Type	Speed n (r/min)	Capacity Q (m³/h)	Head H (m)	Input-power Pa (kW)	Driving mode
SOW 200	1450	140-300	1-2.6	2-2.8	Direct driving (by changing angle adjusting performance) or Belt driving
SOW 250	1450	200-580	1-2.5	3-4.5	
SOW 300	1450	350-1000	1-5.5	7.5-11	
SOW 350	1450	650-1650	1-7.2	27-60	
SOW 400	1450	1000-2800	1-9.5	32-68	Belt driving
SOW 450	1450	700-1900	1-4.3	18.5-23	
SOW 500	970	1000-3000	1-6.7	37-45	
SOW 600	970	1600-5200	1-9.5	50-105	
SOW 700	730	2000-6600	1.5-7.9	50-115	
SOW 800	730	2600-7700	1.5-5.2	33-100	
SOW 900	580	6000-12000	1.8-6.8	120-220	
SOW 1000	360	10000-19000	1.8-4.1	150-250	
SOW 1200	305	12500-25000	1.8-4.1	150-250	

SOW Performance Curve

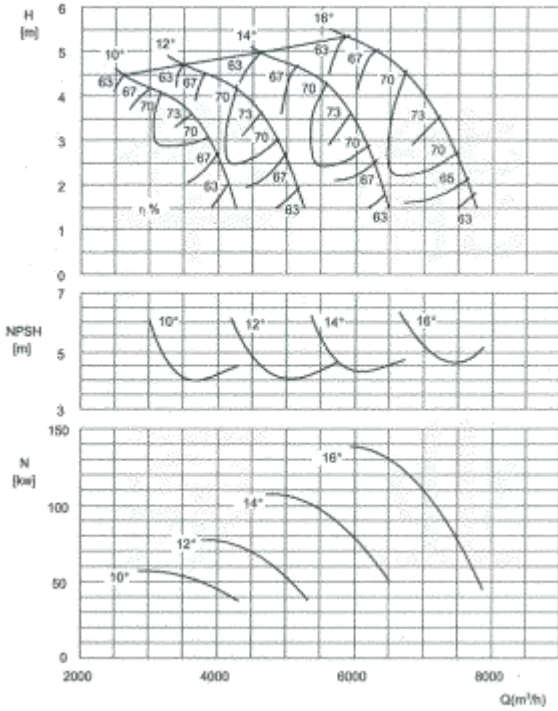


SOW Performance Curve

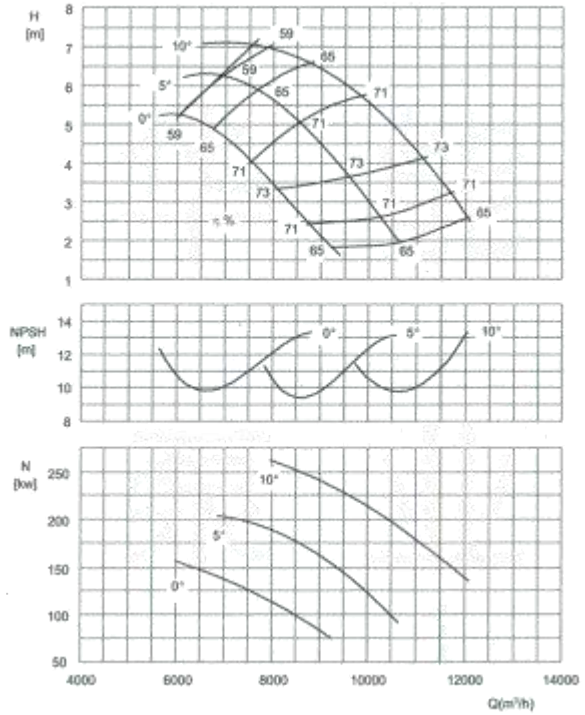


SOW Performance Curve

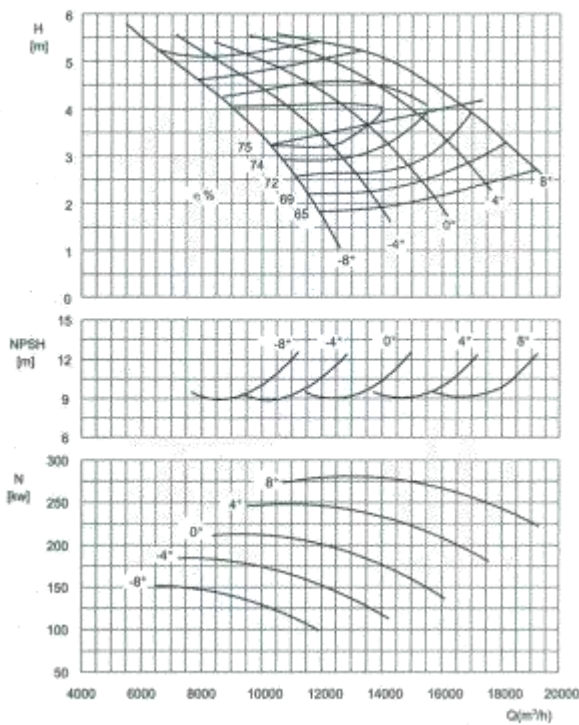
Type of Pump	Speed	Suction Branch	Discharge Branch	η_s
800	730r/min	800mm	800mm	717-1369



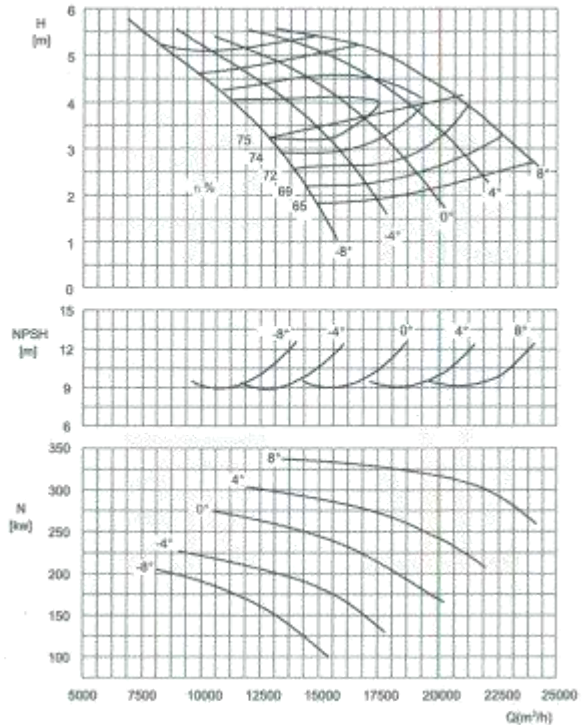
Type of Pump	Speed	Suction Branch	Discharge Branch	η_s
900	580r/min	900mm	900mm	754-959



Type of Pump	Speed	Suction Branch	Discharge Branch	η_s
1000	360r/min	1000mm	1000mm	855-1393



Type of Pump	Speed	Suction Branch	Discharge Branch	η_s
1200	305r/min	1200mm	1200mm	880-974





Pumps & Systems



SOURCE PUMPS & SYSTEMS CO.,LTD

***Add: No.18 Xidian, Qian mu cheng yi, Ying cheng zi Street,
Ganjingzi District, Dalian, China 116036***

Tel: +86-411-39082835/+86-411-66853898

Fax: +86-411-86715305

E-mail: export@sourcegroup.com.cn

<http://www.sourcegroup.com.cn> <http://www.sourcepump.com>