

## Operation manual

操作手册

マニュアル

Руководство по эксплуатации

Manuel d'exploitation

SINGLE  
SCREW  
PUMP

上海边科  
单螺杆泵

S.H. Benk Single screw pump is a sealed screw pump with internal engagement. In addition to the transportation of general mobile media, for high viscosity medium, medium containing hard suspended particles or solid particles, and medium containing fiber, all have excellent conveying efficiency.

上海边科单螺杆泵是一种内啮合的密封式螺杆泵。除了输送一般性可流动介质外，对于高粘稠度介质，含有硬质悬浮颗粒或固体颗粒的介质，含有纤维的介质都有优良的输送效率。

上海边科タイプの単ネジポンプは内啮合の密封式スクリーンプンプです。一般的な流動性媒質の搬送に加えて、硬質懸濁粒子または固体粒子を含む媒質に対して、繊維を含む媒体は優れた輸送効率を有する。

одновинтовой насос типа S, H. Benk герметичным винтовым насосом с внутренним зацеплением. Наряду с транспортировкой обычных мобильных сред, отличные коэффициенты перекачки отмечаются в высоковязких диэлектриках, диэлектриках с твердыми взвешенными частицами или твердыми частицами, а также в целлюлозных средах.

La pompe à vis unique de S.H. Benk une pompe à vis étanche à prise interne. Outre le transport d'un milieu mobile général, on obtient d'excellentes performances de transport pour un milieu à viscosité élevée, un milieu contenant des particules en suspension dure ou solide, et un milieu contenant des fibres.

### 更多产品及售后服务请登录：

For more products and after-sales services, please visit:

もっと多くの製品とアフターサービスは登録してください。

более широкий ассортимент продукции и послепродажное обслуживание, пожалуйста, войдите в:

Plus de produits et de services après vente s'il vous plaît connecter:

上海边科机械集团官方网址

[www.chinabenk.com](http://www.chinabenk.com)

上海边科天猫官方旗舰店

天猫

Q 上海边科 搜索

阿里巴巴边科官方旗舰店

阿里巴巴

Q 上海边科 搜索

\*手机二维码见操作手册尾页

## Model overview:

S.H. Benk single screw pump is a kind of closed screw pump with internal meshing, which belongs to rotor type positive displacement pump. Due to its strong adaptability to medium, stable flow, good suction performance and small pressure fluctuation, it can also transport high viscous medium, medium containing hard suspended particles or solid particles, and medium containing fiber, with adjustability. Therefore, it is widely used in environmental protection, shipping, petroleum, medicine, daily chemical, food, brewing, construction, mining, chemistry, printing, paper making, power plant, boiler and other industries.

## Working principle:

Benk single screw pump is a rotary positive displacement pump with internal meshing. The main working parts are eccentric screw (rotor) and fixed bushing (stator). Due to the special geometry of rotor and stator, several separate sealing cavities are formed. The operation of rotor will transport the medium in each sealing cavity continuously, uniformly and with constant volume from the suction end to the extrusion end.

Due to these characteristics, single screw pump is particularly suitable for the following working conditions:

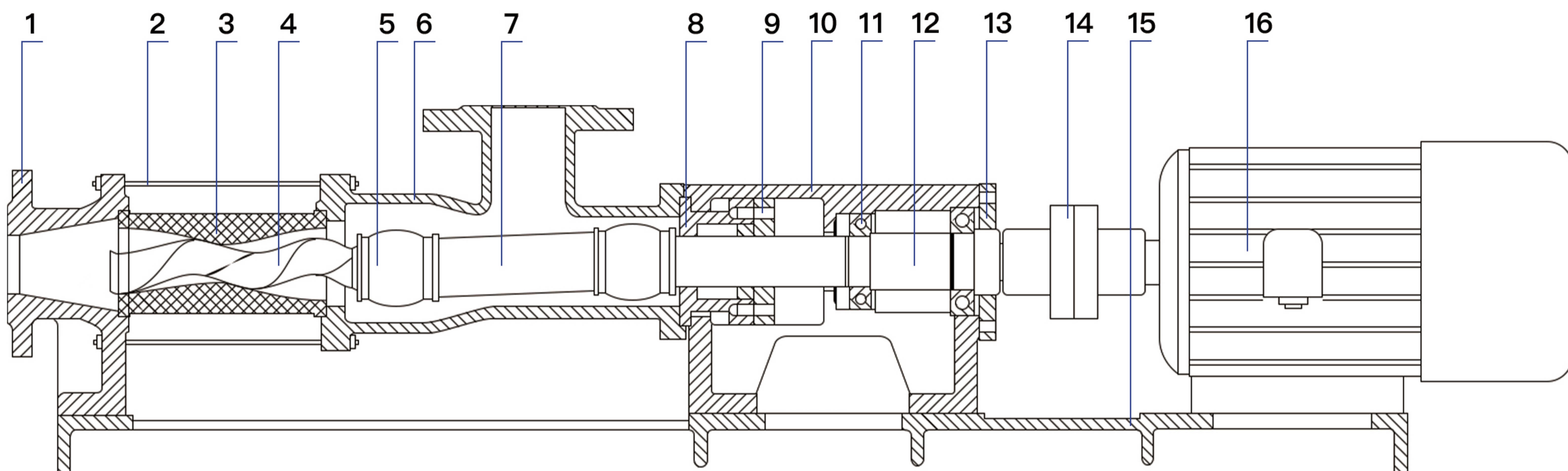
1. Conveying high viscosity medium;
2. Conveying medium containing solid particles or fibers;
3. Continuous, stable pressure and no periodic pressure fluctuation are required;
4. Small agitation and no damage to the inherent structure of the transported medium is required;
5. Low noise.

## Scope of application:

Benk single screw pump is a kind of general-purpose pump. The flow rate can be adjusted by changing the speed according to the requirements. The operating speed can be high or low. The outlet pressure can be increased with the increase of pump stages. The pressure increases by 0.6MP for each additional stage. It is widely used in the following areas and industries:

1. Environmental protection: transportation of industrial sewage, domestic sewage and muddy water containing solid particles and short fibers, especially suitable for oil-water separator Plate and frame filter press and other equipment;
2. Shipbuilding industry: ship bottom cleaning, oil and water, oil residue, oily water and other media transportation;
3. Petroleum industry: transportation of crude oil, mixture of crude oil and water, mixture of coalfield gas and water, injection of polymer into formation, etc. It reduces the cost of mechanical oil recovery and coalfield gas, and increases the oil recovery rate;
4. Pharmaceutical daily chemicals: transportation of various viscous paste, emulsion, ointment and cosmetics;
5. Food can industry: transportation of all kinds of sticky starch, cooking oil, honey, syrup, fruit pulp, cream, minced fish and its leftovers;
6. Brewing industry: all kinds of fermented viscous slurry, distiller's grains, grain product residues, various sauces, pulps and mucus containing massive solid substances, etc;
7. Construction industry: spraying and transportation of cement mortar, lime slurry, coating and other pastes;
8. Mining industry: underground water containing solid particles and sewage slurry water in the mine are discharged to the ground;
9. Chemical industry: various suspensions, oils, colloidal slurries and adhesives;
10. Printing and paper industry: transportation of high viscosity ink, PVC polymer paste of wallpaper and pulp and short fiber pulp of various concentrations;
11. Industrial boiler and power plant: coal water slurry transportation.

## Overall structure:



- |                                 |                        |          |        |
|---------------------------------|------------------------|----------|--------|
| 1. Discharge body               | 9. Packing gland       | 1.出料体    | 9.填料压盖 |
| 2. Pull rod                     | 10. Bearing pedestal   | 2.拉杆     | 10.轴承座 |
| 3. Stator                       | 11. Bearing            | 3.定子     | 11.轴承  |
| 4. Screw shaft                  | 12. Transmission shaft | 4.螺杆轴    | 12.传动轴 |
| 5. Universal joint or pin joint | 13. Bearing cover      | 5.万向节或销接 | 13.轴承盖 |
| 6. Feed body                    | 14. Coupling           | 6.进料体    | 14.联轴器 |
| 7. Connecting shaft             | 15. Site               | 7.连接轴    | 15.地盘  |
| 8. Packing seat                 | 16. Motor              | 8.填料座    | 16.电机  |

## 型号概述:

上海边科单螺杆泵是一种内啮合的密闭式螺杆泵，属转子式容积泵，由于这种泵对介质的适应性强，流动平稳，吸入性能好，压力脉动小，除可以输送各种可流动的介质外，还可以输送高粘稠介质、含有硬质悬浮颗粒或固体颗粒的介质、含有纤维的介质，调节性能好，范围宽，效率高，因此，在环境保护、船舶、石油、医药、日化、食品、酿造、建筑、采矿、化学、印刷、造纸、电厂、锅炉等各种行业得到广泛应用。

## 工作原理:

Benk单螺杆泵是一种内啮合回转式容积泵，主要工作部件是偏心螺杆(转子)和固定的衬套(定子)，由于转、定子的特殊几何形状，分别形成数个单独的密封腔，转子的运转，将各个密封腔内的介质连续地、匀速地、容积不变地从吸入端输送到压出端。

由于有这些特性，单螺杆泵特别适合下列工况的工作:

1. 输送高粘度的介质;
2. 输送含有固体颗粒或纤维的介质;
3. 要求连续、压力稳定、不出现周期性压力波动;
4. 要求搅动小、不破坏被输送介质的固有结构;
5. 要求噪声低，安静。

## 适用范围:

单螺杆泵作为种通用泵，流量可以根据要求，通过改变速度进行调节，运行速度可高可低，出口压力可随泵的级数增加而增加，每增加一级，压力增加0.6MP，在以下范围和行业广泛应用:

- 1.环境保护: 工业污水、生活污水、含有固体颗粒及短纤维的污泥浊水的输送，特别适用于油水分离器板框压滤机等设备;
- 2.船舶工业: 轮底清洗、油水、油渣、油污水等介质的输送;
- 3.石油工业: 输送原油、原油与水的混合物、煤田气和水的混合物、往地层内灌注聚合物等等，从而降低了机械采油、采煤田气的成本，增加了油口采收率;
- 4.医药日化: 各种粘稠浆、乳化液、各种软膏化妆品的输送;
- 5.食品罐头工业: 各种粘稠淀粉、食油、蜂蜜、糖浆、果浆、奶油、鱼糜肉糜以及其下脚料的输送;
- 6.酿造工业: 各种发酵粘稠浆液、浓酒糟、粮食制品渣、各种酱类、浆类和含有块状固态物的粘液等;
- 7.建筑行业: 水泥砂浆、石灰浆、涂料及其它糊状体的喷涂与输送;
- 8.采矿工业: 矿井内的含固体颗粒的地下水和污水排送到地面;
- 9.化学工业: 各种悬浮液、油脂、各种胶体浆、各种粘合剂;
- 10.印刷、造纸工业: 高粘度油墨、墙纸的PVC高分子塑料糊和各种浓度的纸浆、短纤维浆料的输送;
- 11.工业锅炉、电厂: 水煤浆的输送。

## 整泵结构:

Warning Sign

Warning Sign

警告标志

警告标志



警告



警告



警告



警告

The sign indicates that if you fail to comply with the technical requirements, serious injury and death may result.

This sign indicates that if you fail to comply with the technical requirements, the equipment may be damaged or damaged.

该标志表示如果你未能按照技术要求操作，可能会导致严重损伤和死亡。

该标志表示如果你未能按照技术要求操作，可能会损害或破坏设备。

<b>Warning</b>	
 <b>GUIDE</b>	<p><b>Danger of misuse of equipment</b></p> <p>Misuse of equipment can cause equipment rupture or failure, resulting in serious damage.</p> <ul style="list-style-type: none"> <li>● This equipment is for professional use only.</li> <li>● Before operating the equipment, all instructions must be read to understand the contents of various signs and labels.</li> <li>● The equipment can only be used for the specified purpose. If you are not sure, please contact S.H.Benk.</li> <li>● It is not allowed to change or transform the equipment without authorization, and the pure parts and accessories of S.H.Benk shall be used.</li> <li>● Check the equipment daily. Any worn or damaged parts should be replaced or repaired immediately.</li> <li>● When the system is working, the maximum working pressure of the minimum required parts shall not be exceeded.</li> <li>● In pressure aluminum equipment, 1,1,1-trioxyethane, dioxane, other halogenated solvents or liquids containing such solvents shall not be used, otherwise chemical reactions with explosion potential may be caused.</li> <li>● Do not use hose to drag equipment.</li> <li>● Do not lift pressurized equipment.</li> <li>● All national fire, electrical and safety regulations shall be observed.</li> </ul>

<b>警告</b>	
 <b>指南</b>	<p><b>误用设备的危险</b></p> <p>误用设备可使设备产生破裂或故障，导致严重损伤。</p> <ul style="list-style-type: none"> <li>● 本设备仅用于专业用途。</li> <li>● 在操作设备前，必须阅读所有的说明，了解各种标志和标签内容。</li> <li>● 设备仅可用于规定的目的，如果不能确信，可与上海边科联系。</li> <li>● 不得擅自改变或改造设备，应采用纯正的上海边科零件和附件</li> <li>● 每日应检查设备。如果有任何磨损或损坏的零件，应立即更换或修理。</li> <li>● 系统工作时，不得超过最低要求零部件的最大工作压力。</li> <li>● 必须使用符合设备接触液体部件要求的流体和溶剂。应参阅设备说明中的技术数据部分的内容，并了解制造商有关流体和溶剂的警告。</li> <li>● 不得用软管来拖动设备。</li> <li>● 不得吊运加压设备。</li> <li>● 应遵守国家的一切有关火灾，电气和安全方面的规定。</li> </ul>

<b>警告</b>	
	<p><b>Hazards of transporting toxic fluids</b></p> <p>Dangerous liquids or toxic gases can cause serious injury or death if splashed in the eyes, skin, or inhaled or swallowed.</p> <ul style="list-style-type: none"> <li>● The danger of the liquid used must be understood.</li> <li>● Hazardous liquids should be stored in approved containers. Hazardous liquids must be disposed of in accordance with national regulations.</li> <li>● Always wear protective glasses, gloves, clothing and gas masks recommended by fluid and solvent manufacturers.</li> </ul>
 	<p><b>Fire and explosion hazard</b></p> <p>Improper grounding, poor ventilation, open fire or spark can cause fire, explosion and serious injury.</p> <ul style="list-style-type: none"> <li>● When using the equipment, if there is any static spark or electric shock, the pump should be stopped immediately. Do not use the equipment until the problem is identified and resolved.</li> <li>● The work area should be kept clean and free of any rubbish, including solvents, rags and gasoline.</li> <li>● All equipment in the work area shall be electrically disconnected.</li> <li>● All open flames or indicator lights in the work area shall be extinguished.</li> </ul>

<b>警告</b>	
	<p><b>输送有毒流体的危害</b></p> <p>危险的液体或有毒气体如果喷溅在眼中，皮肤上，或被吸入或吞咽，可导致身体的严重伤害或死亡。</p> <ul style="list-style-type: none"> <li>● 必须了解所用液体的危险性。</li> <li>● 应将危险的液体储存在核准的容器中。必须按照国家的规定处置危险液体。</li> <li>● 应始终穿戴流体和溶剂厂商推荐的防护眼镜，手套，衣服和防毒面具。</li> </ul>
 	<p><b>着火和易爆危险</b></p> <p>接地不当，通风不良，明火或火花均可导致火灾，爆炸和严重伤害等危险。</p> <ul style="list-style-type: none"> <li>● 设备必须接地，防止电气危害。</li> <li>● 在使用设备时，如果有任何静电火花或感到触电现象，机泵应立即停止使用。问题确定和解决前，不得使用设备。</li> <li>● 工作区应保持清洁，无任何垃圾，包括溶剂，破布和汽油。</li> <li>● 工作区中的所有设备应断开电气连接。</li> <li>● 应熄灭工作区内的所有明火或指示灯。</li> </ul>

# Performance table

## Performance parameters at fixed speed

Form 1

Model	Flow (m³/h)	Pressure (MPa)	Allowable max speed (r/min)	Motor power (kw)	NPSH required (m)	Flange outlet diameter (mm)	Flange inlet diameter (mm)	Particle diameter (mm)	Fiber length (mm)
G20-1	0.8	0.6	960	0.75	4	25	25	1.5	25
G20-2		1.2		1.5					
G25-1	2	0.6	960	1.5		40	32	2	30
G25-2		1.2		2.2					
G30-1	5	0.6	960	2.2		50	40	2.5	35
G30-2		1.2		3					
G35-1	8	0.6	960	3		65	50	3	40
G35-2		1.2		4					
G40-1	12	0.6	960	4		80	65	3.8	45
G40-2		1.2		5.5					
G50-1	14	0.6	720	5.5	4.5	100	80	5	50
G50-2		1.2		7.5					
G60-1	22	0.6	720	11	5	125	100	6	60
G60-2		1.2		15					
G70-1	38	0.6	720	11		150	125	8	70
G70-2		1.2		18.5					
G85-1	56	0.6	630	15		150	150	10	80
G85-2		1.2		30					
G105-1	100	0.6	500	30		200	200	15	110
G105-2		1.2		55					
G135-1	150	0.6	400	45		250	250	20	150
G135-2		1.2		90					

## Single stage, performance parameters of different motors

Form 2

Model	Pressure 0.3MPa			Pressure 0.6MPa			Adjustable speed		
	Speed (r/min)	Flow (m³/h)	Motor power (kw)	Speed (r/min)	Flow (m³/h)	Motor power (kw)	Speed (r/min)	Flow (m³/h)	Motor power (kw)
G20-1	960	0.96	0.75~6级	960	0.8	0.75~6stage	125~1250	0.1~1.5	1.1
	720	0.8	0.55~8级	720	0.5	0.75~8stage			
	510	0.4	0.55~4级/齿轮箱	510	0.3	0.75~4stage/gearbox			
G25-1	960	2.4	0.75~6级	960	2	1.5~6stage	125~1250	0.1~3	1.5
	720	1.5	0.55~8级	720	1.27	1.1~8stage			
	510	1.08	0.5~4级/齿轮箱	510	0.9	1.1~4stage/gearbox			
G30-1	960	3.6	1.5~6级	960	3	2.2~6stage	125~1250	0.2~4	2.2
	720	2.28	1.1~8级	720	1.9	1.5~8stage			
	510	1.63	1.1~4级/齿轮箱	510	1.35	1.5~4stage/gearbox			
G35-1	720	4.8	2.2~8级	720	4.04	3~8stage	125~890	0.3~5	3
	510	3.36	1.5~4级/齿轮箱	510	2.8	2.2~4stage/gearbox			
	380	1.92	1.1~4级/齿轮箱	380	1.6	1.5~4stage/gearbox			
G40-1	510	6.8	2.2~4级/齿轮箱	510	5.6	3~4级stage/gearbox	125~890	0.3~10	4
	380	5.1	1.5~4级/齿轮箱	380	4	2.2~4stage/gearbox			
	252	2.65	1.1~6级/齿轮箱	252	2.2	1.5~6stage/gearbox			
G50-1	510	13.8	4~4级/齿轮箱	510	11.5	5.5~4stage/gearbox	80~750	1~18	5.5
	380	10.2	4~4级/齿轮箱	380	7.5	5.5~4stage/gearbox			
	252	5.6	3~6级/齿轮箱	252	4.4	5.5~6stage/gearbox			
G60-1	510	20.8	7.5~4级/齿轮箱	510	16	11~4stage/gearbox	63~630	1~20	11
	380	15.6	7.5~4级/齿轮箱	380	12	11~4stage/gearbox			
	252	7.8	5.5~6级/齿轮箱	252	6	7.5~6stage/gearbox			
G70-1	510	26	11~4级/齿轮箱	510	20	11~4stage/gearbox	56~560	1~22	11
	380	17	7.5~4级/齿轮箱	380	13	11~4stage/gearbox			
	252	9.1	7.5~6级/齿轮箱	252	7	7.5~6stage/gearbox			
G85-1	380	32	11~4级/齿轮箱	380	25	15~4stage/gearbox	37~370	2~24	15
	252	21	7.5~6级/齿轮箱	252	16	11~6stage/gearbox			
	189	11	5.5~8级/齿轮箱	189	8	11~8stage/gearbox			
G105-1	380	80	15~4级/齿轮箱	380	65	22~4stage/gearbox	29~290	3~50	22
	252	44	15~6级/齿轮箱	252	34	22~6stage/gearbox			
	189	29	11~8级/齿轮箱	189	22	1~8stage/gearbox			
G135-1	380	132	37~4级/齿轮箱	380	120	45~4stage/gearbox	18~180	3~56	45
	252	95	30~6级/齿轮箱	252	80	37~6stage/gearbox			
	189	65	18.5~8级/齿轮箱	189	53	30~8stage/gearbox			

# 性能表

固定转速时的性能参数

表一

型号	流量 (m³/h)	压力 (MPa)	允许最高 转速 (r/min)	电机功率 (kw)	必需汽蚀 余量 (m)	进口 法兰通径 (mm)	出口 法兰通径 (mm)	允许颗粒 直径 (mm)	允许纤维 长度 (mm)
G20-1	0.8	0.6	960	0.75	4	25	25	1.5	25
G20-2		1.2		1.5					
G25-1	2	0.6	960	1.5		40	32	2	30
G25-2		1.2		2.2					
G30-1	5	0.6	960	2.2		50	40	2.5	35
G30-2		1.2		3					
G35-1	8	0.6	960	3		65	50	3	40
G35-2		1.2		4					
G40-1	12	0.6	960	4		80	65	3.8	45
G40-2		1.2		5.5					
G50-1	14	0.6	720	5.5	4.5	100	80	5	50
G50-2		1.2		7.5					
G60-1	22	0.6	720	11	5	125	100	6	60
G60-2		1.2		15					
G70-1	38	0.6	720	11		150	125	8	70
G70-2		1.2		18.5					
G85-1	56	0.6	630	15		150	150	10	80
G85-2		1.2		30					
G105-1	100	0.6	500	30		200	200	15	110
G105-2		1.2		55					
G135-1	150	0.6	400	45		250	250	20	150
G135-2		1.2		90					

单级，由齿轮变速、电磁调速、无机变速电机加齿轮变速时的性能参数

表二

型号	压力 0.3MPa			压力 0.6MPa			可调转速		
	转速 (r/min)	流量 (m³/h)	电机功率 (kw)	转速 (r/min)	流量 (m³/h)	电机功率 (kw)	转速 (r/min)	流量 (m³/h)	电机功率 (kw)
G20-1	960	0.96	0.75~6级	960	0.8	0.75~6级	125~1250	0.1~1.5	1.1
	720	0.8	0.55~8级	720	0.5	0.75~8级			
	510	0.4	0.55~4级/齿轮箱	510	0.3	0.75~4级/齿轮箱			
G25-1	960	2.4	0.75~6级	960	2	1.5~6级	125~1250	0.1~3	1.5
	720	1.5	0.55~8级	720	1.27	1.1~8级			
	510	1.08	0.55~4级/齿轮箱	510	0.9	1.1~4级/齿轮箱			
G30-1	960	3.6	1.5~6级	960	3	2.2~6级	125~1250	0.2~4	2.2
	720	2.28	1.1~8级	720	1.9	1.5~8级			
	510	1.63	1.1~4级/齿轮箱	510	1.35	1.5~4级/齿轮箱			
G35-1	720	4.8	2.2~8级	720	4.04	3~8级	125~890	0.3~5	3
	510	3.36	1.5~4级/齿轮箱	510	2.8	2.2~4级/齿轮箱			
	380	1.92	1.1~4级/齿轮箱	380	1.6	1.5~4级/齿轮箱			
G40-1	510	6.8	2.2~4级/齿轮箱	510	5.6	3~4级/齿轮箱	125~890	0.3~10	4
	380	5.1	1.5~4级/齿轮箱	380	4	2.2~4级/齿轮箱			
	252	2.65	1.1~6级/齿轮箱	252	2.2	1.5~6级/齿轮箱			
G50-1	510	13.8	4~4级/齿轮箱	510	11.5	5.5~4级/齿轮箱	80~750	1~18	5.5
	380	10.2	4~4级/齿轮箱	380	7.5	5.5~4级/齿轮箱			
	252	5.6	3~6级/齿轮箱	252	4.4	5.5~6级/齿轮箱			
G60-1	510	20.8	7.5~4级/齿轮箱	510	16	11~4级/齿轮箱	63~630	1~20	11
	380	15.6	7.5~4级/齿轮箱	380	12	11~4级/齿轮箱			
	252	7.8	5.5~6级/齿轮箱	252	6	7.5~6级/齿轮箱			
G70-1	510	26	11~4级/齿轮箱	510	20	11~4级/齿轮箱	56~560	1~22	11
	380	17	7.5~4级/齿轮箱	380	13	11~4级/齿轮箱			
	252	9.1	7.5~6级/齿轮箱	252	7	7.5~6级/齿轮箱			
G85-1	380	32	11~4级/齿轮箱	380	25	15~4级/齿轮箱	37~370	2~24	15
	252	21	7.5~6级/齿轮箱	252	16	11~6级/齿轮箱			
	189	11	5.5~8级/齿轮箱	189	8	11~8级/齿轮箱			
G105-1	380	80	15~4级/齿轮箱	380	65	22~4级/齿轮箱	29~290	3~50	22
	252	44	15~6级/齿轮箱	252	34	22~6级/齿轮箱			
	189	29	11~8级/齿轮箱	189	22	15~8级/齿轮箱			
G135-1	380	132	37~4级/齿轮箱	380	120	45~4级/齿轮箱	18~180	3~56	45
	252	95	30~6级/齿轮箱	252	80	37~6级/齿轮箱			
	189	65	18.5~8级/齿轮箱	189	53	30~8级/齿轮箱			

# Performance table

## Double stage, performance parameters of different motors

Form 3

Model	Pressure 0.8MPa			Pressure 1.2MPa			Adjustable speed		
	Speed (r/min)	Flow (m³/h)	Motor power (kw)	Speed (r/min)	Flow (m³/h)	Motor power (kw)	Speed (r/min)	Flow (m³/h)	Motor power (kw)
G20-2	960	0.96	1.5~6stage	960	0.8	1.5~6stage	125~1250	0.1~1.5	1.5
	720	0.8	1.1~8stage	720	0.5	1.5~8stage			
	510	0.4	1.1~4stage/gearbox	510	0.3	1.1~4stage/gearbox			
G25-2	960	2.4	1.5~6stage	960	2	2.2~6stage	125~1250	0.1~3	2.2
	720	1.5	1.1~8stage	720	1.27	1.5~8stage			
	510	1.08	1.1~4stage/gearbox	510	0.9	1.5~4stage/gearbox			
G30-2	960	3.6	3~6stage	960	3	3~6stage	125~1250	0.2~4	3
	720	2.28	1.5~8stage	720	1.9	2.2~8stage			
	510	1.63	1.5~4stage/gearbox	510	1.35	2.2~4stage/gearbox			
G35-2	720	4.8	3~8stage	720	4.04	4~8stage	125~890	0.3~5	4
	510	3.36	2.2~4stage/gearbox	510	2.8	3~4stage/gearbox			
	380	1.92	1.5~4stage/gearbox	380	1.6	2.2~4stage/gearbox			
G40-2	510	6.8	4~4stage/gearbox	510	5.6	5.5~4stage/gearbox	125~890	0.3~10	5.5
	380	5.1	3~4stage/gearbox	380	4	4~4stage/gearbox			
	252	2.65	2.2~6stage/gearbox	252	2.2	3~6stage/gearbox			
G50-2	510	13.8	5.5~4stage/gearbox	510	11.5	7.5~4stage/gearbox	80~750	1~18	11
	380	10.2	4~4stage/gearbox	380	7.5	5.5~4stage/gearbox			
	252	5.6	3~6stage/gearbox	252	4.4	5.5~6stage/gearbox			
G60-2	510	20.8	15~4stage/gearbox	510	16	15~4stage/gearbox	63~630	1~20	11
	380	15.6	11~4stage/gearbox	380	12	15~4stage/gearbox			
	252	7.8	7.5~6stage/gearbox	252	6	11~6stage/gearbox			
G70-2	510	26	15~4stage/gearbox	510	20	18.5~4stage/gearbox	56~560	1~22	15
	380	17	11~4stage/gearbox	380	13	15~4stage/gearbox			
	252	9.1	11~6stage/gearbox	252	7	11~6stage/gearbox			
G85-2	380	32	18.5~4stage/gearbox	380	25	22~4stage/gearbox	37~370	2~24	22
	252	21	15~6stage/gearbox	252	16	18.5~6stage/gearbox			
	189	11	15~8stage/gearbox	189	8	15~8stage/gearbox			
G105-2	380	80	30~4stage/gearbox	380	65	37~4stage/gearbox	29~290	3~50	37
	252	44	30~6stage/gearbox	252	34	30~6stage/gearbox			
	189	29	22~8stage/gearbox	189	22	22~8stage/gearbox			
G135-2	380	132	55~4stage/gearbox	380	120	75~4stage/gearbox	18~180	3~56	75
	252	95	55~6stage/gearbox	252	80	75~6stage/gearbox			
	189	65	37~8stage/gearbox	189	53	45~8stage/gearbox			

## Performance parameters at fixed speed

Form 4

Model	Flow (m³/h)	Pressure (MPa)	Speed (r/min)	Speed regulating motor for gear reducer (kw)
G30-2	~1	1.2	30~300	YCT160/4A~2.2
G35-2	~2	1.2	30~300	YCT160/4A~2.2
G40-2	~3	1.2	30~250	YCT160/4A~3
G50-1	~4.5	0.6	28~280	YCT180/4A~4
G50-2	~4.5	1.2	28~280	YCT200/4A~5.5
G60-1	~6.5	0.6	25~250	YCT200/4A~5.5
G60-2	~6.5	1.2	25~250	YCT200/4B~7.5
G70-1	~8	0.6	25~220	YCT200/4B~7.5
G85-1	~12.5	0.6	18~180	YCT225/4A~11
G105-1	~20	0.6	14~140	YCT225/4B~15
G135-1	~35	0.6	10~100	YCT250/4B~22

Explain:

1. The above performance parameters are the test data of normal temperature water test;
2. For different media and different speeds, the performance parameters will change, and the flow value is inversely proportional to the concentration and viscosity, and directly proportional to the speed;
3. The user must select the type of pump according to the use requirements, the condition of conveying medium and the selection principle, or negotiate with S.H. Benk technical department to determine the type of pump;
4. For the coal water slurry pump, the transmission mode is gear speed regulation, matching electromagnetic speed regulating motor or mechanical stepless speed changing motor, and the flow rate can be adjusted steplessly with the speed change.

# 性能表

双级，由齿轮变速、电磁调速、无机变速电机加齿轮变速时的性能参数

表三

型号	压力 0.8MPa			压力 1.2MPa			可调转速		
	转速 (r/min)	流量 (m³/h)	电机功率 (kw)	转速 (r/min)	流量 (m³/h)	电机功率 (kw)	转速 (r/min)	流量 (m³/h)	电机功率 (kw)
G20-2	960	0.96	1.5~6级	960	0.8	1.5~6级	125~1250	0.1~1.5	1.5
	720	0.8	1.1~8级	720	0.5	1.5~8级			
	510	0.4	1.1~4级/齿轮箱	510	0.3	1.1~4级/齿轮箱			
G25-2	960	2.4	1.5~6级	960	2	2.2~6级	125~1250	0.1~3	2.2
	720	1.5	1.1~8级	720	1.27	1.5~8级			
	510	1.08	1.1~4级/齿轮箱	510	0.9	1.5~4级/齿轮箱			
G30-2	960	3.6	3~6级	960	3	3~6级	125~1250	0.2~4	3
	720	2.28	1.5~8级	720	1.9	2.2~8级			
	510	1.63	1.5~4级/齿轮箱	510	1.35	2.2~4级/齿轮箱			
G35-2	720	4.8	3~8级	720	4.04	4~8级	125~890	0.3~5	4
	510	3.36	2.2~4级/齿轮箱	510	2.8	3~4级/齿轮箱			
	380	1.92	1.5~4级/齿轮箱	380	1.6	2.2~4级/齿轮箱			
G40-2	510	6.8	4~4级/齿轮箱	510	5.6	5.5~4级/齿轮箱	125~890	0.3~10	5.5
	380	5.1	3~4级/齿轮箱	380	4	4~4级/齿轮箱			
	252	2.65	2.2~6级/齿轮箱	252	2.2	3~6级/齿轮箱			
G50-2	510	13.8	5.5~4级/齿轮箱	510	11.5	7.5~4级/齿轮箱	80~750	1~18	11
	380	10.2	4~4级/齿轮箱	380	7.5	5.5~4级/齿轮箱			
	252	5.6	3~6级/齿轮箱	252	4.4	5.5~6级/齿轮箱			
G60-2	510	20.8	15~4级/齿轮箱	510	16	15~4级/齿轮箱	63~630	1~20	11
	380	15.6	11~4级/齿轮箱	380	12	15~4级/齿轮箱			
	252	7.8	7.5~6级/齿轮箱	252	6	11~6级/齿轮箱			
G70-2	510	26	15~4级/齿轮箱	510	20	18.5~4级/齿轮箱	56~560	1~22	15
	380	17	11~4级/齿轮箱	380	13	15~4级/齿轮箱			
	252	9.1	11~6级/齿轮箱	252	7	11~6级/齿轮箱			
G85-2	380	32	18.5~4级/齿轮箱	380	25	22~4级/齿轮箱	37~370	2~24	22
	252	21	15~6级/齿轮箱	252	16	18.5~6级/齿轮箱			
	189	11	15~8级/齿轮箱	189	8	15~8级/齿轮箱			
G105-2	380	80	30~4级/齿轮箱	380	65	37~4级/齿轮箱	29~290	3~50	37
	252	44	30~6级/齿轮箱	252	34	30~6级/齿轮箱			
	189	29	22~8级/齿轮箱	189	22	22~8级/齿轮箱			
G135-2	380	132	55~4级/齿轮箱	380	120	75~4级/齿轮箱	18~180	3~56	75
	252	95	55~6级/齿轮箱	252	80	75~6级/齿轮箱			
	189	65	37~8级/齿轮箱	189	53	45~8级/齿轮箱			

固定转速时的性能参数

表四

型号	流量 (m³/h)	压力 (MPa)	转速 (r/min)	齿轮减速机配套调速电机 (kw)
G30-2	~1	1.2	30~300	YCT160/4A~2.2
G35-2	~2	1.2	30~300	YCT160/4A~2.2
G40-2	~3	1.2	30~250	YCT160/4A~3
G50-1	~4.5	0.6	28~280	YCT180/4A~4
G50-2	~4.5	1.2	28~280	YCT200/4A~5.5
G60-1	~6.5	0.6	25~250	YCT200/4A~5.5
G60-2	~6.5	1.2	25~250	YCT200/4B~7.5
G70-1	~8	0.6	25~220	YCT200/4B~7.5
G85-1	~12.5	0.6	18~180	YCT225/4A~11
G105-1	~20	0.6	14~140	YCT225/4B~15
G135-1	~35	0.6	10~100	YCT250/4B~22

说明:

1. 以上性能参数是常温清水试验时的试验数据;
2. 对于不同的介质、不同的转速,性能参数都将变化,其流量值与浓度、粘度成反比,与转速成正比;
3. 用户必需根据使用要求、输送介质的状况、选型原则选择泵的类型,或者与上海边科技术部门协商来决定泵的类型;
4. 对于水煤浆泵传动形式为齿轮调速配套电磁调速电机或机械无级变速电机,流量随转速变化无级可调。

# Selection principle

## 1. Select the pump speed according to the cut-off viscosity

Medium viscosity (m <sup>3</sup> /h)	1~1000	1000~10000	10000~100000	100000~1000000
Motor speed (r/min)	400~1000	200~400	<200	<100

## 2. Select the pump speed according to the abrasion of the medium

Medium wear condition	Media type	Speed (r/min)
No wear	Fresh water, coagulant, oil, syrup, soapy water, blood, glycerin, etc	400~1000
Generally wear	Industrial wastewater, paint pigments, sticky mortar, fish, wheat bran, rapeseed oil filtered sediment, etc	200~400
Heavy wear	Mud, lime slurry, mortar, clay, etc	50~200

Explain:  
 a. The specific media transported and the special cases of its wear resistance are given in the table;  
 b. When the size of the pump is larger, the speed should be selected lower.

## 3. Grading according to output pressure

Medium wear condition	First level	Second level
No wear	0.6MPa	1.2MPa
Generally wear	0.4MPa	0.8MPa
Heavy wear	0.2MPa	0.4MPa

Explain:  
 The selection of speed must be based on experience, as some other factors also affect the selection of speed. Please consult with S.H. Benk technology department when determining the above values.

## 4. Basic characteristics of rubber used in single screw pump

Adaptability Material	Nitrile rubber	Fluororubber	Ethylene propylene rubber	Natural rubber
	NBR	FPM	EPDM	NR
Max temperature resistance	+100°C	+150°C	+120°C	+60°C
Wear resistance	○	○	●	○
Aging resistance	●	○	○	×
Ozone resistance	×	○	○	×
Steam resistant	●	○	○	×
Fire resistance	●	○	○	×

Explain:  
 ●: Very good; ○: Good; ×: Poor.

## 5. The stator rubber of single screw pump is selected according to the medium

Level Rubber	Nitrile rubber	Fluoro rubber	Food silica	Ethylene propylene rubber	Natural rubber	Level Rubber	Nitrile rubber	Fluoro rubber	Food silica	Ethylene propylene rubber	Natural rubber
	NBR	FPM	W-NBR	EPDM	NR		NBR	FPM	W-NBR	EPDM	NR
Water (including sewage)	●	●	●	●	×	Ethanol	●	●	●	△	●
Vegetable oil	●	●	●	△	×	Kerosene	●	●	●	×	×
Mineral oil	●	●	●	×	×	Diesel oil	●	●	●	×	×
Ammonia	●	×	●	△	●	Argon chloride	×	△	×	×	×
Aromatic solvents	×	●	×	×	×	Ketone containing materials	×	×	×	●	×
Concentrated alkali	●	×	●	●	×	Alcohol containing materials	●	●	●	●	●
Concentrated nitric acid	×	△	×	×	×	Lipid containing materials	×	×	×	●	×
Glacial acetic acid	●	●	●	×	△	Ether containing materials	×	×	×	●	×
Dilute sulfuric acid	●	●	●	●	●	Slurry	●	△	●	●	●
concentrated sulfuric acid	×	●	×	△	×	Phosphoric acid	△	△	△	●	●
Dilute hydrochloric acid	●	●	×	●	●	Sodium carbonate	●	×	●	●	●
Concentrated hydrochloric acid	●	●	●	●	●	Glycoaldehyde	△	△	△	●	×
Hot water	△	×	△	●	×	Benzene 100	×	●	×	×	×
Gasoline	●	●	●	×	×	Acetone	×	×	×	●	×
Toluene	×	●	×	×	×	Flax seed oil	●	●	●	●	×
Xylene	×	●	×	×	×	Carbon disulfide	×	●	×	×	×

Explain:  
 1. The medium in the table is the adaptation of some commonly used media. If there are media with page number or special requirements, please contact S.H. Benk technology department;  
 2. ●: Very good; △: Average; ×: Poor.



# 选型原则

## 1.根据截至粘度选择泵的转速

介质粘度 (m³/h)	1~1000	1000~10000	10000~100000	100000~1000000
转速 (r/min)	400~1000	200~400	<200	<100

## 2.根据介质的磨损性选择泵的转速

介质磨损状况	介 质 种 类	转 速 (r/min)
无磨损	淡水、促凝剂、油、浆汁、肥皂水、血液、甘油...等	400~1000
一般磨损	工业废水、油漆颜料、粘灰浆、鱼、麦麸、菜籽油过滤后的沉积物...等	200~400
严重磨损	泥浆、石灰浆、灰泥、陶土、黏土...等	50~200

说明:

- a. 表中给出了所输送的具体介质及其磨损性的特例，请注意介质的特性随其浓度和温度的变化而变化；
- b. 当泵的规格越大时，转速应选低一些。

## 3.按输出压力定级数

磨损性	一 级	二 级
无磨损	0.6MPa	1.2MPa
一般磨损	0.4MPa	0.8MPa
严重磨损	0.2MPa	0.4MPa

说明:

在选择转速时须根据使用经验，因为一些其他因素也影响转速的选择，在最后确定上述数值的同时请与上海边科技术部协商而定。

## 4.单螺杆泵使用的橡胶基本特性

适应性 橡胶材质 介质性质	丁腈橡胶 NBR	氟橡胶 FPM	乙丙橡胶 EPDM	天然橡胶 NR
耐最高温度	+100°C	+150°C	+120°C	+60°C
耐磨性	○	○	●	○
耐老化性	●	○	○	×
耐臭氧	×	○	○	×
耐蒸汽	●	○	○	×
耐燃性	●	○	○	×

说明:

●：很好； ○：优良； ×：差。

## 5.单螺杆泵根据介质选择定子橡胶

适应性 橡胶 介质	丁腈橡胶 NBR	氟橡胶 FPM	食品硅胶 W-NBR	乙丙橡胶 EPDM	天然橡胶 NR	适应性 橡胶 介质	丁腈橡胶 NBR	氟橡胶 FPM	食品硅胶 W-NBR	乙丙橡胶 EPDM	天然橡胶 NR
水(含污水)	●	●	●	●	×	乙醇	●	●	●	△	●
植物油	●	●	●	△	×	煤油	●	●	●	×	×
矿物油	●	●	●	×	×	柴油	●	●	●	×	×
氨水	●	×	●	△	●	氯化氢	×	△	×	×	×
芳香族溶剂	×	●	×	×	×	含酮类物料	×	×	×	●	×
浓碱	●	×	●	●	×	含醇类物料	●	●	●	●	●
浓硝酸	×	△	×	×	×	含脂类物料	×	×	×	●	×
冰醋酸	●	●	●	×	△	含醚类物料	×	×	×	●	×
稀硫酸	●	●	●	●	●	泥浆	●	△	●	●	●
浓硫酸	×	●	×	△	×	磷酸	△	△	△	●	●
稀盐酸	●	●	×	●	●	碳酸钠	●	×	●	●	●
浓盐酸	●	●	●	●	●	糖醛	△	△	△	●	×
热水	△	×	△	●	×	苯100	×	●	×	×	×
汽油	●	●	●	×	×	丙酮	×	×	×	●	×
甲苯	×	●	×	×	×	亚麻籽油	●	●	●	●	×
二甲苯	×	●	×	×	×	二硫化碳	×	●	×	×	×

说明:

- 1.表中介质为部分常用介质的适应情况，如有页数介质情况或特殊要求可联系上海边科技术部；
- 2.●：很好； △：一般； ×：差。

## Material introduction

### Rubber sleeve + Universal joint sleeve

1. Natural rubber:
  - a. It is made of the same material as the car tire;
  - b. It is very wear-resistant;
  - c. It will swell when meeting some gasoline.
2. Nitrile rubber:
  - a. Good oil resistance;
  - b. strong compatibility.
3. EPDM:
  - a. High temperature resistance
4. Fluororubber:
  - a. It is resistant to certain clothing and has good corrosion resistance.
5. Silica gel:
  - a. Health grade.

### Motor classification

1. Standard motor:
  - a. Grade 6 or grade 8 motor;
  - b. do not use frequency conversion, otherwise it is easy to burn out
2. Variable frequency motor:
  - a. The frequency converter can adjust the Hertz and adjust the speed at the same time
  - b. The torque force of the motor is crossed. When equipped, it is better to have a gear greater than the rated motor for variable frequency motor, and the frequency converter equipped with heavy load type should be greater than one gear of variable frequency motor, such as 11kw, 15kw, 18.5kw
3. Stepless speed regulating motor:
  - a. Adjust the fixed speed by manually adjusting the scale on the motor
  - b. The motor is expensive, but practical and low failure rate
  - c. Some customers want to know the specific speed of their motor, and can install inspection meter or frequency converter
4. Reduction motor:
  - a. The motor with the lowest failure rate has low speed and high torque
  - b. High viscosity or poor fluidity liquid to use reducer
  - c. Fixed speed
  - d. The speed reduction motor is explosion-proof by speed reduction and frequency conversion
  - e. The flow rate of the pump after the reducer is reduced according to the speed ratio. For example, the flow rate is 10 t / h at 960 rpm and 5 t / h at 480 rpm with 6-stage motor. The calculation is carried out in proportion and the data on the label are changed.

### Pump body material

1. Shaft steel:

The pump body is cast iron, and the internal three shafts are made of stainless steel 201.
2. Overall:

The pump body is made of stainless steel, the three shafts are made of stainless steel, and the outer layer of rubber sleeve is made of stainless steel. In the future, all of them will be polished.

## 材质介绍

### 胶套+万向节套材质

- 1.天然橡胶:
  - a.和汽车轮胎的材质一样;
  - b.非常耐磨;
  - c.遇到一些汽油会膨胀
- 2.丁腈橡胶:
  - a.耐油性比较好;
  - b.兼容性强
- 3.三元乙丙:
  - a.耐高温
- 4.氟橡胶:
  - a.耐一定的腐蚀,耐腐蚀性比较好
- 5.硅胶:
  - a.卫生级用

### 电机分类

- 1.标准电机:
  - a.6级或8级的电机;
  - b.不可变频使用,否则容易烧坏
- 2.变频电机:
  - a.通过变频器可进行调节赫兹,同时进行调速
  - b.该电机扭矩力较差,配备时最好变频电机要大于额定电机一个档,变频器配重载型再大于变频电机一个档,如:泵-11KW,变频电机-15KW,变频器-18.5KW
- 3.无极调速电机:
  - a.通过人工调节电机上的刻度进行固定转速的一个调节
  - b.该电机价格昂贵,但实用且故障率低
  - c.有些客户想知道自己电机上的具体转速可安装视察表或变频器
- 4.减速电机:
  - a.故障率最低的电机,且转速慢扭矩大
  - b.高粘度或流动性较差的液体要用减速机
  - c.固定的转速
  - d.减速电机分 减速防爆;减速变频
  - e.配减速机后泵的流量根据速比降低如配6级电机960转时流量10吨/小时配减速电机480转时流量为5吨/小时。按比例进行计算,同时标牌得更改数据。

### 泵体材质

- 1.轴钢:

泵体为铸铁,内部三条轴为不锈钢201材质。
- 2.正体:

泵体为不锈钢材质,三条轴为不锈钢材质。

# Precautions and troubleshooting



## Warning

In order to better use the screw pump, please read the notice carefully. If the machine is damaged due to not using according to the notice, it is not the quality problem of the machine.

### Precautions for use

1. No water idling is allowed, otherwise the stator and rotor will be damaged and the motor will be burnt out.
2. Before the first use or long-term shutdown and start-up, first pour soap or lubricating liquid into the feed port, and then use tools to turn the coupling. After the coupling rotates smoothly and the internal stator and rotor are lubricated, start the machine.
3. Please do not transport liquid with particles, otherwise the particles entering the pump body will quickly wear the accessories in the pump body, which will lead to engine jam and burning.
4. When pumping liquid, make sure that the pump does not inhale too much air, otherwise there will be no liquid lubrication in the pump body, the stator and rotor are dry and worn, and the motor is damaged.
5. Do not transport the liquid that will react with the pump body or accessories.
6. Do not use the outlet closed, which will cause the pump body to be damaged due to excessive pressure.
7. If there is liquid with poor viscosity and fluidity, please use low-speed motor (deceleration motor). Before shutdown, please use cleaning fluid to transport and clean the pump body, otherwise, the stator and rotor adhesion will not start and the pump will be damaged.
8. When using variable frequency motor, adjust the starting frequency not less than 50 Hz.
9. If it needs to be shut down for a long time, please be sure to clean the pump body, so as to avoid the liquid bonding the internal parts of the pump body.
10. The sealing mode of screw pump is packing seal (there is a little leakage, which belongs to normal).

### Troubleshooting

Fault	Reason	Exclusion method
The pump doesn't turn	1.New pump rotor, stator fit too tight 2.The voltage is too low 3.Medium viscosity too high	1.Turn a few turns with the tool 2.Check and adjust the voltage 3.Diluting solution
No liquid can be pumped out	1.Wrong direction of rotation 2.There is something wrong with the suction line 3.Medium viscosity too high 4.The rotor and stator are damaged or the transmission parts are damaged 5.Foreign matter blockage in pump	1.Adjust the direction 2.Check the leakage and open the inlet and outlet valves 3.Diluting solution 4.Check and replace 5.Eliminate replacement
The flow cannot reach	1.Pipeline leakage 2.Valve not fully opened or partially blocked 3.The speed is too low 4.Wear of rotor and stator	1.Check and repair the pipeline 2.Open all valves to remove blockage 3.Adjust the speed 4.Replace the damaged parts
The pressure can't be reached	1.Wear of rotor stator	1.Replace the rotor and stator
The flow rate and pressure drop sharply	1.Sudden blockage or leakage of pipeline 2.The stator is seriously worn 3.The viscosity of the liquid changes suddenly 4.The voltage dropped suddenly	1.Check and eliminate 2.Replace 3.Find out the cause and eliminate it 4.Find out the cause and eliminate it
Motor overheating	1.Motor failure 2.The outlet pressure is too high and the motor is overloaded 3.The stator is burnt out or stuck to the rotor	1.Check the motor, voltage, current and frequency 2.Check the lift and open the outlet valve to remove the blockage 3.Replace the damaged parts
A large amount of liquid is leaking from the shaft seal	1.Wear of soft packing 2.Mechanical seal damage	1.Press or replace the material 2.Repair or replace

# 注意事项及故障排除



## 警告

为了客户能够更好的使用螺杆泵，请仔细阅读该注意事项，如果因未按注意事项使用导致的机器损坏，不属于机器的质量问题。

### 使用注意事项

1. 禁止无水空转，否则将会导致定转子损坏，电机烧坏。
2. 第一次使用或长期停机启动前，先从进料口灌入肥皂液或者润滑液体，然后用工具转动联轴器，等联轴器转动顺畅、内部定转子润滑后开机。
3. 请勿输送有颗粒的液体，否则进入泵体的颗粒将会快速磨损泵体内配件，严重则会导致卡机烧机现象。
4. 泵吸液体时确保泵不会吸入过多空气，否则将导致泵体内没有液体润滑定转子干燥磨损和电机损坏。
5. 请勿输送与泵体或配件会产生反应的液体。
6. 请勿出口封闭使用，这将导致泵体压力过大而损坏。
7. 若输送有粘度、流动性差的液体，请务必使用低转速电机（减速电机），停机前请务必用清洗液对泵体内进行输送清洗，否则将会导致定转子粘合无法启动和泵损坏。
8. 使用变频电机时，调整启动频率不小于50HZ。
9. 若需要长时间停机，请务必将泵体内清洗干净，以免液体将泵体内部配件粘合。
10. 螺杆泵的密封方式为填料密封（有一点的渗漏现象，属于正常）。

### 故障及排除方法

故障	原因	排除方法
泵不能转动	新泵转子，定子配合过紧 电压太低 介质粘度太高	用工具或人力转动几圈 检查，调整电压 稀释料液
泵不出液	旋转方向不对 吸入管路有问题 介质粘度太高 转子，定子损坏或传动部件损坏 泵内异物堵塞	调整方向 检查泄漏，打开进出口阀门 稀释料液 检查更换 排除更换
流量达不到	管路泄漏 阀门未全部打开或局部堵塞 转速太低 转子，定子磨损	检查修理管路 打开全部阀门，排除堵塞物 调整转速 更换损坏零件
压力达不到	转子定子磨损	更换转子，定子
流量，压力急剧下降	管道突然堵塞或泄漏 定子磨损严重 液体粘度突然改变 电压突然下降	检查排除 更换 找出原因排除 找出原因排除
电机过热	电机故障 出口压力过高，电机超载 定子烧坏或粘在转子上	检查电机，电压，电流，频率 检查扬程，开足出口阀，排除堵塞 更换损坏零件
轴密封处大量泄漏液体	软填料磨损 机械密封损坏	压紧或更换物料 修复或更换



## S.H. BENK CUSTOMER SERVICE

If you have any questions about S.H. Benk products, please call the S.H. bank customer hotline to provide the product model and detailed purchase information, applicable conditions and problems you have encountered, or contact us through the official website of S.H. Benk and the official designated purchase platform.

## 上海边科客户服务

关于上海边科产品，如果您有任何问题，请拨打上海边科客户热线，提供产品型号以及详细的购买情况，适用工况以及您遇到的问题，或者通过上海边科官方网站以及官方指定购买平台与我们联系。

## 上海边科顧客サービス

上海边科の製品について、もし何か問題があれば、上海边科の顧客ホットラインに電話して、製品の型番と詳しい購買状況を提供してください。労働状況及びあなたが遭遇した問題を適用します。あるいは上海边科の公式サイト及び公式指定購入プラットフォームを通じて私達と連絡を取ります。

## ОБСЛУЖИВАНИЕ КЛИЕНТОВ S.H. BENK

Что касается продукции S.H. Benk, если у вас возникнут какие – либо проблемы, позвоните по линии S.H. Benk клиентской горячей линии, сообщите о типе продукции и подробные сведения о покупке, о применимом режиме и проблемах, с которыми вы столкнулись, или свяжитесь с нами через официальный сайт S.H. Benk, а также через официально назначенную закупочную платформу.

## S.H. BENK CUSTOMER SERVICE

En ce qui concerne les produits S.H. Benk, s’ il y a un problème, appelez la ligne téléphonique d ’urgence de la clientèle S.H. Benk pour fournir le modèle de produit et des détails sur les achats, les conditions de travail et les problèmes que vous rencontrez, ou contactez – nous par l’ intermédiaire du site Web officiel de La S.H. Benk et de la plate – forme d ’achat officielle.

Contact us, please confirm the official designated platform

## 联系我们，请认准官方指定平台

私達に連絡してください。公式指定プラットフォームを確認してください。

Свяжитесь с нами, пожалуйста, официально укажите платформу

Contactez-nous pour identifier la plate-forme officielle désignée.

## S.H. Benk Machinery Group

www.chinabenk.com  
GANGYE Road, Xiaokunshan Town, Songjiang District, Shanghai  
356331869@qq.com

## 上海边科机械集团

www.chinabenk.com  
上海市松江区小昆山鎮港業路  
356331869@qq.com

## 上海边科機械グループ

www.chinabenk.com  
上海市松江区小昆山鎮港業路  
356331869@qq.com

## S.H. Benk Motors Group

www.chinabenk.com  
шанхай, район сунцзян, г.  
356331869@qq.com

## S.H. Benk Machinery Group

www.chinabenk.com  
Xiao Kunshan Zhen Gang Ye Lu, Songjiang District, ville de Shanghai  
356331869@qq.com

Scan the QR code at the bottom right of Taobao app

## 手机淘宝APP扫一扫右下方二维码

携帯は宝アプリを洗って、右下の二次元コードをスキャンします。

подметать направо и вниз

Mobile Taobao APP balaie le code bidimensionnel en bas à droite.



Scan the QR code at the bottom right of Alibaba app

## 阿里巴巴APP扫一扫右下方二维码

アリババアプリは右下の二次元コードをスキャンします。

Alibaba APP подметает правое нижний двухмерный код

Aribaba APP, nettoie le code 2D en bas à droite.

