



I-1B(F) 不锈钢 Stainless Steel



I-1B(B) 铸铁 Cast Iron

产品概述

I-1B 型浓浆泵是单螺杆式容积泵，该泵利用偏心单螺旋的螺杆在双螺旋衬套内的转动，使浓浆液沿螺旋槽由吸入口推移到排出口，实现泵的输送功能。

主要特点

1. 可输送高浓度高粘度及含有颗粒的悬浮浆液；
 2. 输送液流稳定，无过流、脉动及搅拌、剪切浆液现象；
 3. 排出压力与转速无关，低流量也可保持高压输出；
 4. 流量与转速成正比，通过变频器或调速电机可实现流量调节；
 5. 自吸能力强，不用装底阀可直接抽吸液体；
 6. 泵可逆转，液体流向由泵的旋转方向来改变，适用于管道需反正向冲洗的场合；
 7. 运转平稳、振动、噪声小；
 8. 结构简单、拆装维修方便；
- 本泵广泛应用于食品加工、酿造、造纸、制药、化工、建筑、矿山、油田、环保等各种行业。

结构材质型式

I-1BB 型：壳体铸铁，传动件（主轴、螺杆轴和绕轴）为 2cr13 不锈钢制造，适用于一般中性浓浆液的输送，一般微酸、碱浆液的输送。

I-1BF 型：传动件和接触浆液的部件均由不锈钢制造，适用于食品、制药及腐蚀性浆液的输送。

橡胶衬套有一般耐磨橡胶，食用橡胶和耐油橡胶等供用户选择。

传动方式有电机与泵轴直接联接、电机经减速器与泵直接联接、调速电机经减速器与泵联接。

配用电动机有一般封闭式、防爆式和电磁调速或无级变速式电机供用户选择。

Product Overview

I-1B Thick Slurry pump is a single screw-type pump, the pump using a single screw eccentric screw in the double helix rotation within the bush, so thick slurry along the spiral groove by the intake passage to the discharge outlet, achieving pump transport function.

Main Features

1. Can deliver high-viscosity and high concentration of suspended particles containing slurry;
 2. Transmission flow stability, no over-current, pulsating and mixing, shear slurry phenomenon;
 3. Discharge pressure has nothing to do with speed, low-flow but also to maintain high pressure output;
 4. Traffic and speed is proportional to motor speed by variable speed drive or the flow regulator can be realized;
 5. Self-priming ability, not the end of valve can be installed directly to suction liquid;
 6. Pump can be reversed, the liquid flows from the pump to change the direction of rotation, suitable for piping to be washed anyway, the occasion;
 7. Stable operation, low vibration, low noise;
 8. Simple structure, easy to maintenance disassembly;
- The pump is widely used in food processing, brewing, paper making, pharmaceutical, chemical, construction, mining, oil fields, environmental protection, etc.

Structural Material Type

I-1BB type: shell of cast iron, transmission parts (spindle, screw shaft and rod shaft) is made from 2cr13 stainless steel, suitable for general neutral thick slurry delivery, generally slightly acidic, alkaline slurry delivery.

I-1BF type: Transmission parts and Contact with slurry components is made from stainless steel, used in food, pharmaceutical and corrosive slurry delivery.

The user can choose general wear resistant rubber, eating rubber and oil resistant rubber.

Transmission methods are directly connected motor and pump shaft, motor and pump directly connected through the reducer, speed reducer and pump motor connected through.

Equipped with motors contain a general closed, explosion-proof type and electromagnetic speed or variable speed motor for the user to choose.

常规性能参数 Conventional Performance Parameters

型号 Model	流量 Flow (m ³ /h)	扬程 Head (m)	压力 Pressure (MPa)	转数 Speed (r/min)	电机功率 Motor Power (kW)	进出口直径 Inlet and Outlet Diameter (mm)
I-1B1寸(Inch)	1.5	50	0.5	960	1.1	25
		100	1	960	2.2	
I-1B1.5寸(Inch)	3.2	80	0.8	960	2.2	40
		120	1.2	960	4	
I-1B2寸(Inch)	5.6	80	0.8	960	3	50
		120	1.2	960	5.5	
I-1B2.5寸(Inch)	6.5	80	0.8	960	3	65
		120	1.2	960	7.5	
I-1B3寸(Inch)	12	60	0.6	960	5.5	75
		120	1.2	960	11	
I-1B4寸(Inch)	16	60	0.6	960	7.5	100
I-1B5寸(Inch)	19	60	0.6	960	11	125
I-1B6寸(Inch)	38	60	0.6	720	11	150

减速时的性能参数 Gear Reduction Performance Parameters

型号 Model	流量 Flow (m ³ /h)	扬程 Head (m)	压力 Pressure (MPa)	转数 Speed (r/min)	电机功率 Motor Power (kW)	进出口直径 Inlet and Outlet Diameter (mm)
I-1B1寸(Inch)	1.1	50	0.5	720	0.75-8级	25
		100	1	720	1.5-8级	
I-1B1.5寸(Inch)	2.4	80	0.8	720	1.5-8级	40
		120	1.2	720	3-8级	
I-1B2寸(Inch)	4	80	0.8	720	2.2-8级	50
		120	1.2	720	4-8级	
	3	80	0.8	510	2.2(齿轮减速)	
		120	1.2	510	3(齿轮减速)	
I-1B2.5寸(Inch)	5	80	0.8	720	3-8级	65
		120	1.2	720	4-8级	
	4	80	0.8	510	2.2(齿轮减速)	
		120	1.2	510	4(齿轮减速)	
I-1B3寸(Inch)	9	80	0.8	720	4/5.5-8级	70
		120	1.2	720	7.5-8级	
	6.5	80	0.8	510	4(齿轮减速)	
		120	1.2	510	5.5(齿轮减速)	
I-1B4寸(Inch)	10	60	0.6	510	5.5(齿轮减速)	100
I-1B5寸(Inch)	12	60	0.6	510	7.5(齿轮减速)	125
I-1B6寸(Inch)	16	60	0.6	510	11(齿轮减速)	150

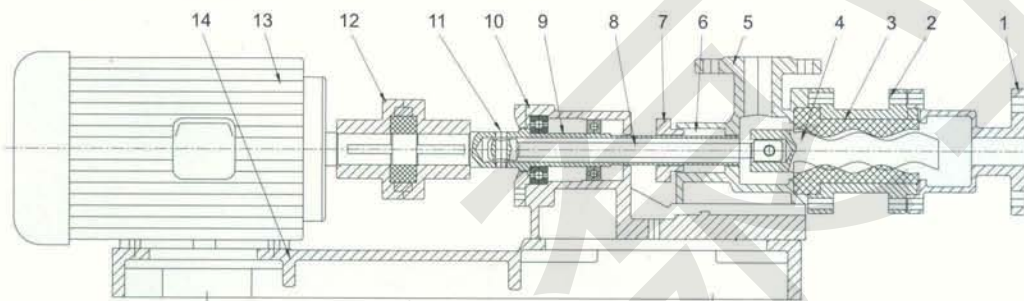
注：1. 性能参数为常温清水的试验数据； 2. 当泵输送高粘度、有颗粒、高磨损性的介质时，必须改变泵的转速。

Note: 1. the performance parameters of the test data of water at room temperature; 2. when the pump delivery of high viscosity, there are particles, high-abrasion of medium, must change the pump speed.

易损件 Wearing Parts

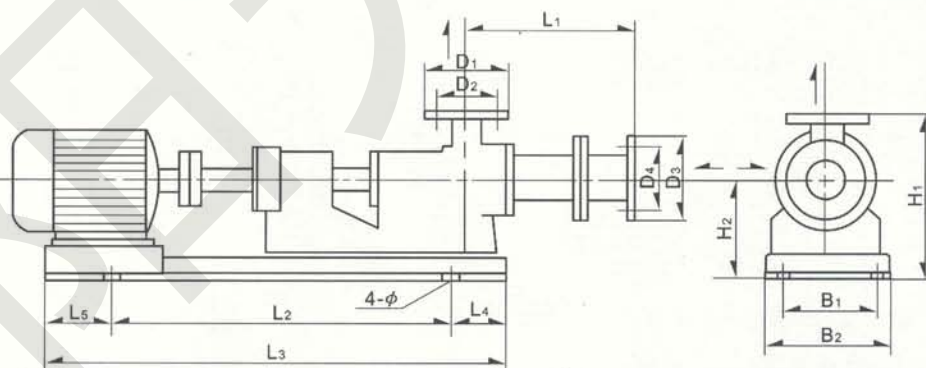


结构图 Structural Drawing



1	接头 Connector	2	长筒 Longituba	3	橡胶套 Rubber sleeve	4	螺杆轴 Screw shaft	5	三通体 3 henselae	6	石棉填料 Asbestos packing	7	填料压盖 Packing gland
8	绕轴 Around axis	9	空心泵轴 Hollow shaft	10	泵座 Pump seat	11	销帽 Nut pin	12	联轴器 Coupling	13	电机 Motor	14	底座 Base

外形及安装尺寸 Overall and Installation Dimensions



型号口径	L ₁	L ₂	L ₃	L ₄	L ₅	H ₁	H ₂	M ₁	M ₂	φ	D ₁	D ₂	D ₃	D ₄
I-1B25	250	455	620	85	80	225	140	160	190	14	115	85	115	85
I-1B40	275	515	830	215	100	282	160	220	250		145	110	145	110
I-1B50	370	720	950	120	110	330	200	265	300		160	125	160	125
I-1B65	410	720	950	120	110	330	200	265	300		180	145	180	145
I-1B75	450	820	1100	155	125	385	220	285	320	16	195	160	195	160
I-1B100	500	820	1200	230	150	410	230	295	330		215	180	215	180
I-1B125	500	820	1200	230	150	410	230	295	330		245	210	245	210

安装调试注意事项 Installation Notes

1. 泵本身不应承受管路重量，进出口管应有各自的支架承重，以免因重压使泵产生变形而损坏。管路法兰如有歪斜应采用柔性连接，不得用螺栓强行紧固，管内杂物要清理干净。
2. 新泵或长时间未使用的泵，开机前应向泵体内注入适量洗洁精，再用管子钳按泵转向反方向扳动，待充分润滑后，才可以启动。（第一次开机时间不能太短，不然下次开机要重复润滑。）
3. 开机前轴承箱应加入足量润滑油(黄油)。
4. 全开进口阀门，全开出口阀门，点动泵，调整电机转向，使其与泵转向一致。
5. 全开进口阀门，全开出口阀门，启动泵。待电机达到正常转速后，缓缓关小出口阀门，调节出口阀门使压力表读数与泵铭牌扬程一致。不允许在缺液的情况下运转泵，以免泵内部件因缺少液体冷却与润滑而温度急剧升高造成损坏。
6. 在运转过程中，发现有异样声音或其他故障，应立即停车检查，待故障排除后，才能继续使用。
7. 输送高粘度或含颗粒及腐蚀性的介质后，应用水或溶剂进行冲洗，防止堵塞，以免下次启动困难。冬季应排除积液，防止冻裂。

1. Pump piping should not allow ourselves to bear the weight of import and export control should have its own bracket bearing, so as to avoid deformation due to stress damage the pump. Pipe flange connection, if skew should be flexible, shall not be forcibly fastened with bolts, pipe junk to clean up.

2. If the new pump haven't use for a long time, should inject an amount of cleanser essence before using ,and then trip the pump to reverse direction by tong, it can start when pump body is fully lubricated.

3. Pre-boot bearing box should be added enough oil (butter).

4. Opened full inlet of valves, opened full outlet valve, inching pump, then adjusting the motor swerve according to pump swerve.

5. Opened full inlet of valves, opened full outlet valve, pump started. Motor reaches the normal speed until after the off slowly small export valves, regulating valves to enable the export nameplate pressure gauge reading head in line with the pump. Does not allow the case of lack of liquid running pump, so as not to pump the internal parts due to lack of lubrication and the temperature of liquid cooling and a sharp increase in damage.

6. In the operation of the process, found to have abnormal sounds or other failure, should immediately stop checks, when troubleshooting before they can continue to use.

7. Transport of high viscosity or containing particles and the corrosive medium, the application of water or solvent washing to prevent clogging, so next time you start difficulties. Effusion should be excluded in winter to prevent the frost crack.



发酵面团输送
Transmission for
fermented dough



最高浓度为75%的糖浆
Syrup with highest
consistency of 75%



输送粘稠且含固量高的土豆渣
Transmission for
glutinous potato dregs



输送葡萄汁
Transmission for
grape juice

故障原因及其排除方法 Failures Causes and Troubleshooting

故障现象 Failure	可能产生的原因 Possible Causes	排除方法 Troubleshooting
泵不能启动 Pump unable to be started	<ol style="list-style-type: none"> 1. 新泵转子、定子配合过紧。 2. 电压太低。 3. 介质粘度过高。 <ol style="list-style-type: none"> 1. The rotor and stator of new pump over fastened. 2. Voltage too low. 3. Excessive viscosity of medium. 	<ol style="list-style-type: none"> 1. 倒润滑油用工具人力帮助转动几圈。 2. 检查、调整。 3. 稀释料液。 <ol style="list-style-type: none"> 1. Pour lubricant, turn it for several rounds with a tool by manpower 2. Check and adjust. 3. Dilute the feed liquid.
泵不出液 No liquid coming out from pump	<ol style="list-style-type: none"> 1. 旋转方向不对。 2. 吸入管路有问题。 3. 介质粘度过高。 4. 转子、定子损坏或传动部件损坏。 5. 泵内异物堵塞。 <ol style="list-style-type: none"> 1. Wrong rotating direction. 2. Suction pipeline in trouble. 3. Excessive viscosity of medium. 4. Rotor, stator or driving components damaged. 5. Pump blocked inside. 	<ol style="list-style-type: none"> 1. 调整方向。 2. 检查泄漏, 打开进出口阀门。 3. 稀释料液。 4. 检查更换。 5. 排除更换。 <ol style="list-style-type: none"> 1. Adjust the direction. 2. Check the leakage, open inlet and outlet valves. 3. Dilute the feed liquid. 4. Check and replace. 5. Replace.
流量达不到 Short of flow rate	<ol style="list-style-type: none"> 1. 管路泄漏。 2. 阀门未全部打开或局部堵塞。 3. 转速太低。 4. 转子、定子磨损。 <ol style="list-style-type: none"> 1. Leakage in pipeline. 2. Valve not fully opened or partially blocked. 3. Rotating speed too low. 4. Rotor and stator damaged. 	<ol style="list-style-type: none"> 1. 检查修理管路。 2. 打开全部阀门、排除堵塞物。 3. 调整转速。 4. 更换损坏零件。 <ol style="list-style-type: none"> 1. Check and repair the pipeline. 2. Open all the valves and clear away the blockage. 3. Adjust the rotary speed. 4. Replace the damaged parts.
压力达不到 Short of pressure	<p>转子、定子磨损。 Rotor and stator damaged.</p>	<p>更换转子、定子。 Replace the rotor and stator.</p>
电机过热 Motor overheated	<ol style="list-style-type: none"> 1. 电机故障。 2. 出口压力过高, 电机超载。 3. 定子烧坏或粘在转子上。 <ol style="list-style-type: none"> 1. Failure of motor. 2. Excessive outlet pressure, motor overloaded. 3. Stator burned out or stuck onto the rotor. 	<ol style="list-style-type: none"> 1. 检查电机、电压、电流、频率。 2. 检查扬程, 开足出口阀门, 排除阻塞。 3. 更换损坏零件。 <ol style="list-style-type: none"> 1. Check the motor, voltage, current and frequency. 2. Check the head, fully open the outlet valve and clear away the blockage. 3. Replace the damaged parts.
流量、压力急剧下降 Sudden drop of flow and pressure	<ol style="list-style-type: none"> 1. 管道突然堵塞或泄漏。 2. 定子磨损恶劣。 3. 液体粘度突然改变。 4. 电压突然下降。 <ol style="list-style-type: none"> 1. Sudden blocking or leaking in pipeline. 2. Stator seriously damaged. 3. Sudden change of liquid viscosity. 4. Sudden drop of voltage. 	<ol style="list-style-type: none"> 1. 检查排除。 2. 更换。 3. 找出原因排除。 4. 找出原因排除。 <ol style="list-style-type: none"> 1. Check and solve. 2. Replace. 3. Find out the cause for solution. 4. Find out the cause for solution.
轴密封处大量泄漏液体 Serious leakage of liquid at shaft seal	<ol style="list-style-type: none"> 1. 软填料磨损。 2. 机械密封损坏。 <ol style="list-style-type: none"> 1. Soft packing damaged. 2. Mechanical seal damaged. 	<ol style="list-style-type: none"> 1. 压紧或更换填料。 2. 修复或更换。 <ol style="list-style-type: none"> 1. Press out or replace the packing. 2. Repair or replace.