

# 密友MIYOU

为您指路



## 容器. 搅拌. 密封一体化

Integration of Pressure Vessel, Mixer and Mechanical Seal

1. 火车站1路公交车至亭林公园转18路到达密友  
Take the bus no. 1 at Kunshan railway station to Tingling park.  
Then transfer bus No. 18 to Miyou Group.
2. 高铁站18路到达密友  
Take the bus no. 18 directly to Miyou Group at Kunshan high speed railway station.
3. 巴城出口下，往昆山方向，城北路向东3公里到达密友  
Take Bacheng exit ramp off from the high way. Drive to Kunshan direction.  
Then drive along Chengbei road from west to east for about 3 kilometers.

## 产品质量是密友人的生命 Quality is the Life of Our Company

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MIYOU GROUP Co., Ltd

### 昆山密友机械密封有限公司

Kunshan Miyou Mechanical Seal Co.,Ltd

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# 公司简介 Company Profile

密友集团有限公司坐落于昆山国家高新技术开发区，1985年创办，2008年经国家工商总局批准成立国家级集团公司。注册商标“密友”为中国驰名商标，总注册资本1.8亿元，总资产4.8亿元，员工568人。专业设计和制造压力容器、机械密封、搅拌传动密封装置一体化成套设备。

公司建有国家级实验基地，产学研合作基地，江苏省企业技术开发中心。拥有一流的现代化加工及检测设备315套，通过ISO9001:2008国际质量体系认证、CE认证。第三类低中压力容器生产许可证(证书编号：TS2210A67-2014)，密封行业高压、大轴径机械密封生产许可证（证书编号：XK06-007-00197）。目前正在申请ATEX欧洲防爆认证。

公司紧紧围绕省级工程技术研究中心和省级企业技术中心开展各项研发工作，从研究设计、开发试制到推广应用，都有着结构合理的专业研发队伍，拥有研发人员68名，聘用院士、专家、教授共16名，为公司研发中心在课题选择、研发方向、技术方案、难题攻关等方面提供技术支持。现已拥有国家专利98项，其中发明专利31项；制定行业标准9项，国家标准1项。

公司制定三年发展目标，进一步加快技术创新步伐，扩建厂房、增添设备，达到规模化、大型化、成套化。

公司目标：您的满意就是密友的追求。

Miyou Group was established in 1985, located in Jiangsu Kunshan Technological and Industrial Park. Our company was approved to be a National level group company in 2008. The trade mark 'Miyou' is a national well-known trade mark which is awarded by SAIC, China. Our total registered capital is RMB 180 million, total assets is 4.8 million. There are 568 employees in our company. Our company is specialized in design and manufacture pressure vessel, mechanical seal and integrated complete equipment of agitator, driver and mechanical seal.

There are a national level experimental base, a university-industry cooperation base and a province level enterprise technology development base in our company. We have 315 sets of first class processing and inspection equipments. Our company obtained the ISO9001:2008 international quality system certificate, the CE certificate, The production licence of Class III pressure vessel ( Licence No.:TS2210A67-2014), The production licence of high pressure and the large shaft diameter mechanical seal ( Licence no.: XK06-007-00197). Now We are applying for European ATEX anti-explosion certificate.

We are carrying out R&D work in our province level engineering research center and province level technology center. We have specialized team to research , design , develop and apply the products. There are total 68 staffs in our R&D team, We also hired 16 academicians, experts and professors to support our technical research. Now we have 98 National patents which include 31 invention patents. We set 9 Industrial standards and 1 National standard in our field.

Our company set a Three-year development goal to speed up technological innovation , workshop extension and processing equipments addition. To make our products large-scale and integrated.

Company goal: Customer's satisfaction is our pursuit.



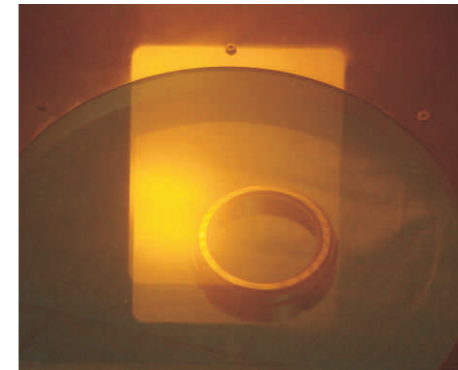
*Ideal Partner Intimate Friend*



瑞士进口的二次元检测仪器  
Quadratic Elements Measuring Instrument  
Imported From Switzerland



三维检测仪器  
3D Measuring Instrument



300mm 大尺径平面度检测仪器  
Flatness Measure Instrument



左：弹簧拉压试验机  
Spring Pull and Press Tester  
右：布洛维光学硬度计  
Brinell Optics Hardness Sclerometer



产品测试台  
Product Test Board

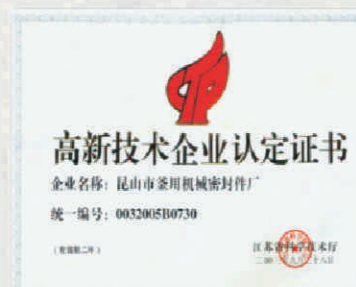
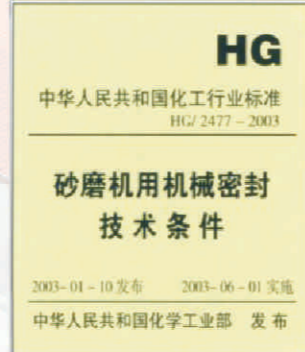
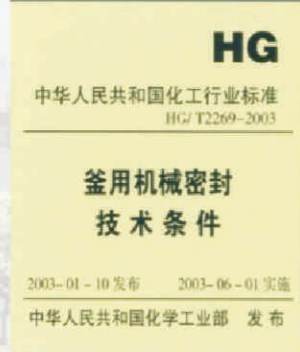
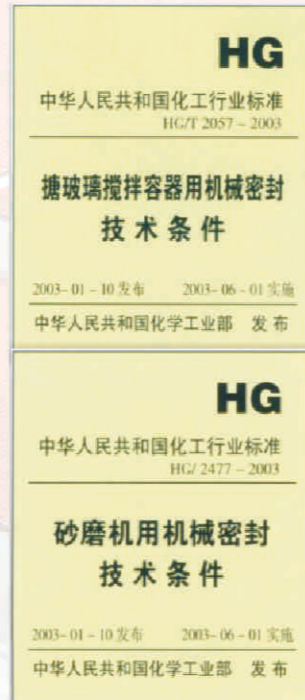
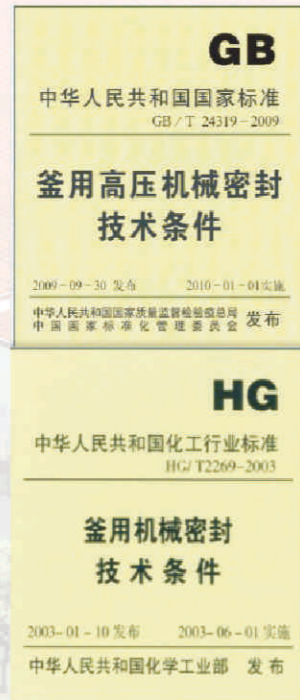


国外进口的先进数控加工设备  
Advanced CNC Processing Equipment



国家示范工程 国家新产品  
国家火炬项目 国家标准制定单位

National Demonstration Projects, National New Product  
National Torch Project, National Standard Formulated Unit



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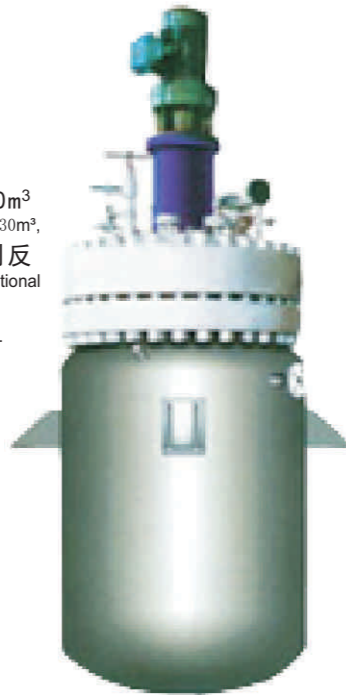


I、II、III类压力容器  
I, II, III class pressure vessel



**常规反应釜**  
Conventional reactors.

应用范围: 压力 $\leq 2.5$ MPa, 容积 $\leq 30$ m<sup>3</sup>  
Application range Working pressure $\leq 2.5$ Mpa, Volume $\leq 30$ m<sup>3</sup>,  
温度 $\leq 260$ °C, 普通钢制反  
Working temperature $\leq 260$ °C, Conventional  
反应釜及非标容器。  
steel reactor and non-standard vessels.



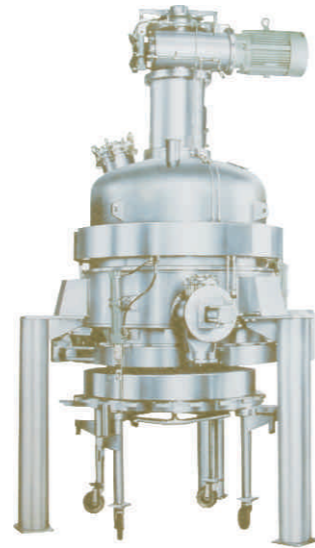
**高压反应釜**  
High pressure reactor

应用范围: 压力 $\leq 9.9$ MPa, 容积 $\leq 25$ m<sup>3</sup>  
Application range Working pressure $\leq 9.9$ Mpa, Volume $\leq 25$ m<sup>3</sup>,  
温度 $\leq 350$ °C, 钢制高压釜。  
Working temperature $\leq 350$ °C, Steel reactor.



**多搅拌反应釜**  
Multi-mixers reactor

应用范围: 压力 $\leq 1.6$ MPa, 容积 $\leq 30$ m<sup>3</sup>  
Application range Working pressure $\leq 1.6$ Mpa, Volume $\leq 30$ m<sup>3</sup>,  
温度 $\leq 260$ °C, 多搅拌钢制反应釜。  
Working temperature $\leq 260$ °C, Steel reactor.



**三合一多功能反应釜**  
3in 1 multi-functional reactors.

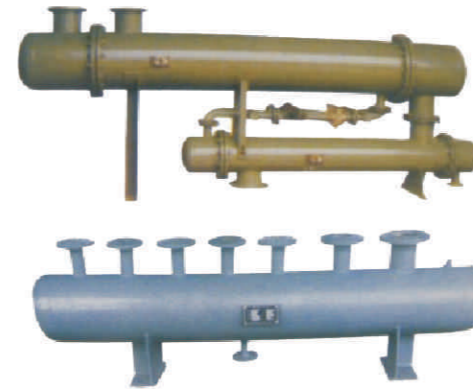
应用范围: 压力 $\leq 0.3$ MPa, 容积 $\leq 14.5$ m<sup>3</sup>  
Application range Working pressure $\leq 0.3$ Mpa, Volume $\leq 14.5$ m<sup>3</sup>,  
温度 $\leq 180$ °C, 集过滤、洗涤、  
Working temperature $\leq 180$ °C, Integrates filtering,  
干燥搅拌反应于一体。  
washing, drying, mixing and reacting



**不锈钢反应釜**  
Stainless steel reactor

应用范围: 压力 $\leq 2.5$ MPa, 容积 $\leq 30$ m<sup>3</sup>  
Application range Working pressure $\leq 2.5$ Mpa, Volume $\leq 30$ m<sup>3</sup>,  
温度 $\leq 260$ °C, 不锈钢医药  
Working temperature $\leq 260$ °C, Stainless steel  
食品级反应釜。  
reactor for pharmaceutical and food industries.

I、II、III类压力容器  
I, II, III class pressure vessel



**冷凝器**  
Cooling condenser

用于化工、制药行业等物料  
Applies to cooling and multiple piping separate  
热水冷却及多管分流设备。  
equipments in chemical, pharmaceutical industries.



**汽液分离器**  
Gas-liquid separator

食品行业汽液分离设备  
Food industries gas-liquid separator



**列管式换热器**  
Tube type heat exchanger

用于化工、制药、食品行业的产品降温设备。  
Applies to cooling equipments in chemical pharmaceutical and food industries



**卧式反应釜**  
Horizontal reactor

非标定制各类卧式反应釜, 根  
Customer made horizontal reactors, 根  
据客户需求生产30m<sup>3</sup>以内产品。  
The volume within 30m<sup>3</sup>.



**储罐**  
Storage tank

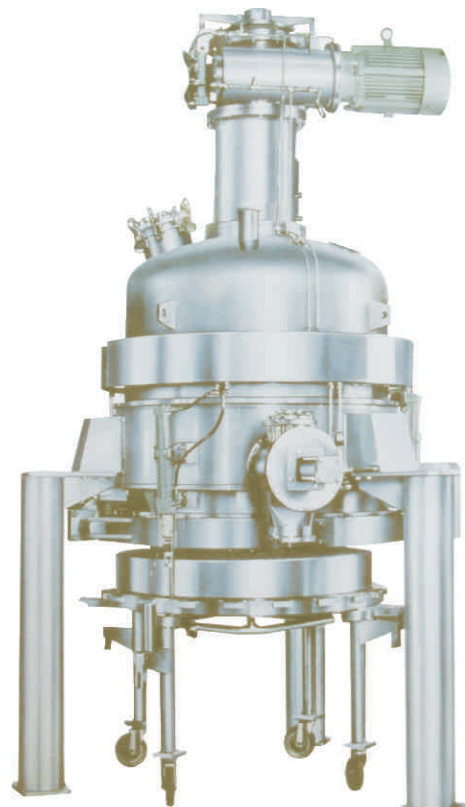
用于压缩机后的储气设备, 可以节  
Air storage tank for saving the power of air compressor.  
省电源稳定压力。



## MSY三合一多功能搅拌釜

MSY 3 in 1 multifunctional mixing reactor

### 产品概述



- **过滤阶段：**产品的滤饼和母液的分离。滤饼厚度可达500mm。
- **洗涤阶段：**滤饼进一步纯化，残母液清洗和予脱水。通过升降搅拌器逐层将滤饼和洗液混合，最后形成浆状，悬浊液滤饼得到充分洗涤。
- **干燥阶段：**滤饼的脱水干燥处理，滤饼在被搅拌器逐层刮疏松的同时，设备侧壁、滤板的底部、以及运动搅拌叶同时对滤饼加热，湿份迅速蒸发达到干燥的效果，通过设备内真空的方法加快蒸发速度，通过加入处理后的热氮气等介质带走蒸发的湿份，使物料加速干燥，提高干燥效果。
- **卸料阶段：**干燥物料通过S型搅拌浆的反转推动物料从侧出料口自动卸出，直接进入包装。
- 该过滤、洗涤、干燥“三合一”设备，可以同时替代过滤及干燥设备(如：抽滤器、压滤器、双锥干燥器、干燥箱等)在同一台设备内完成过滤、洗涤、干燥、固体卸料全过程。广泛应用于医药、化工、农药、食品等行业，是过滤干燥的最佳设备。可实现全封闭、全过程的连续操作生产，更适应于无菌要求的产品及有毒产品的生产。

Filtering stage: Separate the filter cake from the mother solution. The thickness of filter cake can reach 500mm.

Washing stage: Further purify the filter cake, wash the mother solution and dehydration. By means of rising and falling the mixer to mix the filter cake and washing liquid. Then turbid liquid and filter cake will be washed sufficiently.

Drying stage: While the filter cake is being loosened by mixer, it is also being heated by the side wall, the filter plate and the rotating mixer. Then the moisture promptly evaporating. The vacuum condition inside the equipment will accelerate evaporation. Also the heated nitrogen can speed up drying and improve drying result.

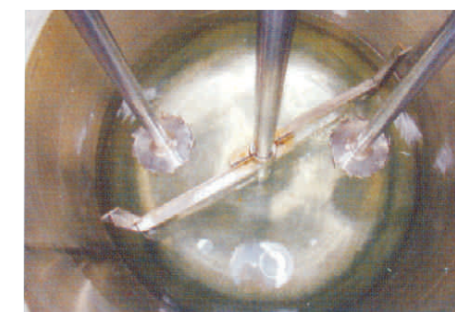
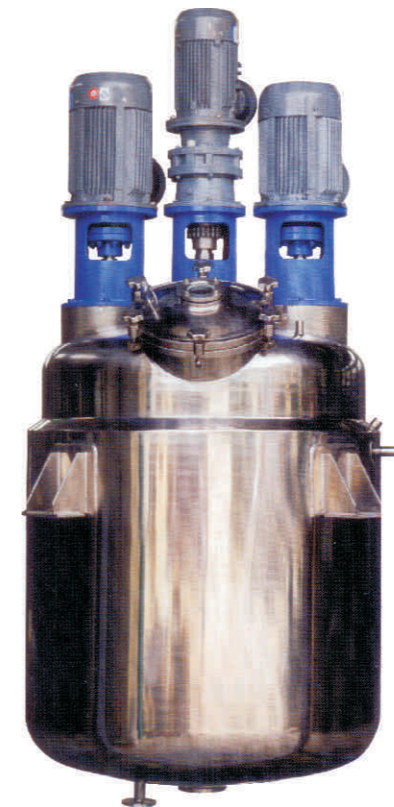
Discharging stage: The dried products can be discharged to wrappage from the side discharging outlet by inverting rotation of the mixer.

This is a 3 in 1 equipment with filtering, washing and drying function. It can take the place of filtering and drying equipment (e.g. suction filter, press filter, double cone dryer and drying box etc.) It integrates the function of filtering, washing drying and discharging. It can be widely applied in pharmaceutical, chemical, agrochemical and food industries. It is a best choice for filtering and drying process requirement. A totally closed and continuously production can be realized. So it is also suitable for aseptic production and nocuous production.

产品规格 Specification	1000	1200	1400	1600	1800	2000	2400	2800	3000
容积 (m <sup>3</sup> ) Volume	1.2	1.5	2.2	3	3.5	4	6	9.5	10.2
过滤面积 (m <sup>2</sup> ) Filtration volume	0.8	1	1.5	2	2.5	3	4.5	6	7
搅拌行程 (mm) Mixer travel	300	300	400	400	400	400	450	450	500
电机功率 (kW) Motor power	5.5	5.5	7.5	7.5	11	11	15	18.5	22

## MFS三合一多功能分散釜

MFS 3 in 1 multifunctional dispersing reactor



### 主要特点

Features:

- 本机集低速强烈搅拌与高速分散多功能于一体，对中高粘度及触变性物料具有良好的适应性。  
Integrates low speed mixing and high speed dispersing. It has a good adaptability for high viscosity and thixotropy products.
- 适用于各种物料的搅拌、溶解分散和配色，尤其适用于批量乳胶漆生产。  
It can be applied to mixing, dissolving, dispersing and color blending of a variety of products. Especially suitable for emulsion paint production.

规格 Specification	MFS-2m <sup>3</sup>	MFS-3m <sup>3</sup>	MFS-5m <sup>3</sup>	MFS-6m <sup>3</sup>	MFS-8m <sup>3</sup>	MFS-10m <sup>3</sup>	MFS-12m <sup>3</sup>	
容积 (m <sup>3</sup> ) Volume	2	3	5	6	8	10	12	
搅拌功率 (kW) Mixing power	5.5	5.5	7.5	7.5	11	15	18.5	
搅拌转速 (r/min) Rotating speed for mixing	50	50	50	50	41	41	41	
搅拌器直径 (mm) Diameter of the mixer	1300	1500	1700	1700	1900	2100	2300	
分散转速 (r/min) Rotating speed for dispersing	960/1450	960/1450	960/1450	960/1450	870/1470	870/1470	750/1480	
分散功率 (kW) Dispersing power	13/16	13/16	22/28	22/28	22/28	26/34	30/42	
分散盘个数 Number of dispersing plate	2	2	2	2	2	2	2	
外形尺寸 Dimension (mm)	D	1400	1600	1800	1800	2000	2200	2400
	H1	1650	1765	2048	2400	2800	2950	3100
	H2	1930	2000	2200	2200	2500	2570	2620



## MFF高速分散釜

MFF high speed dispersing reactor



### 主要特点

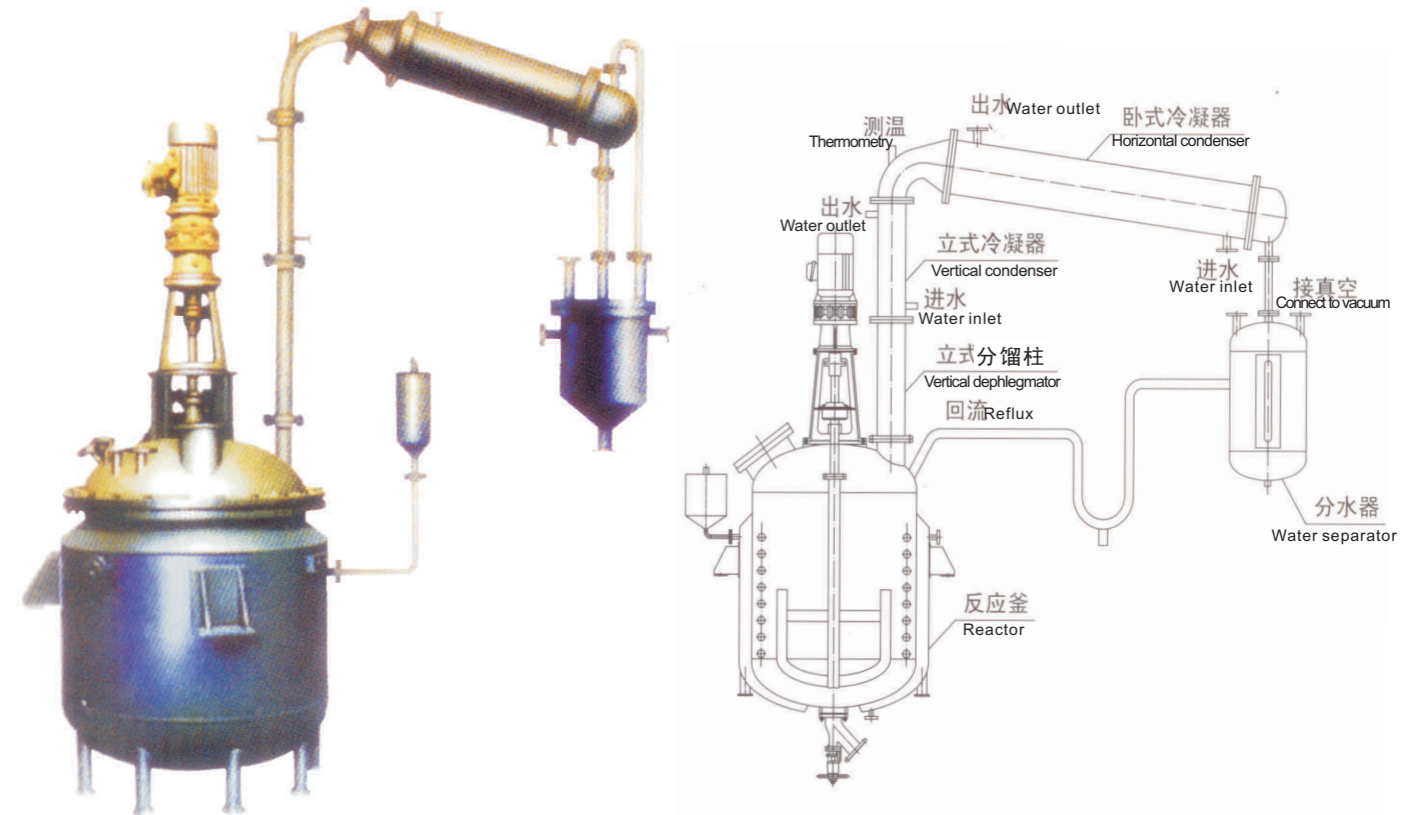
Features:

- 适用于涂料、染料、颜料、造纸、胶贴剂等化工业 对液体及液固相容物料进行搅拌、溶解和分散。  
Suitable for painting, dye, pigment and adhesive industries, Mix, resolve and disperse the liquid or the solid liquid mixture.
- 特点：搅拌、分散时空气吸留极少，混合与调匀效果俱佳，用中、高速搅拌，分散可使物料迅速溶解，颗粒变小。  
Features: Low air retention in process of mixing and dispersing. So the results of mixing and dispersing is very good. Intermediate and high speed mixing and dispersing can resolve the products immediately and micrify the particle size.

规格 Specification	MFF-0.5m <sup>3</sup>	MFF-1m <sup>3</sup>	MFF-2m <sup>3</sup>	MFF-3m <sup>3</sup>	MFF-4m <sup>3</sup>	MFF-5m <sup>3</sup>	MFF-6m <sup>3</sup>	MFF-10m <sup>3</sup>	
电机功率 (kW) Motor power	11	15	30	37	45	55	75	110	
分散轴转速 (r/min) Dispersion shaft speed	0-1450	0-1450	0-1450	0-1450	0-1450	0-1450	0-1450	0-1000	
料缸容积 (m <sup>3</sup> ) Volume	0.5	1	2	3	4	5	6	10	
调速形式 Speed regulation	电磁调速/变频调速 Electromagnetic control				变频调速 Frequency control				
分散盘直径 (mm) Dispersion disk diameter	250	300	350	380	400	450	500	550	
外形尺寸 Dimension (mm)	D	800	1000	1450	1500	1600	1800	1900	2200
	H	1000	1250	1575	1880	2180	2235	2360	2820
	H2	850	1170	1380	1480	1570	1690	1740	1850

## 树脂生产设备

Resin production equipment



反应釜 Reactor	立式分馏柱 Vertical dephlegmator			卧式冷凝器 Horizontal condenser		分水器 Separator	
	规格 Specification L	分馏柱规格 Specification of dephlegmator mm	填料容积 Packing volume m <sup>3</sup>	冷却面积 Cooling area m <sup>2</sup>	规格 Specification mm	冷却面积 Cooling area m <sup>2</sup>	规格 Specification mm
50	Φ76x460	0.002	0.10	Φ108x750	0.29	Φ200x250	8
100	Φ108x500	0.0046	0.19	Φ159x750	0.58	Φ300x320	30
200	Φ139x530	0.0073	0.2	Φ220x800	1.035	Φ350x380	36
300	Φ159x560	0.01	0.22	Φ220x1000	1.49	Φ400x420	53
500	Φ159x750	0.015	0.29	Φ273x1400	2.08	Φ410x450	60
1000	Φ198x800	0.025	0.62	Φ300x1500	3.17	Φ410x450	60
1500	Φ198x850	0.025	0.62	Φ350x1800	5	Φ410x450	60
2000	Φ220x1000	0.035	1.0	Φ350x1800	6	Φ500x500	98
3000	Φ273x1100	0.58	1.2	Φ400x1800	8	Φ500x500	98
5000	Φ300x1200	0.65	1.5	Φ400x2000	15	Φ600x600	120



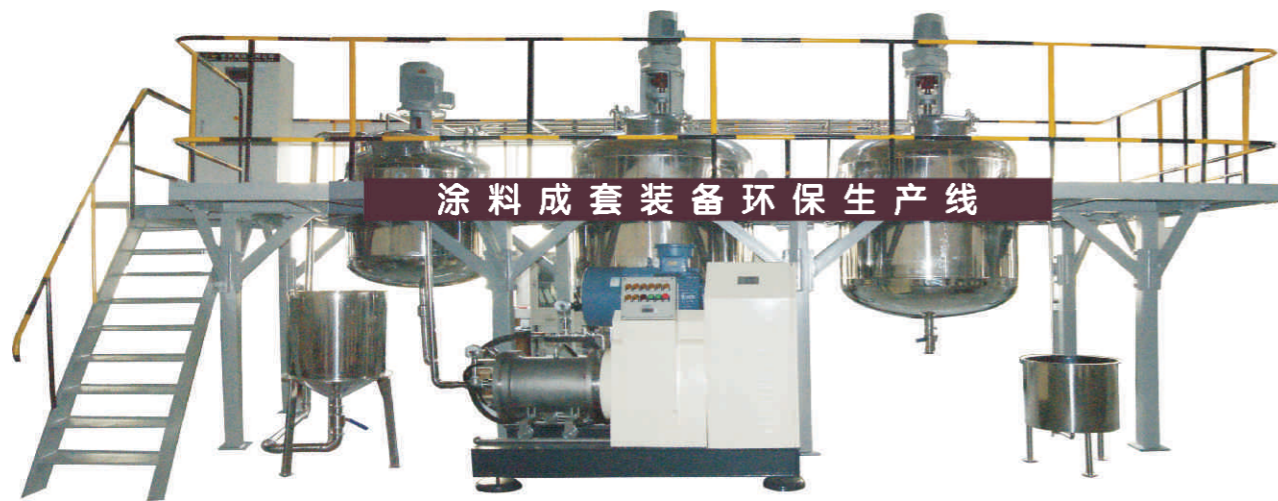
### 化工设备成套装备

Complete equipment for chemical industries.



公司产品在台湾日产化工的水悬浮剂成套生产线

Miyou SC formulation complete production equipment in Taiwan.



公司产品在奥麒化工有限公司的涂料成套生产线

Miyou Painting and pigment complete production equipment in Arch Chemicals Co., Ltd., China.

从控制开始为客户设计、制作成套化工、农药、涂料生产线。根据客户需求可实

We can design the complete equipments with remote control for chemical, agrochemical and pigment industries.

现自动化操作和远程监控。所有隐患均可在早期预警，并提示出问题点，满足客户高稳定、高安

Early warning system with failure prompt can be also integrated for stability, safety, power saving and enviromental

全、高节能环保生产线的要求。

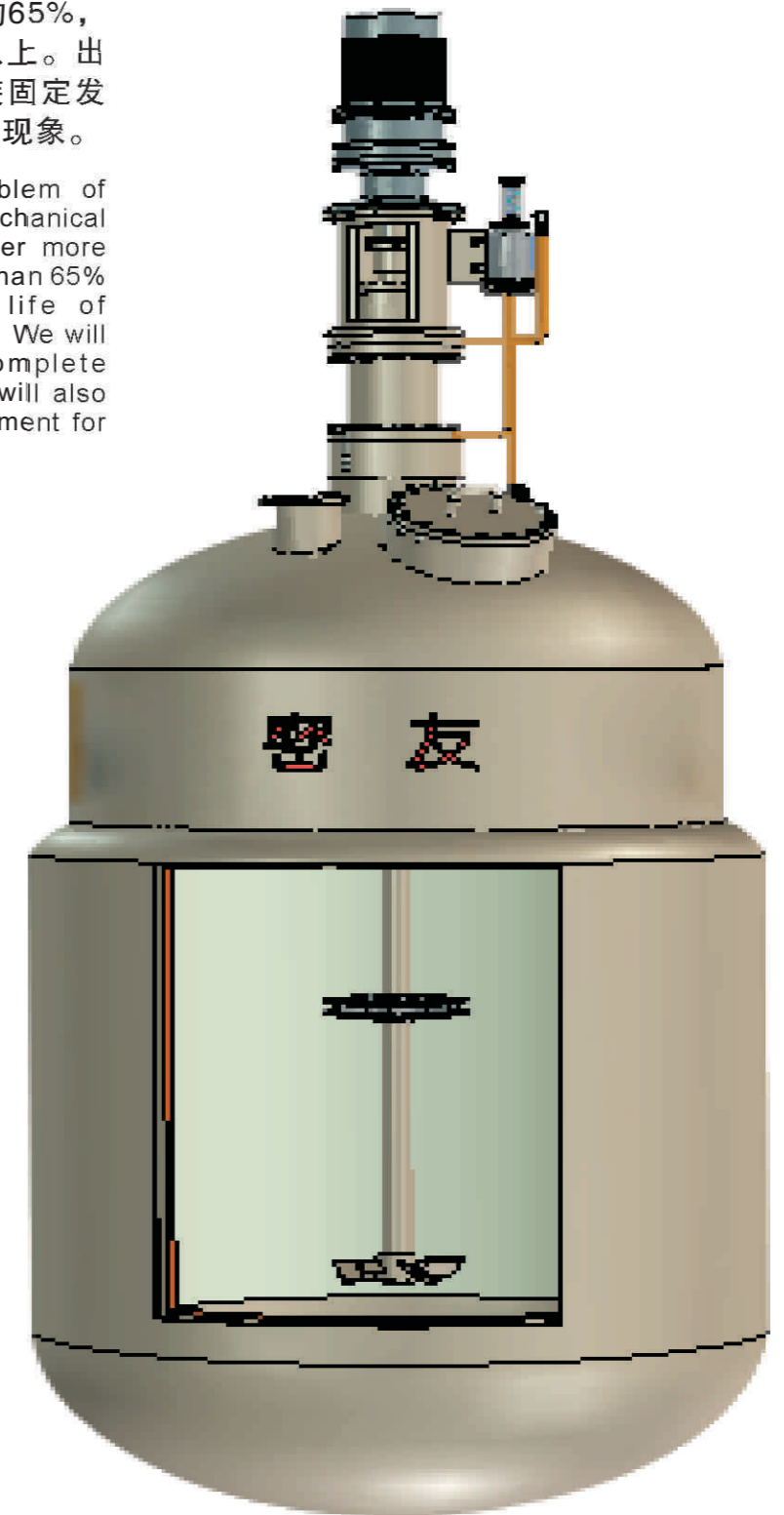
protection requirements of our customers.

### 压力容器 搅拌装置 机械密封一体化

Pressure vessel, mixer and mechanical seal integration

解决了压力容器、搅拌装置、机械密封之间配合问题，搅拌设计更稳定、节能。功率是普通搅拌的65%，机械密封使用寿命增加30%以上。出厂前整机装配测试，专用工装固定发运，避免了各个厂家相互扯皮现象。

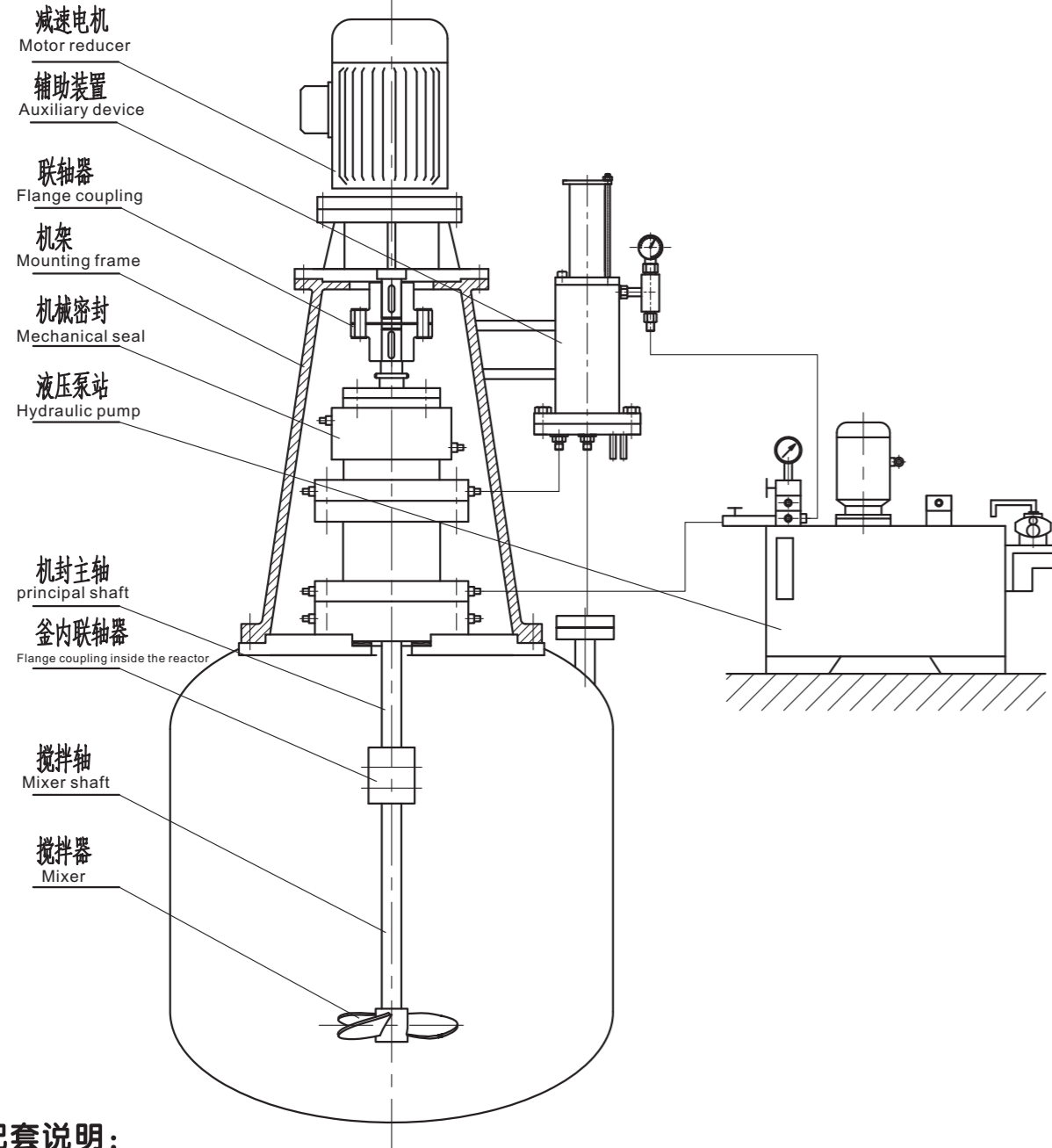
Resolve the coordination problem of Pressure vessel, mixer and mechanical seal. Our design make the mixer more stable, Save the power by more than 65% and increase the service life of mechanical seal more than 30%, We will inspection and test the complete equipment before delivery. We will also use special tool to fix the equipment for transportation.





## 高压搅拌传动密封装置

High pressure mixing, driving and sealing equipment

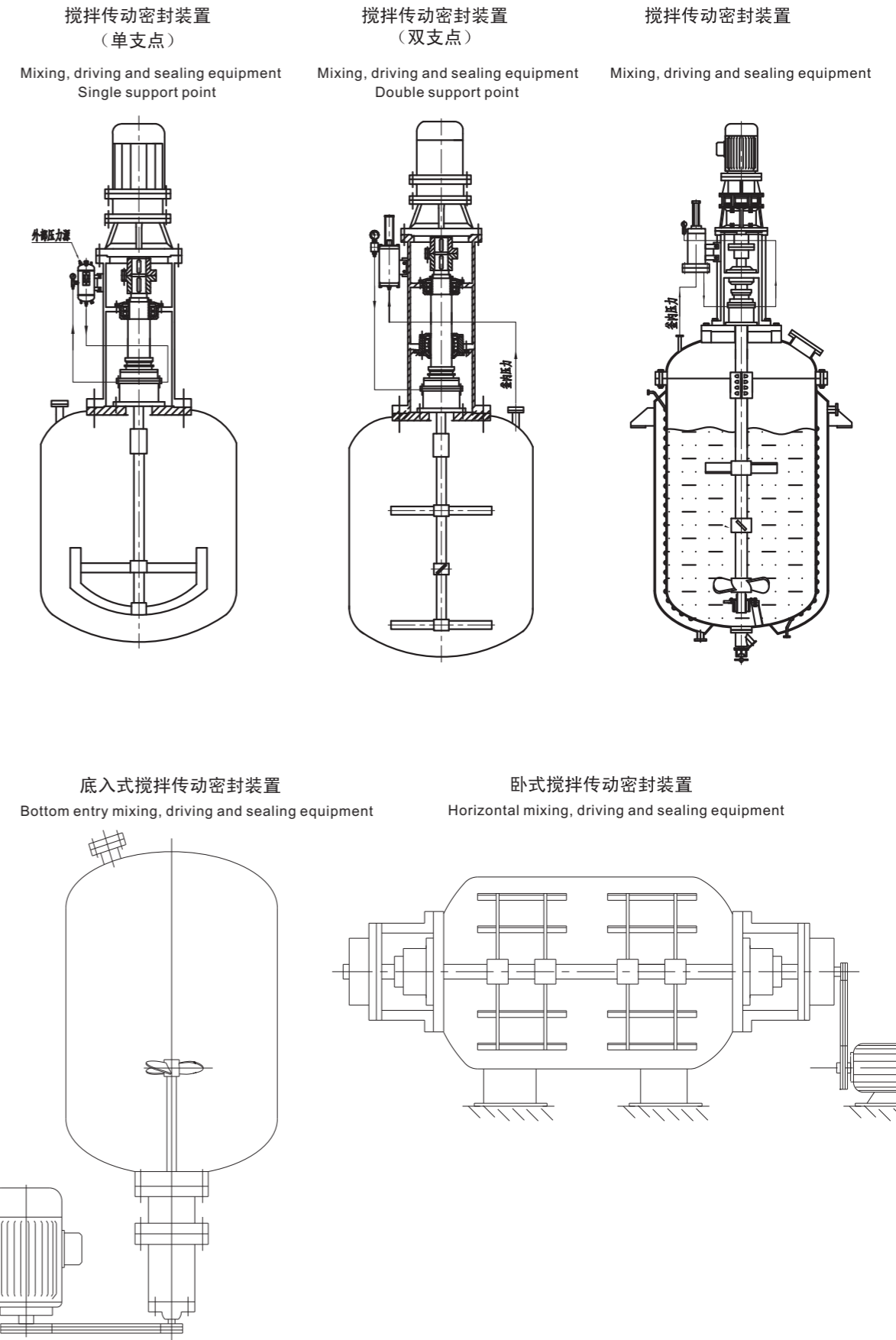


### 配套说明:

搅拌传动密封装置整套设计、制造可以实现含搅拌器、搅拌轴、凸缘法兰、上轴、机架、机械密封、电机、减速机在内的所有配件套体组合、测试、运输。避免出现各配套厂家互相推诿、扯皮现象，提高整体质量，减少配套之间的配合带来的精度问题。

### Explanation:

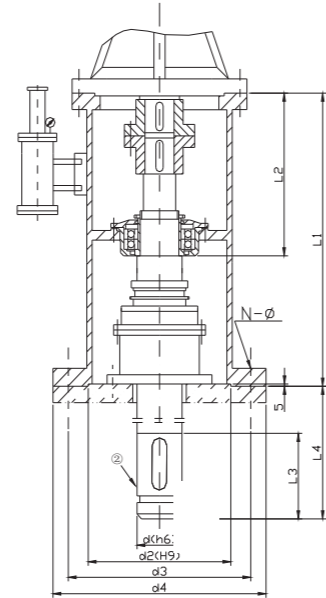
The design and manufacturing of mixing, driving and sealing equipment can realize the combination of mixer, mixer shaft, flange coupling, upper shaft, mounting frame, mechanical seal, motor reducer etc. Our company can integrate design, manufacturing, test and shipment.





## DJ、LDJ型搅拌传动密封装置

DJ, LDJ mixing, driving and sealing equipment



### 适用范围

立式反应釜。

Application  
Vertical reactor.

### 结构特点

机架单轴承座结构，轴承作为一个支点。

可选铸铁结构或钢制结构。

钢制机架焊接后回火处理，无残余应力变形。

主要结构件的加工均使用数控，加工精度高。

如LDJ增高型结构仍无法满足安装高度要求，可特别提出定制。

根据用户需要，可实现远程监控。

### Structure Features:

Single bearing structure, Bearing can act as a support point.

Cast iron or steel are for your option.

Tempering the steel mounting frame after welding. No stress deformation.

Numerical control machining .High precise machining.

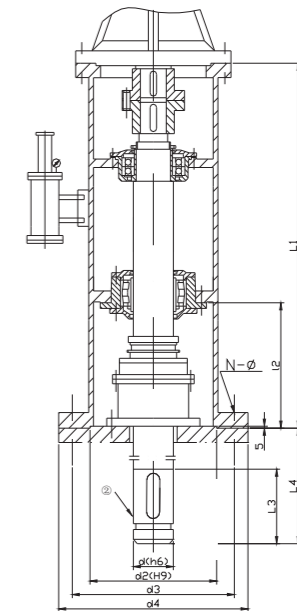
If the mounting height can not meet your requirement. A customer made is available.

Remote control can be realized.

机架代号 Mounting frame model	DJ型							LDJ型		N-Φ
	d	d2	d3	d4	L4	L3	L2	L1	L1	
DJ.LDJ30	40	240	285	315	500	85	320	550	700	12-14
DJ.LDJ35	50	260	320	360	500	100	334	600	750	12-14
DJ.LDJ40	50	260	320	360	500	100	334	600	750	12-14
DJ.LDJ45	65	260	320	360	500	130	338	600	750	12-14
DJ.LDJ55	65	325	400	435	500	130	372	660	760	12-14
DJ.LDJ65	80	350	420	460	600	145	447	720	870	12-18
DJ.LDJ70	80	350	420	460	700	145	447	720	870	12-18
DJ.LDJ80	90	380	455	495	800	170	495	785	935	12-18
DJ.LDJ90	110	430	510	555	800	200	519	805	950	12-23
DJ.LDJ100	125	480	560	600	800	225	535	820	1020	16-23
DJ.LDJ110	125	560	650	700	900	225	660	1100	1150	16-27
DJ.LDJ120	140	560	650	700	900	225	660	1200	1150	16-27
DJ.LDJ130	150	720	810	880	900	255	800	1200	1400	20-27
DJ.LDJ140	160	720	810	880	1000	255	800	1200	1400	20-27
DJ.LDJ150	171	840	940	1020	1000	385	790	1200	1400	16-33
DJ.LDJ160	180	840	940	1020	900	285	810	1200	1400	16-33
DJ.LDJ180	200	970	1080	1160	900	325	910	1280	1400	20-33

## SJ、LSJ型搅拌传动密封装置

SJ, LSJ mixing, driving and sealing equipment



### 适用范围

立式反应釜。

Application  
Vertical reactor.

### 结构特点

机架双轴承座结构，轴承作为两个支点。

可选铸铁结构或钢制结构。

钢制机架焊接后回火处理，无残余应力变形。

主要结构件的加工均使用数控，加工精度高。

如LSJ增高型结构仍无法满足安装高度要求，可特别提出定制。

根据用户需要，可实现远程监控。

### Structure Features:

Double bearing structure, Bearing can act as two support points.

Cast iron or steel are for your option.

Tempering the steel mounting frame after welding. No stress deformation.

Numerical control machining .High precise machining.

If the mounting height can not meet your requirement. A customer made is available.

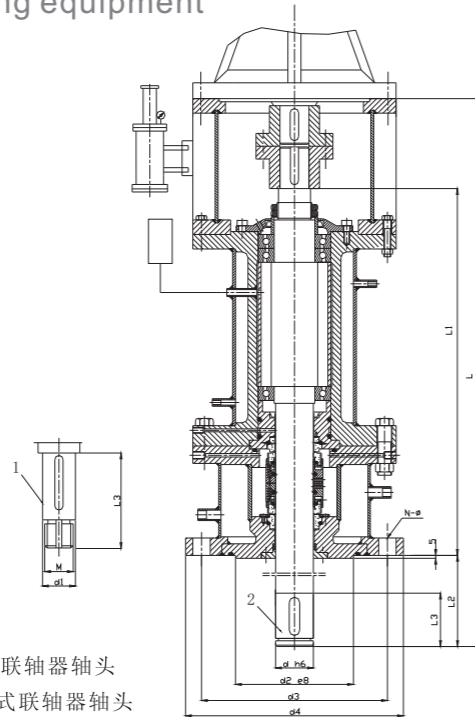
Remote control can be realized.

机架代号 Mounting frame model	SJ型						LSJ型				N-Φ
	d	d2	d3	d4	L4	L3	L2	L1	L2	L1	
SJ.LSJ35	50	260	320	360	500	100	316	970	466	1120	12-14
SJ.LSJ45	65	260	320	360	500	130	316	970	466	1120	12-14
SJ.LSJ55	65	325	400	435	500	130	312	1070	462	1220	12-14
SJ.LSJ65	80	350	420	460	500	145	307	1140	457	1290	12-18
SJ.LSJ70	80	350	420	460	500	145	307	1140	457	1290	12-18
SJ.LSJ80	90	380	455	495	600	170	354	1230	504	1380	12-23
SJ.LSJ90	110	430	510	555	700	200	363	1400	513	1550	12-23
SJ.LSJ100	125	480	560	600	800	225	367	1510	567	1710	16-23
SJ.LSJ110	125	560	560	700	800	225	373	1510	573	1710	16-27
SJ.LSJ120	140	560	560	700	800	225	373	1510	573	1710	16-27
SJ.LSJ130	150	720	720	880	900	255	374	1610	574	1810	20-27
SJ.LSJ140	160	720	720	880	900	255	374	1610	574	1810	20-27
SJ.LSJ150	170	840	840	1020	900	285	400	1660	600	1860	16-33
SJ.LSJ160	180	840	840	1020	1000	285	400	1660	600	1860	16-33
SJ.LSJ180	200	970	970	1160	1000	325	400	1710	600	1920	20-33



## FMY.L400型搅拌传动密封装置

FMY.L400 mixing, driving and sealing equipment



1.J型凸缘式联轴器轴头  
2.JQ型夹壳式联轴器轴头

d	d1	d2	d3	d4	L	L1	L2	L3	M	N-φ
30	25	149	190	230	720	520	140	60	M20	8-23
40	35	149	190	230	750	520	155	75	M30	8-23
50	45	175	230	285	960	680	190	90	M40	8-27
60	55	175	230	285	1000	680	210	110	M50	8-27
65	60	203	260	315	1000	680	210	110	M55	8-27
70	65	203	260	315	1040	680	230	130	M60	8-27
80	75	203	260	315	1180	780	260	140	M70	8-27
90	80	259	320	375	1200	780	270	150	M75	12-27
95	85	259	320	375	1230	780	285	165	M80	12-27
100	90	259	320	375	1320	850	295	175	M85	12-27
110	100	312	390	455	1400	850	350	200	M95	12-33
120	110	312	390	455	1420	850	360	210	M100	12-33
130	120	363	450	515	1450	850	375	230	M110	16-33

### 使用参数:

压力:PN -0.1--4.0MPa;  
温度:-40--180°C(350°C);  
转速:≤5m/s;  
介质:聚乙烯,聚丙烯,带悬浮颗粒及结晶性介质。

### OPERATION PARAMETERS

Pressure:PN-0.1--4.0MPa;  
Temperature:-40--180°C(350°C);  
Rotating speed:≤5m/s;  
Medium: Polyethylene, polypropylene, medium with suspended particle or crystalline particle.

### Structure features

Mechanical seal and mounting frame integration, High design accuracy. Suitable for high speed conditions, bottom entry mixer, horizontal and side entry polymerization reactors.

Notice: In case the working pressure exceeds 0.6 Mpa, a pressure balance device is needed.

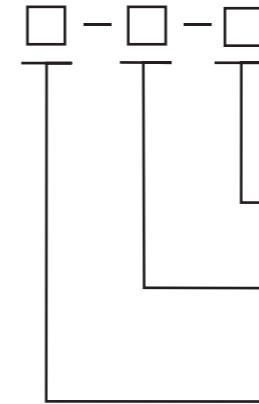
### 结构特点:

适用于高速场合,密封机架一体化,设计精度更高,可同  
时适用于底搅拌、卧式及斜入式聚合釜。

注:机械密封使用压力大于0.6MPa时必须配套压力平衡装置。

## 搅拌器型号标注方法

The indicating method of the mixer models.



搅拌器轴孔径  
The inner diameter of the mixer shaft hole.

搅拌器的外径  
The outer diameter of the mixer shaft.

搅拌器型式代号(见搅拌器型号一览表)  
The code of mixer models.(Refer to mixer models list)

## 搅拌器型号一览表 Mixer models list

序号 S/No.	搅拌器型式名称 The description of mixers	代号 Code
001	PJ型平直叶桨式 PJ type	PJ
002	XJ型二叶斜桨式 XJ type	XJ
003	ZX型三叶旋桨式 ZX type	ZX
004	TXL型推进式 TXL type	TXL
005	TWL型推进式带稳定环 TWL type	TWL
006	KCX型三宽叶旋桨式 KCX type	KCX
007	HQ三叶后掠式 HQ type	HQ
008	SK型四直叶开启涡轮式 SK type	SK
009	XCK型四斜叶开启涡轮式 XCK type	XCK
010	MIG型多层双斜桨式 MIG type	MIG

序号 S/No.	搅拌器型式名称 The description of mixers	代号 Code
011	整体式稳定环 Integral stabilizator type	WH
012	消泡桨 Defoaming paddle type	XPJ
013	PY型六直叶圆盘涡轮式 PY type	PY
014	WY型六弯叶圆盘涡轮式 WY type	WY
015	ZY型六斜叶圆盘涡轮式 ZY type	ZY
016	WK型六后弯叶开启涡轮式 WK type	WK
017	CY锯齿圆盘式 CY type	CY
018	HY型六圆弧叶圆盘涡轮式 HY type	HY
019	KS型椭圆底框式 KS type	KS
020	LD型双螺带式 LD type	LD
021	LDG型单螺带螺杆式 LDG type	LDG



搅拌器

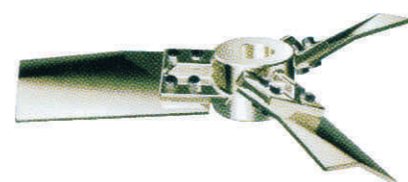
Mixer



PJ 型平直叶桨式  
PJ type



XJ型二叶斜桨式  
XJ type



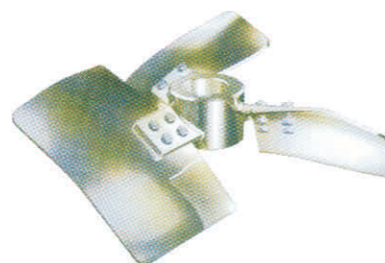
ZX型三叶旋桨式  
ZX type



TXL 型推进式  
TXL type



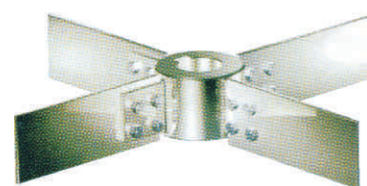
TWL型推进式带稳定环  
TWL type



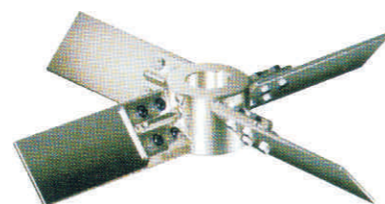
KCX型三宽叶旋桨式  
KCX type



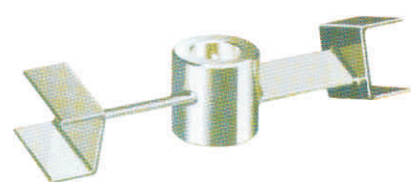
HQ 三叶后掠式  
HQ type



SK型四直叶开启涡轮式  
SK type



XCK型四斜叶开启涡轮式  
XCK type



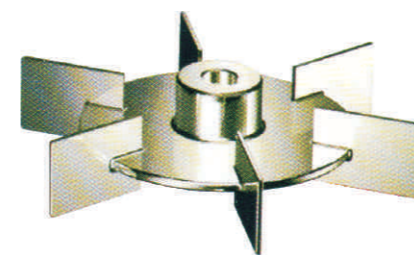
MIG型多层双斜桨式  
MIG type



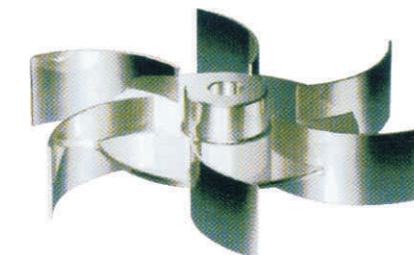
整体式稳定环  
Integral stabilizer type



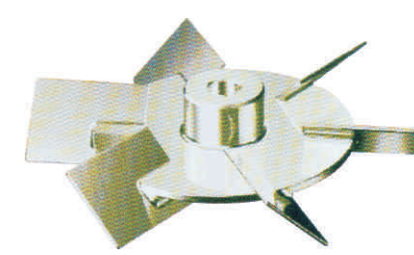
消泡桨  
Defoaming paddle type



PY型六直叶圆盘涡轮式  
PY type



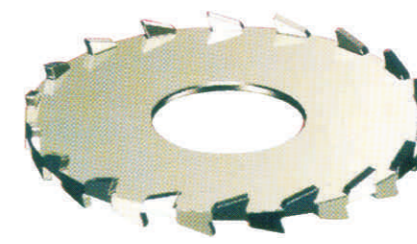
WY型六弯叶圆盘涡轮式  
WY type



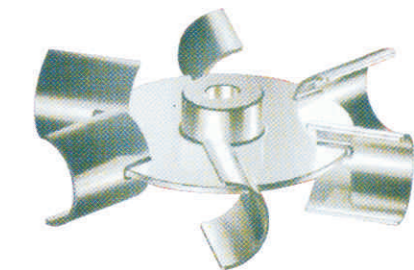
ZY型六斜叶圆盘涡轮式  
ZY type



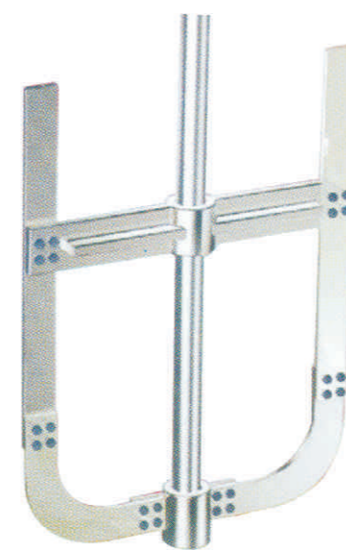
WK型六后弯叶开启涡轮式  
WK type



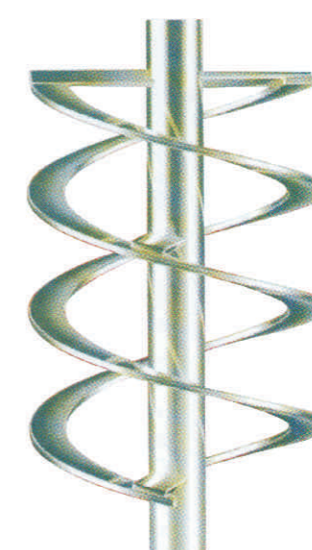
CY锯齿圆盘式  
CY type



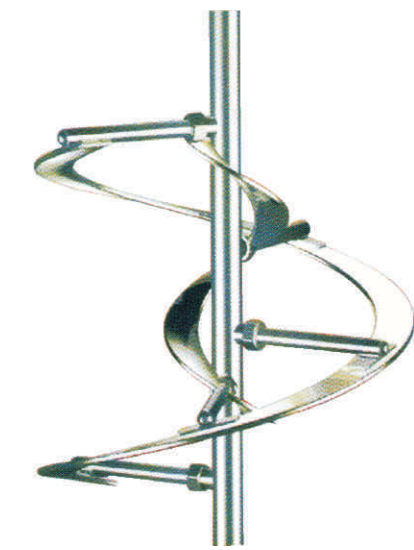
HY型六圆弧叶圆盘涡轮式  
HY type



KS型椭圆底框式  
KS type



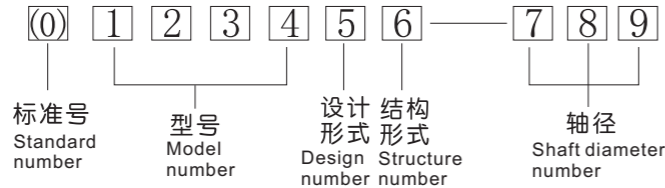
LD型双螺带式  
LD type



LDG型单螺带螺杆式  
LDG type

## 釜用机械密封型号编制说明

Model formation of reactor mechanical seal



**标准号**：用括号将釜口法兰使用的标准号全称写出，非标产品给出专用订单号。

Standard number: Indicate the standard number of flange with bracket, Non-standard products should be indicated with special number.

**型号**：密友机械密封产品型号均为四位数，老型号转新型号参照新老型号对照表。

Model number: A four-digit numbers

**设计形式**：B为平衡型

Design number: B means balanced type.

**结构形式**：0干磨带内漏带高位水箱

Structure number: 0 Dry seal with internal impurity collector and high water tank.

1带高温冷却水箱

1 Has cooling water tank.

2带内漏装置

2 Has internal impurity collector.

3带浮环密封

3 Has gathering ring seal

4带静止式端面

4 Has Static end face

5干磨型结构

5 Dry seal structure

6干磨型带内漏装置

6 Dry seal with internal impurity collector

7带高温冷却水箱及内漏装置

7 Have cooling water tank and internal impurity collector.

8带高温冷却水箱及浮环密封

8 Have Cooling water tank and gathering ring seal

9其他特殊结构

9 Other special structures

### 举例说明

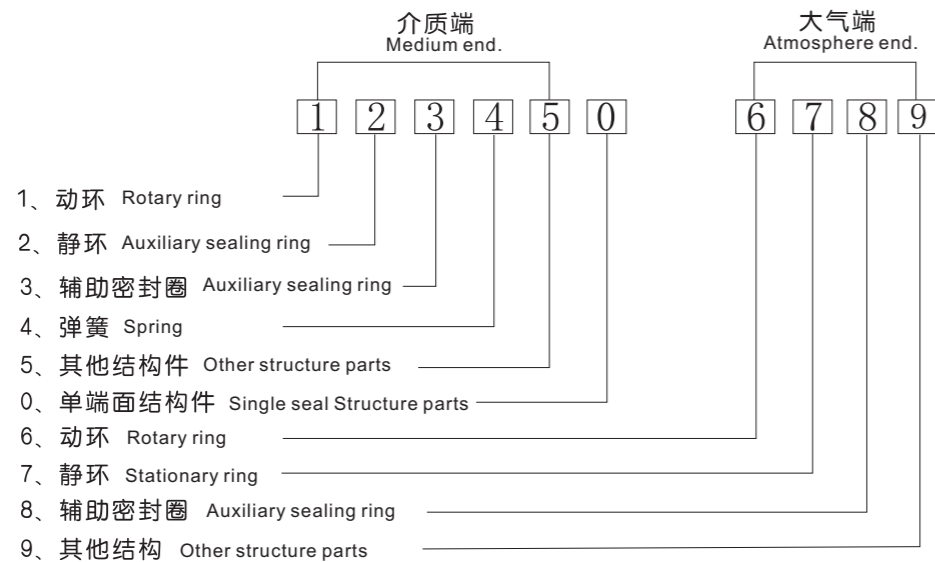
(HG/T21571-95) 2017B1-080

2017型不带轴承 平衡型 高温冷却水箱 轴径80mm  
符合 HG/T 21571-95标准

e.g.:  
2017 model mechanical seal without bearing, Balanced type, with cooling plate, Shaft diameter 80mm, meets the HG/T 21571-95 standard.

### 材料编制说明

Model formation instructions



## 机械密封的安装和技术要求

INSTALLATION&SPECIFICATION OF MECHANICAL SEALS

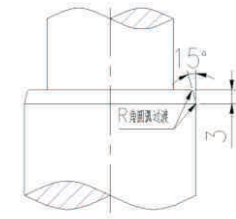
机械密封是精密的部件，设备的制造精度及安装精度要求都很严格，如果装配不当就会影响密封性能。正确安装必须注意以下几点：

1、对反应釜以及机械密封配合部分的要求：

- ①安装机械密封部位的轴制造公差为h8，表明粗糙度1.6μm
- ②安装机械密封部位的轴或轴套端部应做成倒角并修光，如图所示：
- ③搅拌轴的轴向窜动量小于0.3mm，轴向摆动小于 $\sqrt{d}/100$ (d为轴径)mm(在机械密封部位测量)；
- ④搅拌轴与釜口法兰的垂直角度不大于0.5mm，搅拌轴与釜口法兰止口的同心度不大于0.5mm；
- ⑤机械密封的使用寿命是建立在设备满足上述条件、设备使用工况满足机械密封的使用参数、日常维护保养正确的前提下。

2、釜用机械密封的安装要求、

- ①部件内各零件符号图纸设计要求。
- ②平衡型机械密封动环密封圈与动环密封腔应有3-5mm间隙。
- ③安装静环时，端面需用千分表找正并保证端面与轴线下垂直允许0.05mm。
- ④弹簧的压缩量按图纸要求允许误差±0.2mm。
- ⑤安装完毕后将定位卡片螺母松开才可开车。
- ⑥机械密封安装后应有24小时以上的空车跑合运转。
- ⑦在没有做好可靠的防护措施时，釜用机械密封禁止装配在反应釜上运输。



The mechanic seals,as the precise prts,require very high manufacturingprecision and installation accuracy.Any assembly discrepancy will lead to the failure of sealing.The following are correct procedures for installation.

Specificaltions for assembling the mechanical seals on the reaction cauldrons:

- ①The manufacturing tolerance of the shafts on the location of mechanical seals:h8; The required surface roughree 1.6um.
- ②The shaft or shaft slecve end of the rotaing seal ring shall be chamfered and polished,as show in Figure.
- ③The maximun axial displacement of the shafts:0.3mm.
- ④The masimun vertically between the shaft and the cauldron flange is 0.5mm.

Installation Requirements Of Cauldron-using Mechanical Seals.

- ①The component parts shall be as per the drawing requirements.
- ②3-5mm distance shall be maintained between the rotating seal ring of the balance-type mechanical seals and the rotating seal cavity
- ③To install the dead rings,use the dial gauge to align the ring surface and axis.The verticality allows of 0.05mm.
- ④The allowable error of spring compressivility as per the drawing:±0.2mm.
- ⑤Do not run the machine until the nuts are unfastened after installation.
- ⑥Upon completion of installation of mechanical seals,24 hours of idle run shall be maintained.

## 机械密封的冷却和冲洗

COOLING & RINSING OF MECHANICAL SEALS

### 机械密封的冷却

1、单端面机械密封

- ①介质温度在80℃以下时，在冷却槽内加油、水等干净液体进行冷却。
- ②介质温度高于80℃时，在冷却槽内壁增加对此二个接管进行循环冷却。

2、双端面机械密封

- ①介质温度小于180℃时依靠夹套进行冷却。
- ②介质温度大于180℃小于350℃时需要设置高位水箱，依靠高位水箱夹套进行冷却。

3、强腐蚀介质的机械密封用辅助设备输入于干净的液体（其压力应比釜内压力大0.05-0.1Mpa）进行循环冷却。

Cooling of Cauldron-using Mechanical Seals

Single-end Mechanical seal

- ①When the medium is below 80℃,add clean liquid like oil and water to the cooling bath.
- ②When the medium is over 80℃,add two symmetric connecting pipes to the inner wall of cooling bath for cooling revcle.

Double-end Mechanical Seal

- ①When the medium is below 180℃,the mechanical seals can be cooled by way of jacket.
- ②When the medium is between 180℃ Cand 350℃,an elevated water tank is to be mounted for cyclic cooling by way of jacket. For mechanical seal using strong corrosive media,clean liquids are to be fed for the purpose of cyclic cooling through the auxiliary equipment (with a pressure 0.05-0.1 Mpa higher than that inside the cauldron).



### 机械密封常用材料及适用范围

Application of common materials for reactor mechanical seals

旋转环、静止环材料 Materials for rotary and stationary ring	代号 Code	适用范围 Scope of application
石墨浸渍酚醛树脂 Graphite impregnated phenolic resin	B <sub>q</sub>	酸、油、除硝酸等强氧化性酸外 Acid, oil, except strong oxidizing acids, such as nitric acid.
石墨浸渍呋喃树脂 Graphite impregnated furan resin	B <sub>k</sub>	酸、碱、油类、除硝酸等强氧化性酸外 Acid, base, oil, except strong oxidizing acids, such as nitric acid.
石墨浸渍环氧树脂 Graphite impregnated epoxy resin	B <sub>h</sub>	弱酸、碱、除硝酸等强氧化性酸外 Acid, base, oil, except strong oxidizing acids, such as nitric acid.
石墨浸渍锑合金 Graphite impregnated antimony alloy	A <sub>t</sub>	盐水、轻油、乙苯、苯乙烯、溶剂等 Brine, light oil, ethylbenzene, styrene & Solvent etc.
铬镍钢 Chrome-nickel steel	F	酸、碱、除盐酸、氢氟酸外 Acid, base, except hydrochloric acid and hydrofluoric acid
金属表面熔焊镍基合金 Surface layer welded with nickel alloy	I <sub>h</sub>	弱酸、弱碱、醇、油、液态烃等 Weak acid, Weak base, Alcohol, Oil & liquid hydrocarbon etc.
金属表面熔焊钴基合金 Surface layer welded with cobalt alloy	I <sub>g</sub>	弱酸、弱碱、醇、油、液态烃等 Weak acid, Weak base, Alcohol, Oil & liquid hydrocarbon etc.
金属表面喷涂 Surface metal spray	J	油、乙苯、苯乙烯、溶剂、丙酮等 Oil, ethylbenzene, styrene, Solvent & Acetone etc.
氮化硅 Silicon nitride	Q	酸、碱、有机物等 Acid, base & Organics etc.
镍硬合金 Nickel-based tungsten carbide	U <sub>1</sub>	油、酸、碱、有机物等 Oil, acid, base & Organics etc.
钴硬合金 Cobalt-based tungsten carbide	U <sub>2</sub>	油、弱酸、碱、有机物等 Oil, weak acid, base & Organics etc.
无压烧结碳化硅 SSIC	O <sub>1</sub>	氢氟酸、有机酸、碱、有机物等 hydrofluoric, Organic acid, base & organics etc
反应烧结碳化硅 SIC	O <sub>2</sub>	弱酸、碱、有机物等 Organic acid, base & organics etc.
氧化铝 Aluminium oxide (Ceramics)	V	除氢氟酸、高浓度酸外 Not suitable for hydrofluoric and high concentration acid.
增强（填充玻纤）聚四氟乙烯 Reinforced PTFE filled with glass fiber	Y <sub>t</sub>	氧化性酸、有机物等 Oxidized acids, Organics etc.
增强（填充石墨）聚四氟乙烯 Reinforced PTFE filled with graphite	Y <sub>h</sub>	酸、有机物等 Acid, organics etc.

### 订购说明

Purchase guidance

- 1、客户在订货前请先提供《用户需求信息反馈表》。  
Please provide customer requirement questionnaire
- 2、本公司提供相应的方案图供双方确认，方案实施以确认图为准。  
We send the drawing for approval, Final products will be manufactured as per approved drawings.
- 3、订购机架时需注明采用铸铁或钢制。  
Indicate the material for mounting frame, Cast iron or steel.
- 4、机械密封件的选用参阅本公司《机械密封》样本。  
Model selection please refer to our Mechanical seal brochure
- 5、本公司保留产品设计变更的权利，如果更改不另行通知。  
We reserve the right for design modification, We are free and clear for without notice.
- 6、样本中的图样均为本公司版权，如发现侵权将追究法律责任。  
All rights reserved for our Brochure.

### 机械密封辅助密封圈材料、结构型式和适用范围JB/T7757.2-2006

Auxiliary sealing ring, structure form and scope of application for Mechanical seal JB/T7757.2-2006

辅助密封圈材料及结构型式 Materials for auxiliary sealing ring	代号 Code	适用范围 Scope of application
丁腈橡胶O形圈 Nitrile rubber O ring	P	油、水、醇等 Oil, Water and alcohol etc.
氟橡胶O形圈 Viton O ring	V	耐弱酸 Weak acid
四丙氟橡胶O形圈 Aflas O ring	V1	耐弱酸 Weak acid
硅橡胶O形圈 Silicon rubber O ring	S	醇、碱溶液辅助密封圈材料及结构型式代号适用范围 Alcohol, aqueous alkali etc.
氯丁橡胶O形圈 Silicon rubber O ring	N	无机酸、碱溶液 Inorganic acid, aqueous alkali
乙丙橡胶O形圈 EPR O ring	E	氨水、碱溶液 Ammonium hydroxide, aqueous alkali
聚四氟乙烯O形圈 PTFE O ring	T1	各种腐蚀性介质，溶剂 Various kinds of corrosive medium, solvent
聚四氟乙烯V形圈 PTFE V ring	T2	各种腐蚀性介质，溶剂 Various kinds of corrosive medium, solvent
聚四氟乙烯棒形圈 PTFE Tenon ring	T3	各种腐蚀性介质，溶剂 Various kinds of corrosive medium, solvent
橡胶包覆聚四氟乙烯O形圈（FEP） FEP	M1	各种腐蚀性介质，溶剂 Various kinds of corrosive medium, solvent
全氟橡胶 Perfluor rubber (FFKM)	K	各种腐蚀性介质，溶剂 Various kinds of corrosive medium, solvent
耐氯气O形圈 Chlorine resistance O ring	X1	耐氯气专用 Special for chlorine
耐高温O形圈 High temperature resistance O ring	X2	200℃以下，耐腐蚀性能通氟橡胶 Below 200 °C, Corrosive resistance is almost like viton

### 机械密封弹簧和其他结构材料及适用范围 Springs, other frameworks and scope of application for mechanical seal

弹簧和其他结构材料 Spring and other frameworks	代号 Code	适用范围 Scope of application
碳钢 Carbon steel	D	一般介质 Common medium
铬镍钢（304、321） Chromium-Nickel Steel (304, 321)	F <sub>1</sub>	除盐酸、氢氟酸外的介质 Medium excludes hydrochloric acid and hydrofluoric acid
铬镍钢钼钢（316） Stainless steel(316)	F <sub>2</sub>	除盐酸、氢氟酸外的介质 Medium excludes hydrochloric acid and hydrofluoric acid
铬镍钢钼钢（316L） Stainless steel(316L)	F <sub>3</sub>	除盐酸、氢氟酸外的介质 Medium excludes hydrochloric acid and hydrofluoric acid
双相不锈钢（2205） Duplex stainless steel (2205)	F5	高氯离子介质 High chloridion medium
2Cr13 2Cr13	E1	一般介质 Common medium
201不锈钢 201 Stainless steel	X2	一般介质 Common medium
高镍钢（20） High nickel steel (20)	M1	各种腐蚀性介质，氢氟酸 Various kinds of corrosive medium, hydrofluoric acid
高镍钢（蒙乃尔） High nickel steel (Monel)	M2	各种腐蚀性介质，氢氟酸 Various kinds of corrosive medium, hydrofluoric acid
高镍钢（哈氏B、C） High nickel steel (Hastelloy B, C)	M3	各种腐蚀性介质，氢氟酸 Various kinds of corrosive medium, hydrofluoric acid
钛及钛合金 Titanium and titanium alloy	T	各种腐蚀性介质 Various kinds of corrosive medium
搪玻璃	X1	各种腐蚀性介质 Various kinds of corrosive medium
锆材 Zirconium	X3	
PTFE	X4	各种腐蚀性介质 Various kinds of corrosive medium
其他材料 Other materials	X	各种腐蚀性介质 Various kinds of corrosive medium

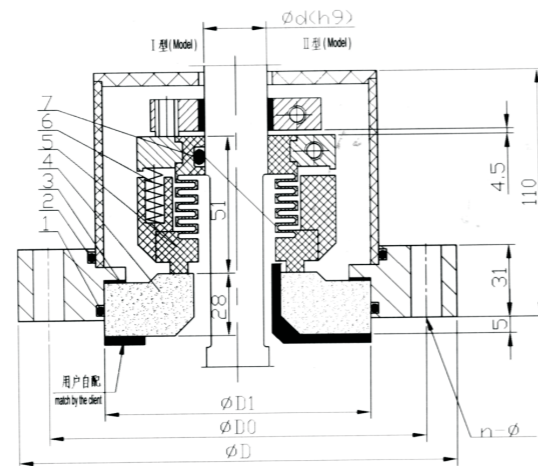
## M212B5干磨型机械密封

M212B5 mechanical seal

本厂专利: ZL200620165191.8  
Patent No.: ZL200620165191.8



HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG/T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 适用范围

Application

制药、食品用立式反应釜。  
Pharmaceutical and food industries

### 使用参数

OPERATION PARAMETERS

设计压力: PNO~0.5MPa

Design pressure: PNO~0.5MPa

设计温度: -40~120°C

Design temperature: -40~120°C

设计转速: 2m/s

Design rotating speed: 2m/s

轴径: 30~220mm

Shaft diameter: 30~220mm

介质: 除氢氟酸、结晶性外的强  
腐蚀工况。

Medium: Suitable for a variety of highly corrosive  
working conditions excluding hydrofluoric acid  
and crystallinity.

### 结构特点

干磨式设计没有密封液污染物料。  
独特的密封面材料配方保证长久可靠运行。  
与介质接触部均为耐强腐蚀材料。

Structure features

Dry seal without any pollution such as sealing liquid.  
Special material ensures stable running and long  
service life.  
Anti-corrosion materials are used for the parts which  
contact the medium.

易损件明细

Wearing parts details

1. 静环O型圈  
O ring for Stationary ring
2. 观察罩O型圈  
O ring for observing cover
3. 静环垫片  
Gaskets for stationary ring
4. 静环  
Stationary ring
5. 波纹管动环  
Rotary bellows
6. 弹簧  
Springs
7. 动环O型圈  
O ring for rotary parts

d	D1	D0	D	n-φ	标准 Standard
40	100	130	160	4-18	79.91
50	120	150	185	4-18	79.91
65	140	170	205	4-18	79.91
80	160	200	235	8-18	79.91
95	175	200	235	8-18	79
		225	265	8-18	91
110	200	225	265	8-18	79
		280	320	8-18	91
125	230	280	320	8-18	79.91
140	280	335	375	12-18	79.91

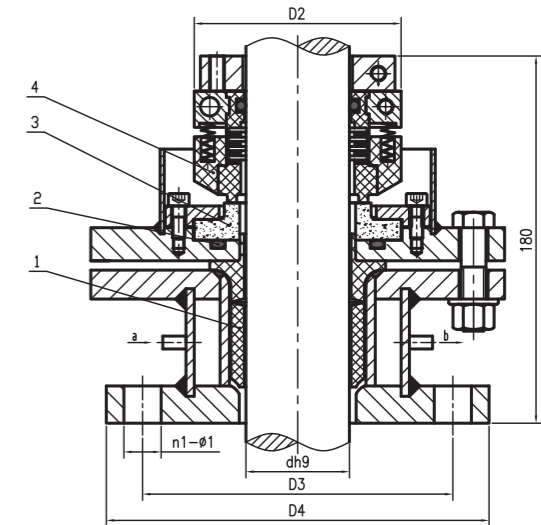
## M212B1型机械密封

M212B1 mechanical seal

本厂专利: ZL97234221.4  
Patent No.: ZL97234221.4



HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG/T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 适用范围

Application

立式搪玻璃反应釜。  
Vertical glass lining reactor

### 使用参数

OPERATION PARAMETERS

设计压力: 0~0.5MPa

Design pressure: 0~0.5MPa

设计温度: -40~180°C

Design temperature: -40~180°C

设计转速: 2m/s

Design rotating speed: 2m/s

轴径: 30~180mm

Shaft diameter: 30~180mm

介质: 除氢氟酸、结晶性外的强  
腐蚀工况。

Medium: Suitable for a variety of highly corrosive  
working conditions excluding hydrofluoric acid  
and crystallinity.

### 结构特点

机封带抗偏摆结构,能适应1.5mm以内的摆动。  
调整环均为分半结构安装更方便。  
与介质接触部均为耐强腐蚀材料。

Structure features

Anti-deflection structure adapts for swing within  
1.5mm.  
Half ring structure ensuring easy installation.  
Anti-corrosion materials are used for the parts  
which contact the medium.

易损件明细

Wearing parts details

1. 中填料组件  
Packing parts
2. 静环O型圈  
O ring for stationary ring
3. 静环  
Stationary ring
4. 动环组件  
Rotary parts

管口明细

Orifice details

- A. 冷却水进口  
Cooling water inlet
- B. 冷却水出口  
Cooling water outlet

### 79标

d	D2	D3	D4	n1-φ
40	90	130	160	4-φ14
50	100	150	185	4-φ18
65	115	170	205	4-φ18
80	130	200	235	8-φ18
95	150	200	235	8-φ18
102	150	255	290	8-φ18
110	163	225	255	8-φ18
125	178	280	315	8-φ18
160	237	350	395	12-φ22

### 91标

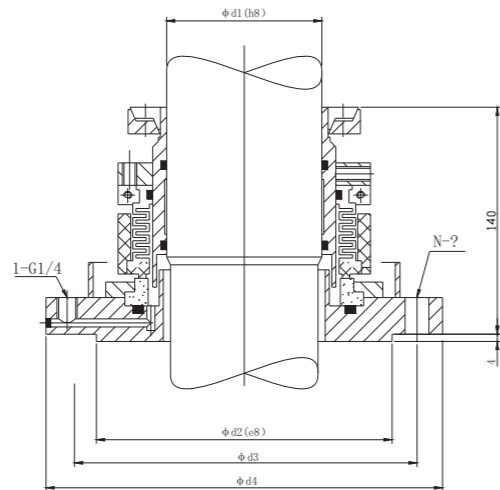
d	D2	D3	D4	n1-φ
40	90	130	160	4-φ14
50	100	150	190	4-φ18
65	115	170	210	4-φ18
80	130	200	240	8-φ18
95	150	225	265	8-φ18
110	163	280	320	8-φ18
125	178	280	320	8-φ18
140	194	335	375	12-φ18



## M212B2型机械密封

M212B2 mechanical seal

HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG./T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 适用范围

Application  
制药、食品用立式反应釜。  
Pharmaceutical and food industries

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN 0~0.4MPa  
Design pressure: PN 0~0.4MPa  
设计温度: -40~120°C  
Design temperature: -40~120°C  
设计转速: 2m/s  
Design rotating speed: 2m/s  
轴径: 30~220mm  
Shaft diameter: 30~220mm

介 质: 硫酸、硝酸、盐酸等各种强腐介质,  
介质必须无颗粒。

Medium: Nitric acid, sulfuric acid and other highly corrosive mediums without crystal.

### 结构特点

带内漏收集装置没有磨屑  
污染物料。  
独特的密封面材料配方保  
证长久可靠运行。  
与介质接触部均为耐强腐  
蚀材料。

#### Structure features

Impurity collector to collect impurities  
during running process.  
Special material ensures stable running  
and long service life.  
Anti-corrosion materials are used for the  
parts which contact the medium

#### 易损件明细

Wearing parts details  
1. 静环O型圈  
O ring for Stationary ring  
3. 静环  
Stationary ring  
3. 波纹管动环  
Rotary bellows  
4. 轴套O型圈  
O ring for shaft sleeve  
5. 弹簧  
Springs  
6. 波纹管O型圈  
O ring for bellows

#### 管口明细

Orifice details  
A. 内漏孔  
Orifice of impurity collector.

d1	d2	d3	d4	N-φ
30	116	150	180	4-18
40	135	170	225	4-18
45	164	200	235	8-18
50	164	200	235	8-18
60	164	200	235	8-18
65	164	200	235	8-18
80	188	225	260	12-18
90	220	255	290	12-18
95	220	255	290	12-18
100	245	280	315	12-18
110	245	280	315	12-18
120	245	280	315	12-18
125	245	280	315	12-18

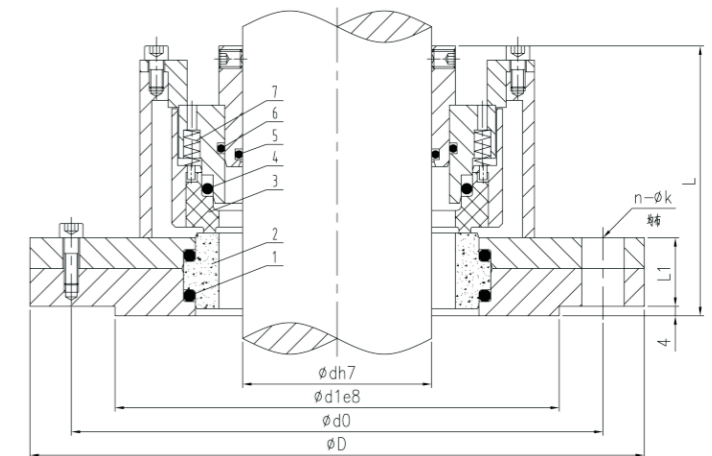
## X203B型机械密封

X203B mechanical seal

发明专利号: 2011 2 0020843.X  
2011 2 0020919.9  
2011 2 0020863.7

### 模块化设计 Modularized design

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical  
conditions



### 适用范围

立式低压反应釜。

### 设计参数

设计压力: PN-0.1~0.6MPa  
设计温度: -40~180°C (320°C)  
当温度超过180°C时须增加冷却水箱, 安  
装高度增加80mm  
设计转速: 2m/s  
介质: 根据配置不同可适用于各种  
强腐蚀性介质。

#### 易损件明细

1. 静环密封圈  
2. 静环  
3. 动环  
4. 动环密封圈  
5. 轴套密封圈  
6. 弹簧座密封圈  
7. 弹簧

### Application

Vertical low pressure reactor.

#### OPERATION PARAMETERS

Design pressure: PN-0.1~0.6MPa  
Design temperature: -40~180°C (320°C)  
If the working temperature is above 180°C,  
A cooling plate should be needed and the  
mounting height will increase by 80mm.  
Design rotating speed  
Shaft diameter: 2m/s  
Medium: Suitable for a variety of highly  
corrosive working conditions by different configurations.

#### Wearing parts details

1. O ring for Stationary ring  
2. Stationary ring  
3. Rotary ring  
4. O ring for rotary ring  
5. O ring for shaft sleeve  
6. O ring for spring retainer  
7. Springs

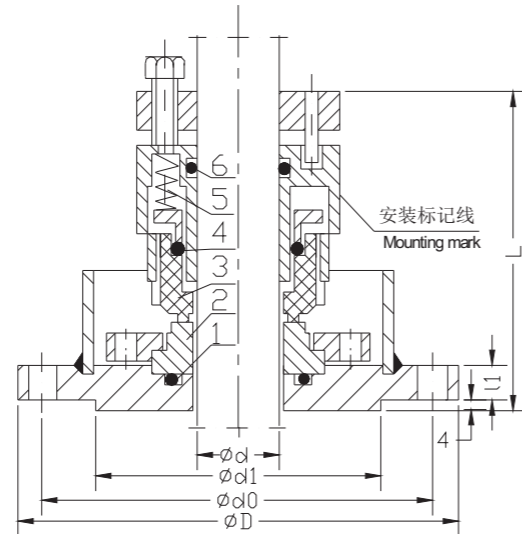
d	d1	d0	D	L1	L	n-φ
30	116	150	180	19	92	4-18
40	135	170	205	19	92	4-18
45	164	200	235	19	92	8-18
50	164	200	235	19	92	8-18
60	164	200	235	29	114	8-18
65	164	200	235	29	114	8-18
70	164	200	235	29	114	8-18
80	188	225	260	29	114	12-18
90	220	255	290	29	114	12-18
95	220	255	290	29	114	12-18
100	245	280	315	29	114	12-18
110	245	280	315	29	114	12-18
120	245	280	315	29	114	12-18
125	245	280	315	29	114	12-18
130	245	280	315	29	114	12-18
140	280	320	370	29	114	12-18
150	312	355	405	29	114	12-18

## M204B型机械密封

M204B mechanical seal



HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

#### Application

立式低压反应釜、卧式干燥机等。  
Vertical low pressure reactor and horizontal drying machine.

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN-0.1~0.6MPa  
Design pressure: PN-0.1~0.6MPa  
设计温度: -40~180°C(320°C)  
Design temperature: -40~180°C(320°C)  
当温度超过180°C时须增加冷却水箱, 安装高度增加80mm  
If the working temperature is above 180°C, A cooling plate should be needed and the mounting height will increase by 80mm.  
设计转速: 2m/s  
Design rotating speed: 2m/s  
介质: 油、水、弱酸、弱碱等工况。  
Medium: Oil, water, weak acid, weak base etc.

### 结构特点

传动无方向性。  
Non-directional transmission  
弹簧比压可根据使用压力调整使用寿命更长。平衡型设计。  
Specific pressure of spring can be adjusted as per working pressure. Balanced design.

### Structure features

Non-directional transmission  
Specific pressure of spring can be adjusted as per working pressure. Balanced design.

#### 易损件明细

- Wearing parts details
1. 静环型圈  
O ring for Stationary ring
  2. 静环  
Stationary ring
  3. 动环  
Rotary ring
  4. 动环O型圈  
O ring for rotary ring
  5. 弹簧  
Springs
  6. 弹簧座O型圈  
O ring for spring retainer

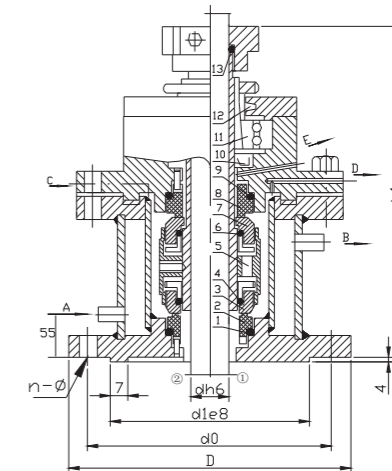
d	d1	d0	D	L1	L	n-φ
30	116	150	180	16	100	4-18
40	135	170	205	16	100	4-18
45	164	200	235	18	105	8-18
50	164	200	235	18	105	8-18
60	164	200	235	18	105	8-18
65	164	200	235	18	105	8-18
70	164	200	235	18	105	8-18
80	188	225	260	18	105	12-18
90	220	255	290	18	105	12-18
95	220	255	290	20	105	12-18
100	245	280	315	20	105	12-18
110	245	280	315	20	105	12-18
120	245	280	315	20	105	12-18
125	245	280	315	20	105	12-18
130	245	280	315	20	105	12-18
140	280	320	370	24	110	12-18
150	312	355	405	24	125	12-18

## M206U、M207B型机械密封

M206U, M207B mechanical seal



HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

#### Application

立式反应釜、薄膜蒸发器。  
Vertical reactor and film evaporator.

### 使用参数

#### OPERATION PARAMETERS

设计压力:  
Design pressure:  
M206U型PN-0.1~1.6MPa  
M207B型PN-0.1~2.5MPa  
设计温度: -40~180°C(320°C)  
Design temperature: -40~180°C(320°C)  
当温度超过180°C时须增加冷却水箱, 安装高度增加80mm  
If the working temperature is above 180°C, A cooling plate should be needed and the mounting height will increase by 80mm.  
设计转速: 2m/s  
Design rotating speed: 2m/s  
介质: 油、水、弱酸、弱碱、易燃、易爆等工况。  
Medium: Oil, water, weak acid, weak base, flammable and explosive working conditions etc.

### 结构特点

轴套螺母传动有方向性。  
Directional transmission  
带承担径向力的轴承, 降低搅拌轴的偏摆, 但不作为搅拌支点。  
Bearing can bear the radial force and reduce deflection of mixer shaft.  
冷却系统的综合考虑保证密封良好的运行环境。  
Cooling system ensures good running.

#### 易损件明细

- Wearing parts details
1. 介质端静环O型圈  
O ring for Stationary ring
  2. 介质端静环  
Stationary ring
  3. 介质端动环  
Rotary ring
  4. 介质端动环O型圈  
O ring for rotary ring
  5. 弹簧  
Springs
  6. 大气端动环O型圈  
O ring for rotary ring
  7. 大气端动环  
Rotary ring
  8. 大气端静环  
Stationary ring
  9. 大气端静环O型圈  
O ring for Stationary ring
  10. 骨架油封  
Framework oil seal
  11. 轴承  
Bearing
  12. 毡圈  
Felt collar
  13. 轴套O型圈  
O ring for shaft sleeve

#### 管口明细

- Orifice details
- A. 冷却水进口  
Cooling water inlet.
  - B. 冷却水出口  
Cooling water outlet.
  - C. 密封液进口  
Sealing liquid inlet.
  - D. 密封液出口  
Sealing liquid outlet.
  - E. 泄漏液出口  
Leakage outlet.
- ①. 平面  
Flat surface  
②. 榫槽面  
Tongue-and-groove

#### 78标

d	D	d0	d1	n-φ	L1	
					M206U, M206L	M207B
30	185	150	116	4-φ18	310	310
35-40	205	170	135	4-φ18	315	330
45-50	235	200	164	8-φ18	325	330
55-65	235	200	164	8-φ18	330	340
70	235	200	164	8-φ18	330	345
80	260	225	188	12-φ18	370	380
85-100	290	255	220	12-φ18	385	405
105-115	315	280	245	12-φ18	400	420
120-125	370	320	270	12-φ23	415	430
130-160	405	355	312	12-φ23	430	440

#### 91标

d	D			d0			d1			n-φ			L1		
	205	206	207	205	206	207	205	206	207	205	206	207	205	206	207
30	235	215	230	200	180	190	164	149	149	8-φ18	8-φ18	8-φ18	293	305	317
35.40	235	215	230	200	180	190	164	149	149	8-φ18	8-φ18	8-φ18	303	315	327
45-60	260	245	270	225	210	220	188	175	175	8-φ18	8-φ18	8-φ18	308	320	332
65.70	315	280	300	280	240	250	245	203	203	8-φ23	8-φ23	8-φ23	363	363	363
75.80	315	280	300	280	240	250	245	203	203	8-φ23	8-φ23	8-φ23	384	384	384
85	370	335	360	335	295	310	298	259	259	12-φ18	12-φ18	12-φ18	404	404	404
90-100	370	335	360	335	295	310	298	259	259	12-φ18	12-φ18	12-φ18	404	404	404
105	370	335	360	335	295	310	298	259	259	12-φ18	12-φ18	12-φ18	404	404	404
110.115	435	405	425	395	355	370	353	312	312	12-φ23	12-φ23	12-φ23	409	409	409
120.125	435	405	425	395	355	370	353	312	312	12-φ23	12-φ23	12-φ23	409	409	409
130.160	485	460	485	445	410	430	403	363	363	16-φ30	16-φ30	16-φ30	424	424	424



## 2001B型机械密封

2001B mechanical seal

发明专利号:2011 2 0020843.X 2011 2 0020919.9

Patent no.: 2011 2 0020863.7

取代: M204B型.2001U型

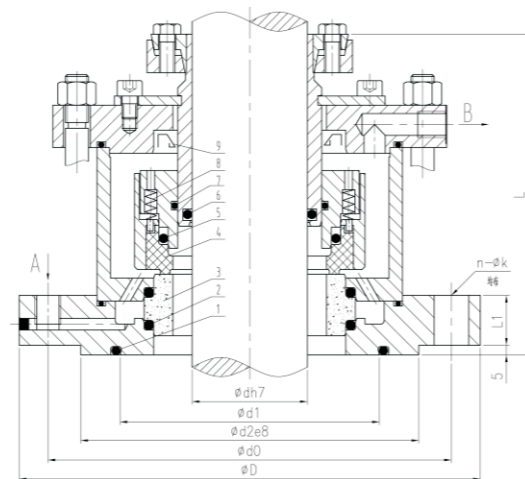
Instead of M204B and 2001U



### 模块化设计

Modularized design

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

Application

立式低压反应釜。  
Vertical reactor

### 使用参数

OPERATION PARAMETERS

设计压力:PN-0.1~0.6MPa

Design pressure: PN-0.1~0.6MPa

设计温度:-40~180°C (320°C)

Design temperature:-40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装高度增加80mm

If the working temperature is above 180°C, A cooling plate should be needed and the mounting height will increase by 80mm.

设计转速: 2m/s

Design rotating speed: 2m/s

介质:根据配置不同可适用于强腐蚀性

介质。

Medium: Suitable for a variety of highly corrosive

working conditions by different configurations.

### 结构特点

集装式结构, 模块化设计, 传动没有方向性。只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。下法兰按不同标准生产就可以适用不同标准的反应釜。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission. High universality parts. Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

#### 易损件明细

Wearing parts details

1. 釜口密封圈  
Sealing ring for connecting flange
2. 静环密封圈  
Sealing ring for stationary ring
3. 静环  
Stationary ring
4. 动环  
Rotary ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Springs
9. 骨架油封  
Framework oil seal

#### 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet (G<sub>1/4</sub>" )
- B. 密封液出口  
Sealing liquid outlet (G<sub>1/4</sub>" )

d	d1	d2	d0	D	L1	L	n-φ
30	75	110	145	175	22	145	4-18
40	75	110	145	175	22	145	4-18
50	135	176	210	240	22	145	8-18
60	135	176	210	240	26	170	8-18
70	135	176	210	240	26	170	8-18
80	155	204	240	275	26	170	8-22
90	190	234	270	305	26	170	8-22
100	190	234	270	305	26	170	8-22
110	215	260	295	330	26	170	8-22
120	215	260	295	330	26	170	8-22
130	215	260	295	330	26	170	8-22
140	250	313	350	395	30	180	12-22
150	265	313	350	395	30	180	12-22
160	265	313	350	395	30	180	12-22
180	310	364	400	445	30	190	12-22
200	310	364	400	445	30	190	12-22
220	340	422	460	505	30	190	16-22

## 2002B型机械密封

2002B mechanical seal

发明专利号2011 2 0020843.X 2011 2 0020919.9

Patent no.: 2011 2 0020863.7

取代: M204B型.2002U型

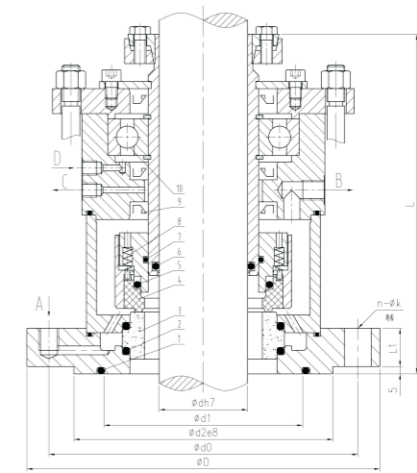
Instead of M204B and 2002U



### 模块化设计

Modularized design

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

Application

立式低压反应釜。  
Vertical reactor

### 使用参数

OPERATION PARAMETERS

设计压力:PN-0.1~0.6MPa

Design pressure: PN-0.1~0.6MPa

设计温度:-40~180°C (320°C)

Design temperature:-40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装高度增加80mm

If the working temperature is above 180°C, A cooling plate should be needed and the mounting height will increase by 80mm.

设计转速: 2m/s

Design rotating speed: 2m/s

介质:根据配置不同可适用于强腐蚀性

性介质。

Medium: Suitable for a variety of highly corrosive

working conditions by different configurations.

### 结构特点

集装式结构, 模块化设计, 传动没有方向性。只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。下法兰按不同标准生产就可以适用不同标准的反应釜。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission. High universality parts. Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

#### 易损件明细

Wearing parts details

1. 釜口密封圈  
Sealing ring for connecting flange
2. 静环密封圈  
Sealing ring for stationary ring
3. 介质端静环  
Stationary ring
4. 动环  
Rotary ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Springs
9. 骨架油封  
Framework oil seal
10. 轴承  
Bearing

#### 管口明细

Orifice details

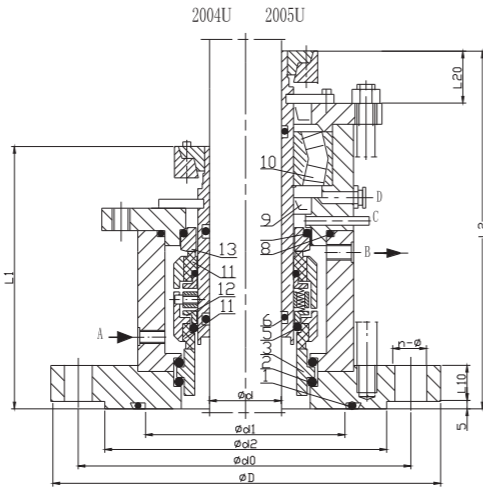
- A. 密封液进口 (G<sub>1/4</sub>" )  
Sealing liquid inlet
- B. 密封液出口 (G<sub>1/4</sub>" )  
Sealing liquid outlet
- C. 泄漏液出口 (M10x1)  
Leakage outlet
- D. 润滑油进口 (M10x1)  
Lubricant inlet

d	d1	d2	d0	D	L1	L	n-φ
30	75	110	145	175	22	195	4-18
40	75	110	145	175	22	195	4-18
50	135	176	210	240	22	230	8-18
60	135	176	210	240	26	240	8-18
70	135	176	210	240	26	240	8-18
80	155	204	240	275	26	245	8-22
90	190	234	270	305	26	250	8-22
100	190	234	270	305	26	250	8-22
110	215	260	295	330	26	250	8-22
120	215	260	295	330	26	260	8-22
130	215	260	295	330	26	260	8-22
140	250	313	350	395	30	275	12-22
150	265	313	350	395	30	275	12-22
160	265	313	350	395	30	280	12-22
180	310	364	400	445	30	295	12-22
200	310	364	400	445	30	295	12-22
220	340	422	460	505	30	295	16-22

## 2004U、2005U型机械密封

2004U, 2005U mechanical seal

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

Application  
立式反应釜、薄膜蒸发器等。  
Vertical reactor and film evaporator.

### 使用参数

#### OPERATION PARAMETERS

设计压力:  
Design pressure  
2004U型PN-0.1~1.6MPa  
2004U PN-0.1~1.6MPa  
2005U型PN-0.1~1.6MPa  
2005U PN-0.1~1.6MPa  
设计温度: -40~180°C (320°C)  
Design temperature: -40~180°C (320°C)  
当温度超过180°C时须增加冷却水箱,  
If the working temperature is above 180°C, A cooling plate  
安装高度增加80mm  
is needed and the mounting height will increase by 80mm.  
设计转速: 2m/s  
Design rotating speed: 2m/s  
介质: 油、水、弱酸、弱碱、易燃、易爆  
等工况。  
Medium: Oil, water, weak acid, weak base, flammable  
and explosive working conditions etc.

### 结构特点

集装式结构传动无方向性。  
结构紧凑适用于标准机架。  
冷却系统的综合考虑保证密封良好的运行环境。  
选择轴承视机架情况而定。  
压力超过0.3MPa需配辅助装置。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission. Compact structure applies to standard mounting frames. Cooling system ensures good running. Bearing configuration depends on mounting frame size. Auxiliary device is needed if the working pressure exceeds 0.3Mpa.

#### 易损件明细

Wearing parts details

1. 釜口O型圈  
O ring for connection flange
2. 静环O型圈  
O ring for Stationary ring
3. 介质端静环  
Stationary ring
4. 介质端动环  
Rotary ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套O型圈  
O ring for shaft sleeve
7. 弹簧  
Springs
8. 密封箱体O型圈  
O ring for housing
9. 骨架油封  
Framework oil seal
10. 轴承  
Bearing
11. 动环  
Rotary ring
12. 弹簧  
Springs
13. 大气端静环  
Stationary ring

#### 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet
- B. 密封液出口  
Sealing liquid outlet
- C. 泄漏液出口  
Leakage outlet
- D. 轴承注油口  
Oil inlet for bearing

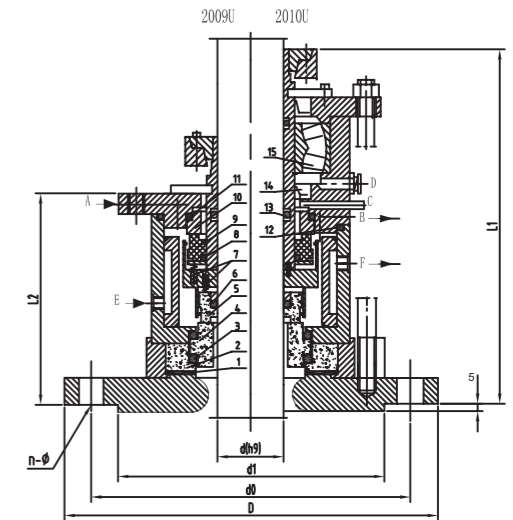
d	d1	d2	d0	D	L10	L1	L2	n-φ
30	90	110	145	175	18	150	215	4-18
40	90	110	145	175	18	155	220	4-18
50	135	176	210	240	18	155	230	8-18
60	135	176	210	240	20	170	245	8-18
70	135	176	210	240	20	170	260	8-18
80	155	204	240	275	25	175	270	8-22
90	190	234	270	305	24	185	290	8-22
100	190	234	270	305	24	185	280	8-22
110	215	260	295	330	24	205	310	8-22
120	215	260	295	330	24	205	305	8-22
130	215	260	295	330	24	205	310	8-22
140	250	313	350	395	24	205	320	12-22
160	265	313	350	395	28	215	340	12-22
180	310	364	400	445	30	245	375	12-22
200	310	364	400	445	30	245	340	12-22
220	340	422	400	445	30	250	390	16-22

## 2009U、2010U型机械密封

2009U, 2010U mechanical seal

国家发明专利号: ZL 2008 2 0217943.x  
Patent no.: ZL 2008 2 0217943.x

HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG./T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 适用范围

Application  
立式搪玻璃反应釜。  
Vertical glass lining reactor

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN-0.1~1.6MPa  
Design pressure: PN-0.1~1.6MPa  
设计温度: -40~180°C  
Design temperature: -40~180°C  
设计转速: 2m/s  
Design rotating speed: 2m/s  
轴径: 40~160mm  
Shaft diameter: 40~160mm  
介质: 除氢氟酸以外的强腐蚀性  
working conditions excluding hydrofluoric acid.

### 结构特点

集装式结构传动无方向性。  
结构紧凑适用于标准机架。  
冷却系统的综合考虑保证密封良好的运行环境。  
介质接触部材料耐强腐蚀。  
压力超过0.3MPa需配辅助装置。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission. Compact structure applies to standard mounting frames. Cooling system ensures good running. Bearing configuration depends on mounting frame size. Auxiliary device is needed if the working pressure exceeds 0.3Mpa.

#### 易损件明细

Wearing parts details

1. 垫片  
Gasket
2. 静环座  
stationary ring retainer
3. 介质端静环O型圈  
O ring for Stationary ring
4. 介质端静环  
Stationary ring
5. 介质端动环  
Rotary ring
6. 介质端动环O型圈  
O ring for rotary ring
7. 弹簧  
Springs
8. 大气端动环O型圈  
O ring for rotary ring
9. 大气端动环  
rotary ring
10. 大气端静环  
Stationary ring
11. 大气端静环O型圈  
O ring for stationary ring
12. 密封箱体O型圈  
O ring for housing
13. 轴套O型圈  
O ring for shaft sleeve
14. 骨架油封  
Framework oil seal
15. 轴承  
Bearing

#### 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet
- B. 密封液出口  
Sealing liquid outlet
- C. 泄漏液出口  
Leakage outlet
- D. 轴承注油口  
Oil inlet for bearing
- E. 冷却水进口  
Cooling water inlet
- F. 冷却水出口  
Cooling water outlet

d	d1		d0		D		L1	L2	n-φ	
	欧洲标准	91标准	欧洲标准	91标准	欧洲标准	91标准			欧洲标准	91标准
40	110	109	145	145	175	185	235	155	4-18	4-18
50	176	149	210	180	240	220	250	160	8-18	8-18
60	204	175	240	210	275	250	260	170	8-22	8-18
65	234	175	270	210	305	250	300	180	8-22	8-18
80	234	175	270	210	305	250	300	180	8-22	8-18
95	313	203	350	240	395	285	300	190	12-22	8-18
100	313	203	350	240	395	285	300	190	12-22	8-18
110	422	259	460	295	505	340	310	215	12-22	8-22
125	422	259	460	295	505	340	310	215	12-22	8-22
140	422	324	460	350	505	395	325	220	12-22	12-22
160	422	324	460	350	505	395	335	225	12-22	12-22



## 2006B型机械密封

2006B mechanical seal

发明专利号:2011 2 0020843.X 2011 2 0020919.9  
Patent no.: 2011 2 0020863.7

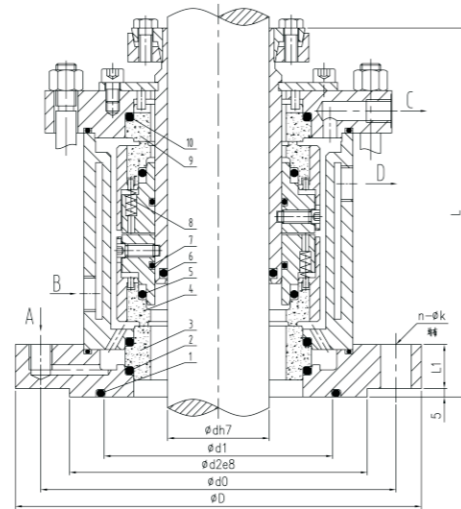
取代: M205U型.M206U型.M207B型.2004U型  
Instead of M205U, M206U, M207B, 2004U



### 模块化设计

Modularized design

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

Application  
立式反应釜。  
Vertical reactor

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN=0.1~2.5MPa  
Design pressure: PN=0.1~2.5MPa

当压力超过0.5MPa时需配置辅助系统。  
Auxiliary device is needed if the working pressure exceeds 0.5MPa.

设计温度: -40~180°C (320°C)  
Design temperature: -40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装  
If the working temperature is above 180°C, A cooling plate should  
高度增加80mm  
is needed and the mounting height will increase by 80mm.

设计转速: 2m/s  
Design rotating speed: 2m/s

介质: 根据配置不同可适用于强腐蚀性介质。  
Medium: Suitable for a variety of highly corrosive working  
conditions by different configurations.

### 结构特点

集装式结构, 模块化设计, 传动没有方向性。  
只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。  
下法兰按不同标准生产就可以适用不同标准的反应釜。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission.  
Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

### 易损件明细

#### Wearing parts details

1. 釜口密封圈  
Sealing ring for connection flange
2. 静环密封圈  
Sealing ring for Stationary ring
3. 介质端静环  
Stationary ring
4. 动环  
Rotary ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Spring
9. 大气端静环  
Stationary ring
10. 大气端静环密封圈  
Sealing ring for Stationary ring

### 管口明细

- #### Orifice details
- A. 密封液进口  
Sealing liquid inlet
  - B. 冷却液进口  
Cooling liquid inlet
  - C. 密封液出口  
Sealing liquid outlet
  - D. 冷却液出口  
Cooling liquid outlet

d	d1	d2	d0	D	L1	L	n-φ
30	75	110	145	175	22	180	4-18
40	75	110	145	175	22	180	4-18
50	135	176	210	240	22	180	8-18
60	135	176	210	240	26	230	8-18
70	135	176	210	240	26	230	8-18
80	155	204	240	275	26	230	8-22
90	190	234	270	305	26	230	8-22
100	190	234	270	305	26	230	8-22
110	215	260	295	330	26	230	8-22
120	215	260	295	330	26	230	8-22
130	215	260	295	330	26	230	8-22
140	250	313	350	395	30	235	12-22
150	265	313	350	395	30	235	12-22
160	265	313	350	395	30	235	12-22
180	310	364	400	445	30	245	12-22
200	310	364	400	445	30	245	12-22
220	340	422	460	505	30	245	16-22

## 2007B型机械密封

2007B mechanical seal

发明专利号:2011 2 0020843.X 2011 2 0020919.9  
Patent no.: 2011 2 0020863.7

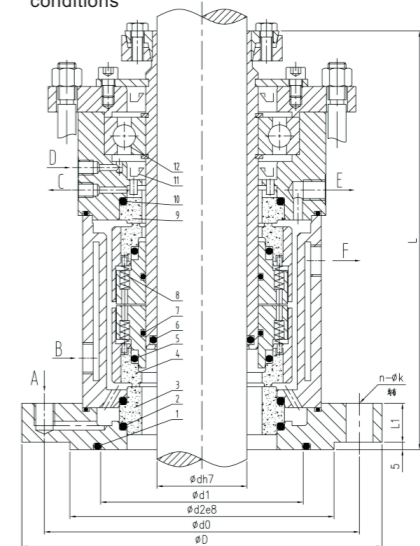
取代: M205U型.M206U型.M207B型.2005U型  
Instead of M205U, M206U, M207B, 2005U



### 模块化设计

Modularized design

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 适用范围

Application  
立式反应釜。  
Vertical reactor

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN=0.1~2.5MPa  
Design pressure: PN=0.1~2.5MPa

当压力超过0.5MPa时需配置辅助系统。  
Auxiliary device is needed if the working pressure exceeds 0.5MPa.

设计温度: -40~180°C (320°C)  
Design temperature: -40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装  
If the working temperature is above 180°C, A cooling plate should  
高度增加80mm  
is needed and the mounting height will increase by 80mm.

设计转速: 2m/s  
Design rotating speed: 2m/s

介质: 根据配置不同可适用于强腐蚀性介质。  
Medium: Suitable for a variety of highly corrosive working  
conditions by different configurations.

### 结构特点

集装式结构, 模块化设计, 传动没有方向性。  
只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。  
下法兰按不同标准生产就可以适用不同标准的反应釜。

#### Structure features

Cartridge structure, modularization design and Non-directional transmission.  
Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

### 易损件明细

#### Wearing parts details

1. 釜口密封圈  
Sealing ring for connection flange
2. 静环密封圈  
Sealing ring for Stationary ring
3. 介质端静环  
Stationary ring
4. 动环  
Rotary ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Spring
9. 大气端静环  
Stationary ring
10. 大气端静环密封圈  
Sealing ring for Stationary ring
11. 骨架油封  
Framework oil seal
12. 轴承  
Bearing

### 管口明细

- #### Orifice details
- A. 密封液进口  
Sealing liquid inlet
  - B. 冷却液进口  
Cooling liquid inlet
  - C. 泄漏出口  
Leakage outlet
  - D. 润滑液进口  
Lubricant inlet
  - E. 密封液出口  
Sealing liquid outlet
  - F. 冷却液出口  
Cooling liquid Outlet

d	d1	d2	d0	D	L1	L	n-φ
30	75	110	145	175	22	225	4-18
40	75	110	145	175	22	230	4-18
50	135	176	210	240	22	235	8-18
60	135	176	210	240	26	290	8-18
70	135	176	210	240	26	295	8-18
80	155	204	240	275	26	300	8-22
90	190	234	270	305	26	300	8-22
100	190	234	270	305	26	305	8-22
110	215	260	295	330	26	305	8-22
120	215	260	295	330	26	315	8-22
130	215	260	295	330	26	315	8-22
140	250	313	350	395	30	330	12-22
150	265	313	350	395	30	330	12-22
160	265	313	350	395	30	335	12-22
180	310	364	400	445	30	350	12-22
200	310	364	400	445	30	350	12-22
220	340	422	460	505	30	350	16-22

## 2017B型机械密封

2017B mechanical seal

发明专利号: 2011 2 0020843.X

Patent no.: 2011 2 0020919.9  
2011 2 0020863.7

取代: 2009U型 Instead of :2009U



### 适用范围

Application  
立式反应釜。  
Vertical reactor

### 使用参数

OPERATION PARAMETERS

设计压力: PN-0.1~2.5MPa

Design pressure: PN-0.1~2.5MPa

当压力超过0.5MPa时需配置辅助系统。

Auxiliary device is needed if the working pressure exceeds 0.5Mpa.

设计温度: -40~180°C (320°C)

Design temperature: -40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装高度增加80mm

If the working temperature is above 180°C, A cooling plate should is needed and the mounting height will increase by 80mm.

设计转速: 2m/s

Design rotating speed: 2m/s

介质: 根据配置不同可适用于强腐蚀性介质。

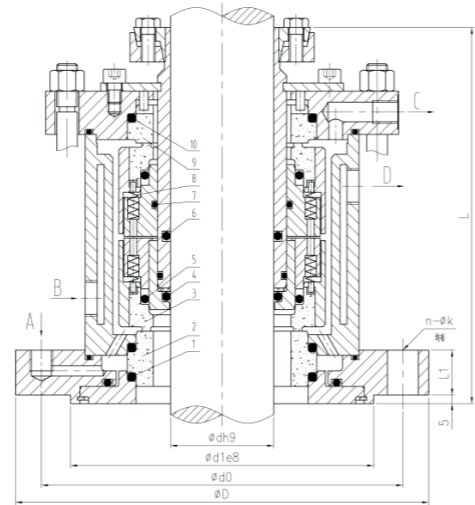
Medium: Suitable for a variety of highly corrosive working conditions by different configurations

d	d1	d0	D	L1	L	n-Φ
30	109	145	185	22	180	4-18
40	109	145	185	22	180	4-18
50	149	180	220	22	180	8-18
60	175	210	250	26	230	8-18
65	175	210	250	26	230	8-18
70	175	210	250	26	230	8-18
80	175	210	250	26	230	8-18
90	203	240	285	26	230	8-18
95	203	240	285	26	230	8-18
100	203	240	285	26	230	8-18
110	259	295	340	26	230	8-22
125	259	295	340	26	230	8-22
130	259	295	340	26	230	8-22
140	324	350	395	30	245	12-22
150	324	350	395	30	245	12-22
160	324	350	395	30	245	12-22

### 模块化设计

Modularized design

HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG./T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 结构特点

集装式结构, 模块化设计, 传动没有方向性。  
只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。  
下法兰按不同标准生产就可以适用不同标准的反应釜。

### Structure features

Cartridge structure, modularization design and Non-directional transmission.  
Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

### 易损件明细

Wearing parts details

1. 静环密封圈  
Sealing ring for Stationary ring
2. 介质端静环  
Stationary ring
3. 动环  
Rotary ring (Medium end)
4. 弹簧座镶环密封圈  
Sealing ring for shrink fit ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Springs
9. 大气端静环  
Stationary ring
10. 大气端静环密封圈  
Sealing ring for stationary ring

### 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet
- B. 冷却液进口  
Cooling liquid inlet
- C. 密封液出口  
Sealing liquid outlet
- D. 冷却液出口  
Cooling liquid outlet

## 2018B型机械密封

2018B mechanical seal

发明专利号: 2011 2 0020843.X

Patent no.: 2011 2 0020919.9  
2011 2 0020863.7

取代: 2010U型 Instead of 2010U



### 适用范围

Application  
立式反应釜。  
Vertical reactor

### 使用参数

OPERATION PARAMETERS

设计压力: PN-0.1~2.5MPa

Design pressure: PN-0.1~2.5MPa

当压力超过0.5MPa时需配置辅助系统。

Auxiliary device is needed if the working pressure exceeds 0.5Mpa.

设计温度: -40~180°C (320°C)

Design temperature: -40~180°C (320°C)

当温度超过180°C时须增加冷却水箱, 安装高度增加80mm

If the working temperature is above 180°C, A cooling plate shouldis needed and the mounting height will increase by 80mm.

设计转速: 2m/s

Design rotating speed: 2m/s

介质: 根据配置不同可适用于强腐蚀性介质。

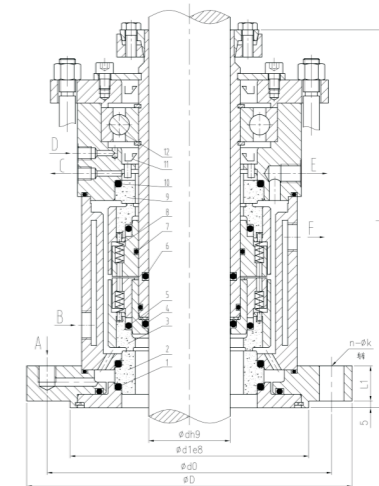
Medium: Suitable for a variety of highly corrosive working conditions by different configurations

d	d1	d0	D	L1	L	n-Φ
30	109	145	185	22	225	4-18
40	109	145	185	22	230	4-18
50	149	180	220	22	235	8-18
60	175	210	250	26	290	8-18
65	175	210	250	26	295	8-18
70	175	210	250	26	295	8-18
80	175	210	250	26	300	8-18
90	203	240	285	26	300	8-18
95	203	240	285	26	305	8-18
100	203	240	285	26	305	8-18
110	259	295	340	26	305	8-22
125	259	295	340	26	315	8-22
130	259	295	340	26	315	8-22
140	324	350	395	30	330	12-22
150	324	350	395	30	330	12-22
160	324	350	395	30	335	12-22

### 模块化设计

Modularized design

HG/T2057《搪玻璃搅拌容器用机械密封》标准制定单位  
HG./T2057 Standard constitutor of glass lining mixing vessel mechanical seal



### 结构特点

集装式结构, 模块化设计, 传动没有方向性。  
只需更换釜口部位的材质就可以适合不同介质的需要, 零件通用性强。  
下法兰按不同标准生产就可以适用不同标准的反应釜。

### Structure features

Cartridge structure, modularization design and Non-directional transmission.  
Suitable for different mediums and different sizes by change the materials or sizes of the connecting flanges.

### 易损件明细

Wearing parts details

1. 静环密封圈  
Sealing ring for Stationary ring
2. 介质端静环  
Stationary ring
3. 动环  
Rotary ring
4. 弹簧座镶环密封圈  
Sealing ring for shrink fit ring
5. 动环密封圈  
Sealing ring for rotary ring
6. 轴套密封圈  
Sealing ring for shaft sleeve
7. 弹簧座密封圈  
Sealing ring for spring retainer
8. 弹簧  
Springs
9. 大气端静环  
Stationary ring
10. 大气端静环密封圈  
Sealing ring for stationary ring
11. 骨架油封  
Framework oil seal
12. 轴承  
Bearing

### 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet
- B. 冷却液进口  
Cooling liquid inlet
- C. 泄漏液出口  
Leakage outlet
- D. 润滑液进口  
Lubricant inlet
- E. 密封液出口  
Sealing liquid outlet
- F. 冷却液出口  
Cooling liquid outlet

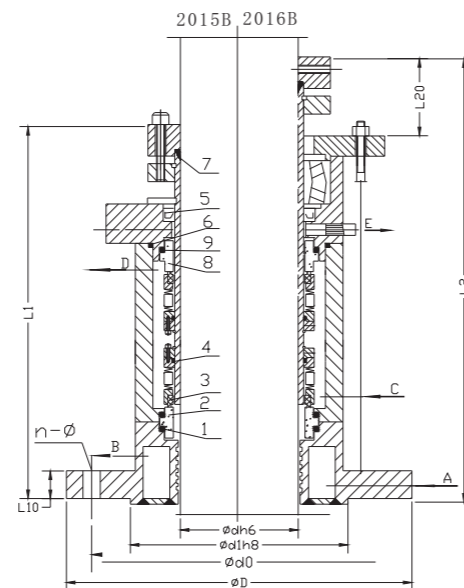
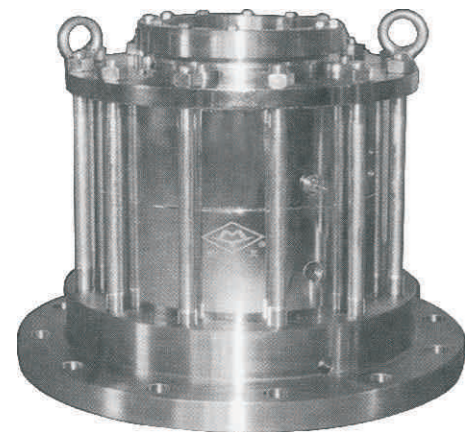


## 2015B,2016B型金属波纹管机械密封

2015B,2016B Metal Bellows Mechanical Seal

符合HG21571-95标准  
Conform to HG21571-95 standard  
本厂专利 专利号: ZL00220957.8  
Patent No: ZL00220957.8

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



A.冷却液进口 G1/2  
Chilling liquid inlet G1/2  
B.冷却液出口 G1/2  
Chilling liquid outlet G1/2  
C.密封液进口 G1/4  
Sealing liquid inlet G1/4  
D.密封液出口 G1/4  
Sealing liquid outlet G1/4

### 使用参数 OPERATION PARAMETERS

压力: PN-0.1~2.5MPa  
Pressure: PN-0.1~2.5MPa  
温度: -40~450℃  
Temperature: -40~450℃

转速: ≤ 2m/s  
Rotating speed: ≤ 2m/s

介质: 适用于各种溶剂、酸、碱、油、高分子悬浮液。  
Medium: Applied to a wide variety of solvents, bases, acids, oil and polymeric suspension.

### 结构特点 STRUCTURE

密封性能可靠。适用于摆动量在0.8mm以内的搅拌轴。辅助密封圈可用聚四氟乙烯或柔性石墨。

Reliable sealing performance, applicable to mixer shafts with amplitude of oscillation less than 0.8mm; auxiliary gasket rings optionally made from either teflon or flexible graphite.

### 易损件明细 Wearing Parts List

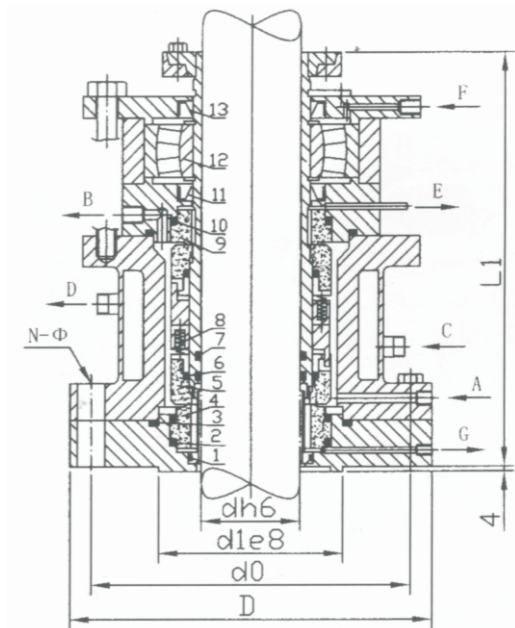
- |  |  |
|--|--|
| 1.下静环密封圈<br>Sealing washer for lower static ring | 6.“O”形圈<br>O ring                                |
| 2.下静环<br>Lower static ring                       | 7.楔形密封圈<br>Wedge ring                            |
| 3.波纹管动环<br>Rotating O ring for bellows           | 8.上静环<br>Upper static ring                       |
| 4.动环密封圈<br>Rotating O ring                       | 9.上静环密封圈<br>Sealing washer for upper static ring |
| 5.油封<br>Oil seal                                 |  |

d	d1	d0	D	L10	L1	L2	L20	n-φ
30	110	145	175	20	195	275	38	4-18
40	110	145	175	20	195	275	38	4-18
50	176	210	240	22	200	310	38	8-18
60	176	210	240	22	210	320	38	8-18
70	176	210	240	22	220	360	38	8-18
80	204	240	275	22	220	360	44	8-22
90	234	270	305	24	230	360	44	8-22
100	234	270	305	24	230	360	44	8-22
110	260	295	330	24	255	370	44	8-22
120	260	295	330	24	255	370	44	8-22
130	260	295	330	24	260	385	50	8-22
140	313	350	395	24	260	385	50	12-22
160	313	350	395	24	265	390	50	12-22

## X207B型机械密封

X207B Mechanical Seal

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 使用参数 OPERATION PARAMETERS

压力: PN-0.1~4.0MPa  
Pressure: PN-0.1~4.0MPa  
温度: -40~180℃  
Temperature: -40~180℃

当温度超过180℃时, 须设置高位水箱, 安装高度L1加高80mm。  
Chilling water tank is to be mounted when the temperature exceeds 180℃, with 80mm higher than the mounting height L1.

转速: ≤ 2m/s  
Rotating speed: ≤ 2m/s

介质: 油、水、弱碱、弱酸及易燃、易爆、有毒气体等  
Medium: oil, water, weak acid, weak base and inflammable, explosive and toxic gas.

A:密封液进口  
Sealing liquid inlet  
B:密封液出口  
Sealing liquid outlet  
C:冷却水进口  
Chilling water inlet  
D:冷却水出口  
Chilling water outlet  
E:泄漏液出口  
Leaking liquid outlet  
F:注油孔  
Oil orifice  
G:渠漏液出口  
Medium face outlet

d	d1	d0	D	L1	N-φ
30	70	145	170	335	6-14
40	80	170	200	335	6-18
50	100	200	230	335	8-18
60	120	235	255	340	8-18
65	130	245	275	340	8-18
80	145	260	295	345	8-23
90	155	275	310	360	8-23
95	170	280	315	360	8-23
110	180	300	335	370	8-23
120	200	325	365	360	8-23
130	200	325	365	365	8-23
150	259	360	430	405	12-27
160	312	430	480	430	12-33
200	420	525	600	485	16-36

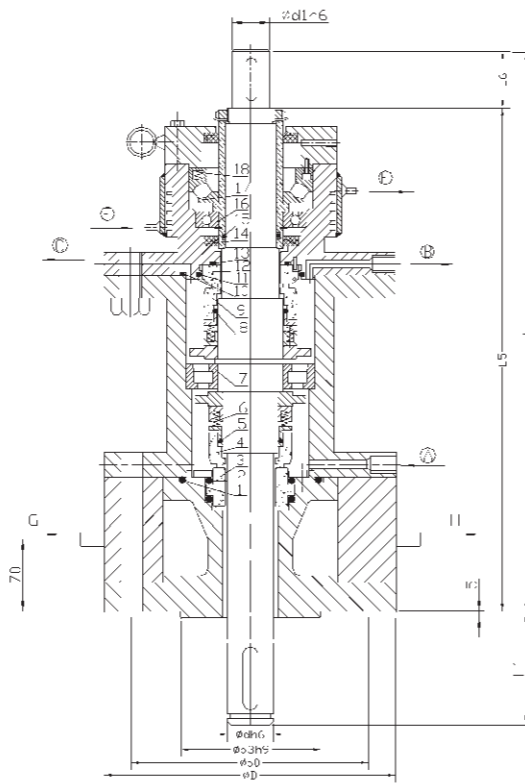
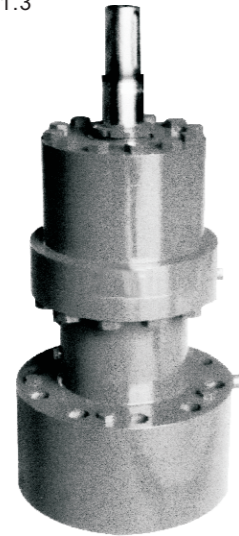
序号 Item	名称 Description	材料 Material	数量 Qty.
1	内漏装置“O”形圈 Inside O-Ring	氟橡胶 Viton	1
2	静环“O”形圈 Stationary O-Ring	氟橡胶 Viton	1
3	箱体“O”形圈 Chamber O-Ring	氟橡胶 Viton	2
4	介质端静环 Medium end Stationary	SIC	1
5	动环 Rotary	SIC	2
6	动环“O”形圈 Rotary O-Ring	氟橡胶 Viton	2
7	轴套“O”形圈 Shaft O-Ring	氟橡胶 Viton	2
8	弹簧 Spring	1Cr18Ni9Ti	2组 two sets
9	大气端静环 Air end Stationary	SIC	1
10	大气端静环“O”形圈 Stationary O-Ring	氟橡胶 Viton	1
11	骨架油封 Reinforced oil seal	耐油橡胶 oil-proof rubber	1
12	轴承 Shaft		1
13	骨架油封 Reinforced oil seal	耐油橡胶 oil-proof rubber	1

## M208B1型机械密封

M208B1 Mechanical Seal

符合HG2098-2001标准  
Conform to HG2098-2001 standard  
本厂专利 专利号: ZL94242541.3  
Patent No: ZL94242541.3

GB/T24319《釜用高压机械密封技术条件》标准制定单位  
GB/T24319 Standard constitutor of Reactor mechanical seal technical conditions



d	d1	d3	d0	D	L1	L5	L6	L	n-φ
40	25	149	200	250	200	550	40	590	8-26
50	35	175	240	295	250	550	55	605	8-30
60	45	175	240	295	300	600	80	680	8-30
80	60	203	280	345	350	650	100	750	8-33
90	70	259	345	415	400	650	100	750	12-36
100	80	259	345	415	500	700	125	825	12-36
110	90	259	345	415	500	700	125	825	12-36
120	100	259	345	415	500	750	160	910	12-36
130	110	259	345	415	500	750	160	910	12-36
140	120	312	400	470	500	800	160	960	12-36
160	130	312	400	470	600	800	190	990	12-36
180	150	363	460	530	600	850	190	1040	12-36
200	170	421	525	600	600	850	230	1080	16-36
220	190	473	585	670	600	950	230	1180	16-36

- A. 密封液进口  
Sealing liquid inlet  
B. 密封液出口  
Sealing liquid outlet  
C. 备用口  
Prepare usage of connect  
D. 大气端泄漏口 φ8  
Discharge port for medium side φ8  
E. 冷却水进口 G1/2  
Chilling water inlet G1/2  
F. 冷却水出口 G1/2  
Chilling water outlet G1/2  
G. 冷却水进口 G1/2  
Chilling water inlet G1/2  
H. 冷却水出口 G1/2  
Chilling water outlet G1/2

### 使用参数 OPERATION PARAMETERS

压力: M208B1PN-0.1~6.4MPa  
Pressure: M208B1PN-0.1~6.4MPa  
温度: -40~180℃ (350℃)  
Temperature: -40~180℃ (350℃)  
介质: 丙烯、甲苯、金属钾、酸、碱高分子悬浮液。  
Medium: Propylene, toluene, metallic potassium, base, polymeric suspension.  
转速: ≤ 5m/s  
Rotating speed: ≤ 5m/s

注: 设备使用时必须配套压力平衡装置  
Note: A pressure-equalizing unit is to be used for normal operation.

### 易损件明细 Wearing Parts List

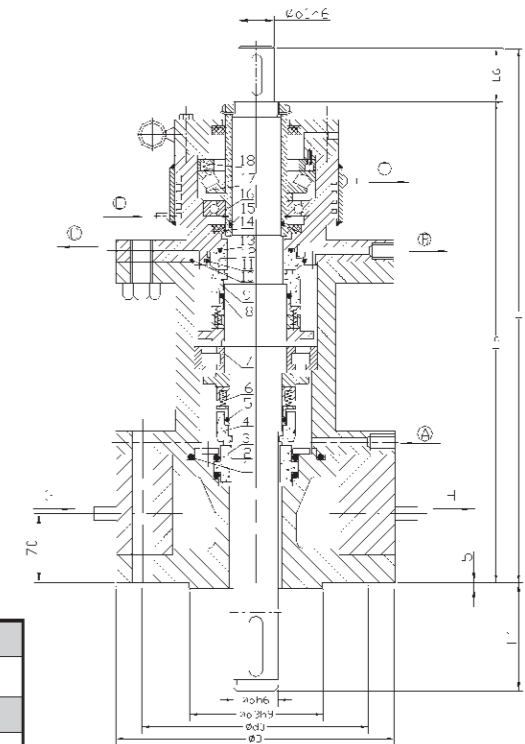
- 密封箱体“O”形圈  
O ring for sealing box
- 介质端静环“O”形圈  
Static O ring for medium side
- 介质端静环  
Static ring for medium side
- 介质端动环  
Rotating ring for medium side
- 介质端动环“O”形圈  
Rotating O ring for medium side
- 弹簧  
Spring
- 轴承1  
Bearign 1
- 大气端动环“O”形圈  
Rotating O ring for atmospheric side
- 大气端动环  
Rotating ring for atmospheric side
- 轴承箱体“O”形圈  
O ring for bearing box
- 大气端静环1“O”形圈  
Static O ring 1 for atmospheric side
- 大气端静环  
Static ring for atmospheric side
- 大气端静环2“O”形圈  
Staaic O ring 2 for atmospheric side
- 骨架油封  
Sketetal oil seal
- 轴套“O”形圈  
O ring for shaft sleeve
- 轴承2  
Bearing2
- 轴承3  
Bearing3
- 推力弹簧  
Thrust spring

## M209B1, M210B1型机械密封

M209B1, M210B1 Mechanical Seal

本厂专利 专利号: ZL002408821.1  
Patent No: ZL002408821.1

GB/T24319《釜用高压机械密封技术条件》标准制定单位  
GB/T24319 Standard constitutor of Reactor mechanical seal technical conditions



d	d1	d3	d0	D	I1	I2	I3	I4	I5	I6	L	n-φ
40	25	149	210	265	200	50	40	70	565	40	605	8-30
50	35	175	250	315	250	50	45	80	565	55	620	8-33
60	45	175	280	345	300	50	50	85	620	80	700	12-33
70	55	203	290	355	300	50	50	85	620	80	700	12-33
80	60	259	360	430	350	50	60	105	665	100	765	12-36
95	75	259	360	430	400	50	60	105	665	100	765	12-36
110	90	312	430	505	500	50	77	112	745	125	870	12-39
125	105	312	430	505	500	50	77	112	785	160	945	12-39
140	120	363	500	585	500	60	80	140	850	160	1010	16-42

- A. 密封液进口  
Sealing liquid inlet  
C. 备用口  
Prepare usage of connect  
E. 冷却水进口 G1/2  
Chilling water inlet G1/2  
G. 冷却水进 G1/2  
Cilling water inlet G1/2  
B. 密封液出口  
Sealing liquid outlet  
D. 介质端泄漏口 φ8  
Discharge port for medium side φ8  
F. 冷却水出口 G1/2  
Chilling water outlet G1/2  
H. 冷却水出 G1/2  
Cilling water outlet G1/2

### 使用参数 OPERATION PARAMETERS

压力: M209B1PN-0.1~10MPa  
M210B1PN-0.1~16MPa  
Pressure: M209B1PN-0.1~10MPa  
M210B1PN-0.1~16MPa  
温度: -40~180℃ (350℃)  
Temperature: -40~180℃ (350℃)  
介质: 丙烯、甲苯、金属钾、酸、碱高分子悬浮液。  
Medium: Propylene, toluene, metallic potassium, base, polymeric suspension.  
转速: ≤ 5m/s  
Rotating speed: ≤ 5m/s

注: 设备使用时必须配套压力平衡装置  
Note: A pressure-equalizing unit is to be used for normal operation.

### 易损件明细 Wearing Parts List

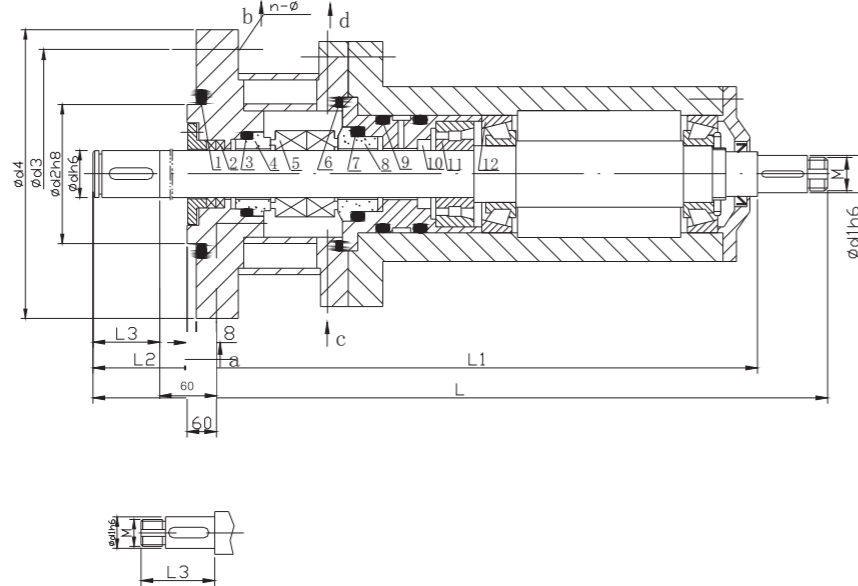
- 内漏装置“O”形圈  
O ring for leak receiver
- 釜口法兰“O”形圈  
Static O ring for cauldron neck flange
- 密封箱体“O”形圈  
O ring for sealing box
- 介质端静环“O”形圈  
Static O ring for medium side
- 介质端静环  
Static ring for medium side
- 介质端动环  
Rotating ring for medium side
- 介质端动环“O”形圈  
Rotating O ring for medium side
- 弹簧  
Spring
- 轴承1  
Bearing 1
- 大气端动环“O”形圈  
Rotating O ring for atmospheric side
- 大气端动环  
Rotating for atmospheric side
- 轴承箱体“O”形圈  
O ring for bearing box
- 大气端静环1“O”形圈  
Static O ring 1 for atmospheric side
- 大气端静环  
Static ring for atmospheric side
- 大气端静环2“O”形圈  
Static O ring 2 for atmospheric side
- 骨架油封  
Sketetal oil seal
- 轴套“O”形圈  
O ring for shaft sleeve
- 轴承2  
Bearing2
- 轴承3  
Bearing3
- 推力弹簧  
Thrust spring



## FMY.W640 卧式和底搅拌型机械密封

FMY.W640 Bottom Agitating and Horizontal Mechanical Seal

GB/T24319《釜用高压机械密封技术条件》标准制定单位  
GB./T24319 Standard constitutor of Reactor mechanical seal technical conditions



### 技术要求 SPECIFICATION

压力:PN-0.1~6.4MPa  
Pressure:PN-0.1~6.4MPa  
温度: -40~180℃ (350℃)  
Temperature: -40~180℃ (350℃)  
转速: ≤ 2m/s  
Rotating speed: ≤ 2m/s  
介质: 聚乙烯、聚丙烯、带悬浮颗粒及结晶性介质。  
Medium: polyethylene, and polypropylene suspending particles, and crystalline medium.  
结构特点: 集装式结构、安装精度高, 适用于底搅拌、卧式以及侧入式聚合釜。  
Structure feature: centralized structure eliminating the negative impact of dead-end sealing from polymeric cauldrons upon the working materials, precise installation; suitable for high-viscosity bottom agitation, horizontal and oblique polymeric cauldrons.

注: 机械密封使用压力大于0.6MPa时必须配套压力平衡装置。

Note: In case the applied pressure exceeds 0.6MPa, a pressure-equalizing unit is to be used for a desirable result.

### 易损件明细 Wearing Parts List

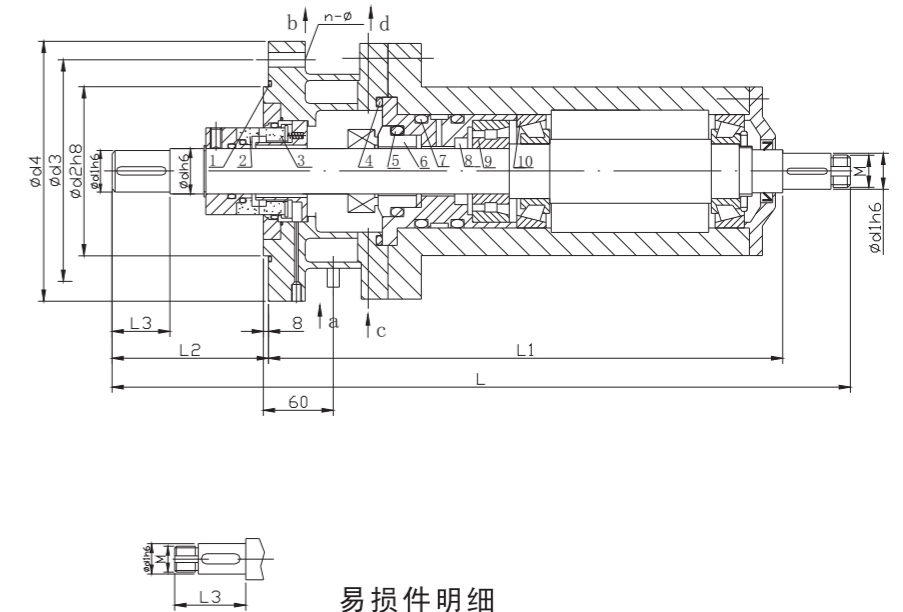
- |                                       |                            |   |  |                                  |                                  |   |   |                                     |                              |                      |                      |
|---------------------------------------|----------------------------|---|--|----------------------------------|----------------------------------|---|---|-------------------------------------|------------------------------|----------------------|----------------------|
| 1.釜口“O”形圈<br>O ring for cauldron neck | 2.填料组件<br>Packing assembly | 3.介质端静环“O”形圈<br>Static O ring for medium side | 4.介质端静环<br>Static ring for medium side | 5.动环组件<br>Rotating ring assembly | 6.箱体“O”形圈<br>O ring for seal box | 7.大气端静环<br>Static ring for atmospheric side | 8.大气端静环“O”形圈<br>Static ring O ring for atmospheric side | 9.静环座“O”形圈<br>Static O ring support | 10.骨架油封<br>Skeletal oil seal | 11.轴承 1<br>Bearing 1 | 12.轴承 2<br>Bearing 2 |
|---------------------------------------|----------------------------|---|--|----------------------------------|----------------------------------|---|---|-------------------------------------|------------------------------|----------------------|----------------------|
- a.冷却水进口 G1/2  
Chilling water inlet G1/2  
b.冷却水出口 G1/2  
Chilling water outlet G1/2
- a.密封液进口 G1/4  
Sealing liquid inlet G1/4  
b.密封液出口 G1/4  
Sealing liquid outlet G1/4

d	d1	d2	d3	d4	L	L1	L2	L3	M	n-φ
30	25	149	190	230	620	420	140	60	M20	8-23
40	35	149	190	230	650	420	155	75	M30	8-23
50	45	175	230	285	775	495	190	90	M40	8-27
60	55	175	230	285	815	495	210	110	M50	8-27
65	60	203	260	315	815	495	210	110	M55	8-27
70	65	203	260	315	855	495	230	130	M60	8-27
80	75	203	260	315	1030	630	260	140	M70	8-27
90	80	259	320	375	1050	630	270	150	M75	12-27
95	85	259	320	375	1080	630	285	165	M80	12-27
100	90	259	320	375	1250	780	295	175	M85	12-27
110	100	312	390	455	1330	780	350	200	M95	12-33
120	110	312	390	455	1350	780	360	210	M100	12-33
130	120	363	450	515	1380	780	375	230	M110	16-33

## FMY.X 卧式和底搅拌型机械密封

FMY.X Bottom Agitating and Horizontal Mechanical Seal

HG/T2269《釜用机械密封技术条件》标准制定单位  
HG./T2269 Standard constitutor of Reactor mechanical seal technical conditions



### 技术要求 SPECIFICATION

压力:PN 0~1.6MPa  
Pressure:PN 0~1.6MPa  
温度: -40~180℃ (350℃)  
Temperature: -40~180℃ (350℃)  
转速: ≤ 2m/s  
Rotating speed: ≤ 2m/s  
介质: 聚乙烯、聚丙烯、带悬浮颗粒及结晶性介质。  
Medium: polyethylene, and polypropylene suspending particles, and crystalline medium.  
结构特点: 集装式结构, 解决了聚合釜中因在密封存在死角而对物料产生的影响。安装精度高, 适用于高黏度底搅拌、卧式以及侧入式聚合釜。  
Structure feature: centralized structure eliminating the negative impact of dead-end sealing from polymeric cauldrons upon the working materials, precise installation; suitable for high-viscosity bottom agitation, horizontal and oblique polymeric cauldrons.

注: 机械密封使用压力大于0.6MPa时必须配套压力平衡装置。

Note: In case the applied pressure exceeds 0.6MPa, a pressure-equalizing unit is to be used for a desirable result.

### 易损件明细 Wearing Parts List

- |                                       |   |   |                                  |                                  |   |   |                                     |                             |                      |                      |
|---------------------------------------|---|---|----------------------------------|----------------------------------|---|---|-------------------------------------|-----------------------------|----------------------|----------------------|
| 1.釜口“O”形圈<br>O ring for cauldron neck | 2.介质端动环组件<br>Rotating ring assembly for medium side | 3.介质端静环组件<br>Static ring assembly for medium side | 4.动环组件<br>Rotating ring assembly | 5.箱体“O”形圈<br>O ring for seal box | 6.大气端静环<br>Static ring for atmospheric side | 7.大气端静环“O”形圈<br>Static ring O ring for atmospheric side | 8.静环座“O”形圈<br>Static O ring support | 9.骨架油封<br>Skeletal oil seal | 10.轴承 1<br>Bearing 1 | 11.轴承 2<br>Bearing 2 |
|---------------------------------------|---|---|----------------------------------|----------------------------------|---|---|-------------------------------------|-----------------------------|----------------------|----------------------|
- a.冷却水进口 G1/2  
Chilling water inlet G1/2  
b.冷却水出口 G1/2  
Chilling water outlet G1/2
- a.密封液进口 G1/4  
Sealing liquid inlet G1/4  
b.密封液出口 G1/4  
Sealing liquid outlet G1/4

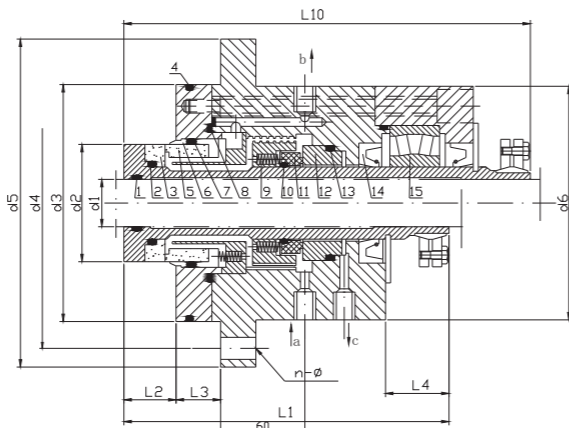
d	d1	d2	d3	d4	L	L1	L2	L3	M	n-φ
30	25	149	190	230	620	420	140	60	M20	8-23
40	35	149	190	230	650	420	155	75	M30	8-23
50	45	175	230	285	775	495	190	90	M40	8-27
60	55	175	230	285	815	495	210	110	M50	8-27
65	60	203	260	315	815	495	210	110	M55	8-27
70	65	203	260	315	855	495	230	130	M60	8-27
80	75	203	260	315	1030	630	260	140	M70	8-27
90	80	259	320	375	1050	630	270	150	M75	12-27
95	85	259	320	375	1080	630	285	165	M80	12-27
100	90	259	320	375	1250	780	295	175	M85	12-27
110	100	312	390	455	1330	780	350	200	M95	12-33
120	110	312	390	455	1350	780	360	210	M100	12-33
130	120	363	450	515	1380	780	375	230	M110	16-33

# MSMDU型机械密封

MSMDU mechanical seal



HG/T2477《砂磨机用机械密封技术条件》标准制定单位  
HG/T2477 Standard constitutor of Reactor mechanical seal technical conditions



## 适用范围

Application

砂磨机、珠磨机、浆液泵。  
Sand mill, Bead mill and slurry pump.

## 使用参数

OPERATION PARAMETERS

设计压力: PN-0.1~1.6MPa

Design pressure: PN-0.1~1.6MPa

设计温度: -40~180°C

Design temperature: -40~180°C

设计转速: 10m/s

Design rotating speed: 10m/s

轴径: 20~200mm

Shaft diameter: 20~200mm

介质: 溶剂、油、水、弱酸、弱碱、  
等带颗粒结晶性等工况。

Medium: Solvent, oil, water, weak acid, weak base and  
working conditions with granules and crystals.

## 结构特点

集装式结构传动无方向性。

密封圈采用防堵结构保证密封圈不会堵死。

密封液直接冲洗到密封面冷却效果更佳。

动、静环材质为独特工艺的硬质合金或碳化硅。

带泵送效应的结构高速情况下密封液可自循环。

## Structure features

Cartridge structure, modularization design and Non-directional transmission. Sealing ring adopts anti-blocking structure

Sealing liquid washes seal face to ensure ideal cooling effect.

Sealing rings adopt silicon carbide or tungsten carbide as there material.

Structure with pumping effect can make self-circulation of sealing liquid during high speed running process.

## 易损件明细

Wearing parts details

1. 轴套密封圈  
Sealing ring for shaft sleeve
2. 介质端动环O型圈  
Sealing ring for rotary ring
3. 介质端动环  
Stationary ring
4. 釜口O型圈  
O ring for connecting flange.
5. 介质端静环  
Stationary ring
6. 楔型防尘密封圈  
Dustproof wedge shaped sealing ring
7. 介质端静环O型圈  
Sealing ring for Stationary ring
8. 密封箱体O型圈  
O ring for housing
9. 弹簧  
Springs
10. 大气端动环O型圈  
Sealing ring for rotary ring
11. 大气端动环  
Rotary ring
12. 大气端静环  
Stationary ring
13. 大气端静环O型圈  
Sealing ring for Stationary ring
14. 骨架油封  
Framework oil seal
15. 轴承  
Bearing

## 管口明细

Orifice details

- A. 密封液进口  
Sealing liquid inlet
- B. 密封液出口  
Sealing liquid outlet
- C. 泄漏液出口  
Leakage outlet

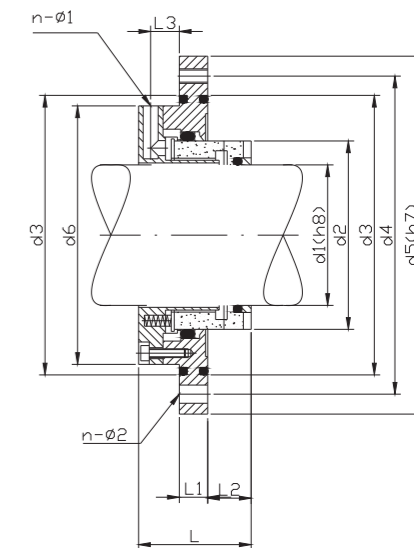
d1	d2	d3	d4	d5	d6	L10	L1	L2	L3	L4	n-φ
20	52	117	140	165	118	197	158	22	25	31	6-12
25	58	124	150	175	128	209	167	22	25	31	6-12
30	62	134	165	185	138	216	174	26	25	31	6-12
35	68	140	175	195	148	216	174	26	25	31	6-12
40	75	146	175	195	148	224	181	27	25	35	8-12
45	83	150	175	195	148	226	181	27	25	35	8-12
50	90	170	195	215	168	249	192	30	25	35	8-12
55	95	175	205	225	178	258	200	30	25	35	8-12
60	100	180	205	225	178	258	200	30	25	35	8-12
65	110	190	220	245	188	268	209	30	30	41	8-14
70	115	195	230	255	198	212	210	30	30	41	8-14
75	120	200	230	255	198	285	217	31	30	41	8-14
80	130	210	240	265	208	308	228	32	30	45	8-14
85	135	215	250	275	218	312	232	32	30	45	8-14
90	140	230	260	285	228	323	246	35	30	45	8-14
95	145	235	270	295	238	323	246	35	30	45	8-14
100	150	240	270	295	238	338	260	39	30	45	8-14
110	160	255	290	315	258	350	266	39	30	50	8-14
120	172	265	305	335	258	358	271	39	40	53	8-18
130	185	275	315	345	278	364	273	39	40	53	8-18
140	195	290	335	365	298	380	286	41	40	53	8-18
150	205	300	335	365	298	392	290	45	40	53	8-18
160	220	330	335	385	323	403	294	45	40	53	8-18
170	230	343	375	405	358	403	294	45	40	53	8-18
180	240	363	395	425	358	416	300	45	40	56	8-18
190	270	393	425	455	388	466	337	60	45	58	12-18
200	280	393	425	455	388	466	337	60	45	58	12-18

# MMRSU型机械密封

MMRSU mechanical seal



HG/T2477《砂磨机用机械密封技术条件》标准制定单位  
HG/T2477 Standard constitutor of Reactor mechanical seal technical conditions



## 适用范围

Application

砂磨机、珠磨机、浆液泵。  
Sand mill, Bead mill and slurry pump.

## 使用参数

OPERATION PARAMETERS

设计压力: PN-0.1~0.6MPa

Design pressure: PN-0.1~0.6MPa

设计温度: -40~180°C

Design temperature: -40~180°C

设计转速: 10m/s

Design rotating speed: 10m/s

轴径: 20~200mm

Shaft diameter: 20~200mm

介质: 溶剂、油、水、弱酸、弱碱、  
等带颗粒结晶性等工况。

Medium: Solvent, oil, water, weak acid, weak base  
and working conditions with granules and crystals.

## 结构特点

传动无方向性。

密封圈采用防堵结构保证密封圈不会堵死。

静止式结构适合高速工况。

动、静环材质为独特工艺的硬质合金或碳化硅。

超短型设计可保证设备在最短的悬臂下使用。

## Structure features

Cartridge structure, modularization design and Non-directional transmission.

Sealing ring adopts anti-blocking structure

Sealing liquid washes seal face to ensure ideal cooling effect.

Sealing rings adopt silicon carbide or tungsten carbide as there material.

## 易损件明细

Wearing parts details

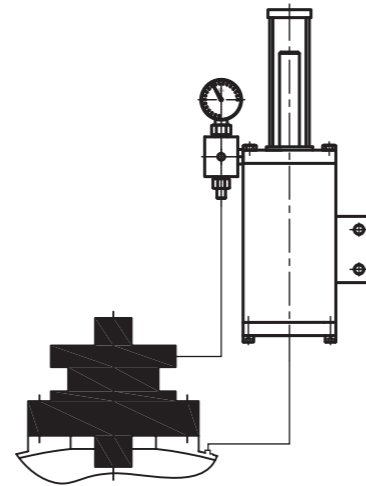
1. 动环O型圈  
O ring for rotary ring
2. 动环  
Rotary ring
3. 静环  
Stationary ring
4. 静环O型圈  
O ring for stationary ring.
5. 弹簧  
Springs

d1	d2	d3	d4	d5	d6	L	L1	L2	L3	n-φ1	n-φ2
20	42	120	140	165	105	58	15	22	13	2-12	6-12
25	48	130	150	175	115	58	15	22	13	2-12	6-12
30	52	145	165	185	130	58	15	22	13	2-12	6-12
35	58	155	175	195	140	58	15	22	13	2-12	6-12
40	65	155	175	195	140	58	15	22	13	2-12	8-12
45	73	155	175	195	140	58	15	22	13	2-12	8-12
50	80	175	195	215	160	58	15	22	13	2-12	8-12
55	80	185	205	225	170	58	15	22	13	2-12	8-12
60	85	185	205	225	170	58	15	22	13	2-12	8-12
65	95	198	220	245	183	61	18	22	13	2-12	8-14
70	100	208	230	255	193	61	18	22	13	2-12	8-14
75	105	208	230	255	193	61	18	22	13	2-12	8-14
80	110	218	240	265	198	61	18	22	13	2-12	8-14
85	115	228	250	275	208	61	18	22	13	2-12	8-14
90	120	238	260	285	218	61	18	22	13	2-12	8-14
95	125	248	270	295	228	61	18	22	13	2-12	8-14
100	130	248	270	295	228	61	18	22	13	2-12	8-14
110	140	268	290	315	348	68	18	25	15	2-16	8-14
120	152	280	305	335	260	68	25	25	15	2-16	8-18
130	165	290	315	335	270	68	25	25	15	2-16	8-18
140	165	310	335	365	290	68	25	25	15	2-16	8-18
150	175	310	335	365	290	68	25	25	15	2-16	8-18
160	180	310	335	385	290	73	25	30	15	2-16	8-18
170	200	350	375	405	330	73	25	30	15	2-16	8-18
180	210	370	395	425	350	73	25	30	15	2-16	8-18
190	240	400	425	455	370	73	25	30	15	2-16	12-18
200	250	400	425	455	370	73	25	30	15	2-16	12-18



## FMY.Z型机械密封增压辅助系统

FMY.G Auxiliary heat exchange system



### 主要用途

主要用于釜用双端面机械密封的封液闭路循环中，对密封液进行加压和补液，利用活塞原理使密封腔内压力与釜内压力呈一定比例，并且具有类似的阻尼作用，从而保证机械密封在平稳状态下工作。

**Application:** Mainly applied to closed-circuit liquid seal cycling for cauldron-using mechanical seal, which imposes greater pressure and liquid compensation sealing liquid. Under the effect of piston mechanism, the pressure inside seal cavity will be in a certain proportion with the cauldron pressure to result in damping-like action, so as to ensure that mechanical seals work smoothly under stable conditions.

### 使用参数

设计压力:

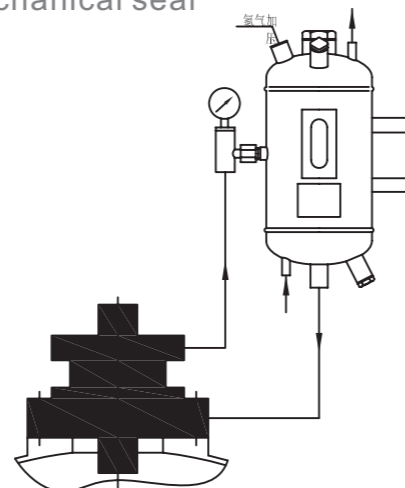
FMY.Z-40型PN0~4.0MPa  
FMY-Z-100 Working pressure:PN 0-1.0MPa  
FMY.Z-64型PN0~6.4MPa  
FMY-Z-64 Working pressure:PN 0-6.4MPa  
FMY.Z-100型PN0~10.0MPa  
FMY-Z-40 Working pressure:PN 0-4.0MPa

设计温度: -60~200°C  
Working temperature: -60~150°C

注: FMY.Z-40不带冷却盘管。  
Note: No cooling coil pipes are required Type FMY-Z-40.

## FMY.G型机械密封换热辅助系统

FMY.G Heat exchange auxiliary system for mechanical seal



### 主要用途

主要用于高温、低压机械密封的封液循环冷却，  
To circulate and cool the sealing liquid of high temperature  
封堵介质泄漏。  
& low pressure mechanical seals. Also it can prevent medium  
from leaking.

### 使用参数

OPERATION PARAMETERS

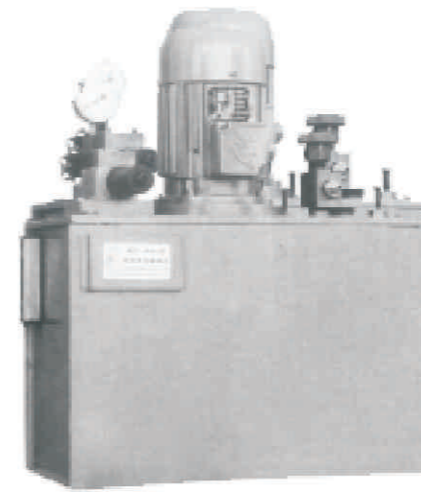
设计压力: 0~1.6MPa  
Design pressure: 0~1.6MPa

设计温度: -60~200°C  
Design temperature: -60~200°C

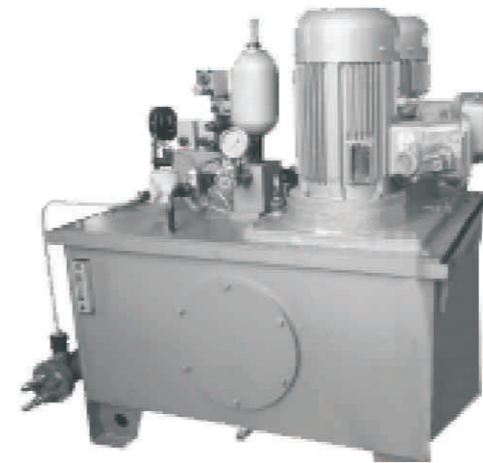
封液: 机油、甘油、水。  
Sealing liquid: Engine oil, glycerol and water.

## JMY40,JMY100型液压泵站辅助装置

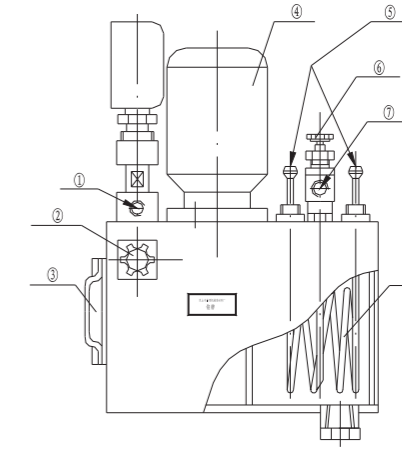
JMY40,JMY100Hydraulic Pump Station Auxiliaries



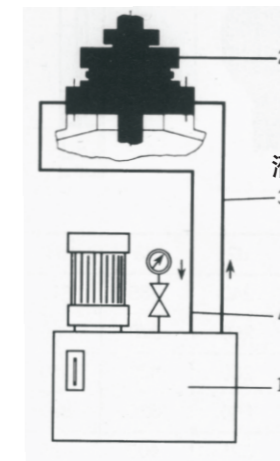
JMY 40



JMY 100



- 1.接机械密封出口  
to mechanical seal outlet
- 2.溢流阀  
overflow valve
- 3.长型油标  
square oil gage
- 4.冷却水进出口  
cooling water inlet/outlet
- 5.直角针阀  
Angle needle valve
- 6.接机械密封出口  
to mechanical seal outlet
- 7.冷却水盘管  
cooling water coil pipe



液压泵站与集装密封连接示意图

Diagram for connecting  
Hydraulic Pump Station  
with Centailezde Seal

### 使用说明

#### OPERATION EXPLAIN

1.本装置与双端面机械密封配套。

This unit is used together with the dual-end mechanical Seal.

2.用金属软管按图示与机械密封相连。

Connect the flexible metal tubing with the mechanical seal as shown in the figures.

3.使用时调整溢流阀和直角针阀使泵站压力比机械密封压力高0.1MPa。

For normal operation, please adjust the overflow valves and the angle needle valves to maintain the pump station pressure 0.1MPa higher than the mechanical seal pressure.

4.液压泵站内必须使用润滑油(机油或甘油)。

Make sure to use lubricants(engine oil or glycerin) inside the hydraulic pump station.

5.JMY40型压力调节范围0.5~4.0MPa。

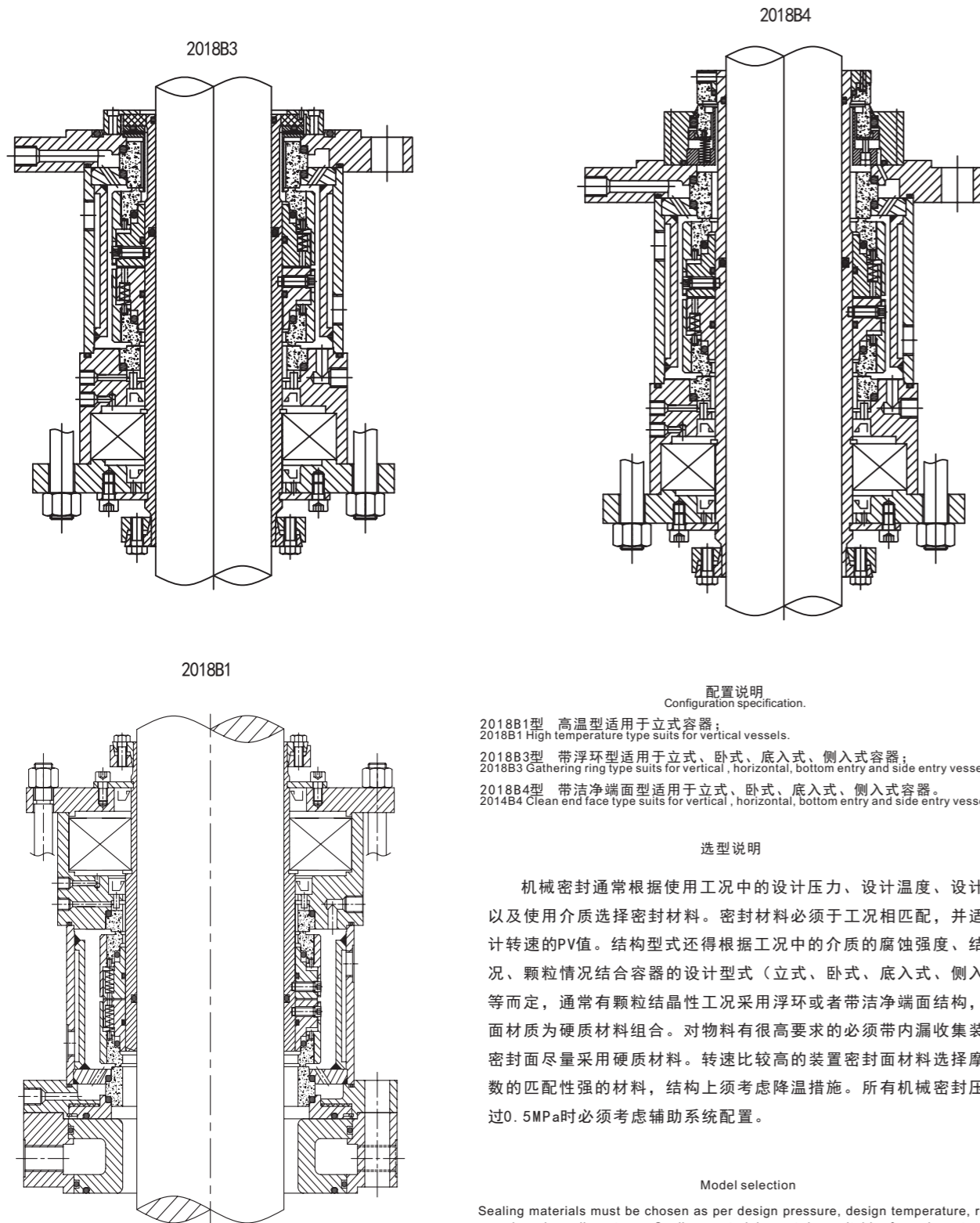
JMY100型压力调节范围0.5~10MPa。

For type JMY 40, pressure regulation ranges between 0.5 to 4.0MPa.

For type JMY 100, pressure regulation ranges between 0.5 to 10.0MPa.

## 特种机械密封

Special mechanical seal



### 配置说明 Configuration specification.

2018B1型 高温型适用于立式容器;  
2018B1 High temperature type suits for vertical vessels.  
2018B3型 带浮环型适用于立式、卧式、底入式、侧入式容器;  
2018B3 Gathering ring type suits for vertical, horizontal, bottom entry and side entry vessels.  
2018B4型 带洁净端面型适用于立式、卧式、底入式、侧入式容器。  
2018B4 Clean end face type suits for vertical, horizontal, bottom entry and side entry vessels.

### 选型说明

机械密封通常根据使用工况中的设计压力、设计温度、设计转速以及使用介质选择密封材料。密封材料必须于工况相匹配，并适合设计转速的PV值。结构型式还得根据工况中的介质的腐蚀强度、结晶情况、颗粒情况结合容器的设计型式（立式、卧式、底入式、侧入式）等而定，通常有颗粒结晶性工况采用浮环或者带洁净端面结构，密封面材质为硬质材料组合。对物料有很高要求的必须带内漏收集装置，密封面尽量采用硬质材料。转速比较高的装置密封面材料选择摩擦系数的匹配性强的材料，结构上须考虑降温措施。所有机械密封压力超过0.5MPa时必须考虑辅助系统配置。

### Model selection

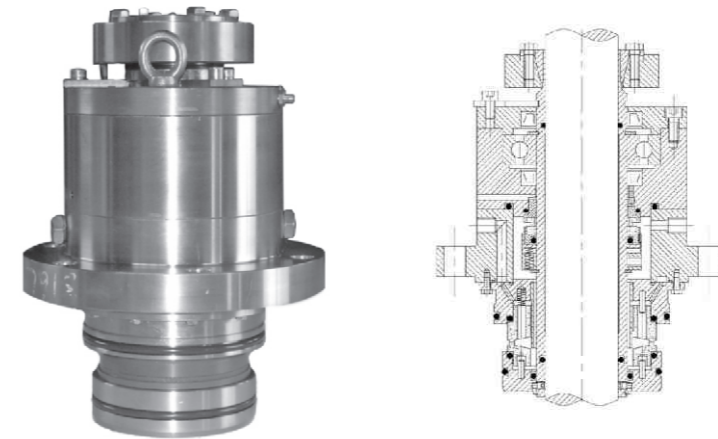
Sealing materials must be chosen as per design pressure, design temperature, rotating speed and medium type. Sealing material must be suitable for relevant working conditions. The structure (vertical, horizontal, bottom entry or side entry) of mechanical seal according to the corrosivity, crystallinity and granularity of the medium. Usually, Working condition with granule or crystal adopts cleaning end face type, meanwhile, the end face of mechanical seal should use hard materials. Impurity collector applies to the proof impurity mediums, and the end face also should choose hard materials. Low friction materials are suitable for high speed running mechanical seals. Also temperature factor should be taken consideration. Auxiliary devices must be included if the pressure exceeds 0.5Mpa.

## 新品推荐

New Product

## 脱硫装置专用机械密封

Parameters for mechanical seals specially used on desulphurization equipment

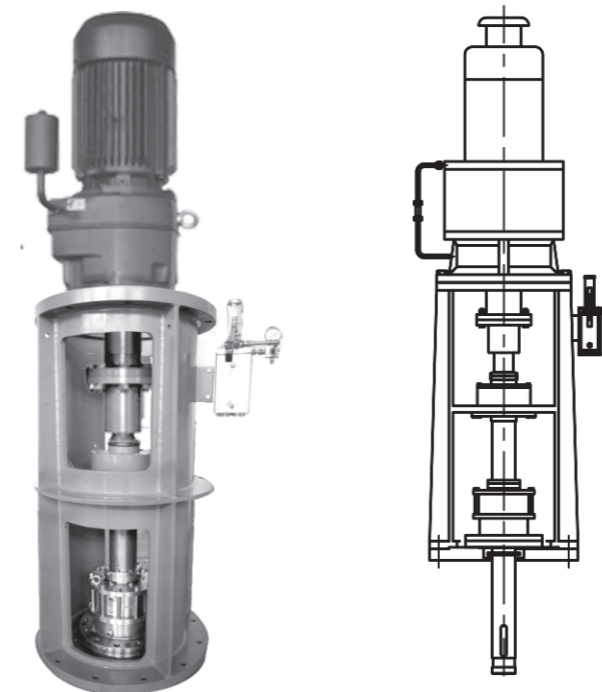


### 使用参数 Operation Parameters

压力  $\leq -0.1 \sim 1.6$  MPa  
温度  $\leq 180^\circ\text{C}$   
介质: 硫化氢, 等有微颗粒介质  
转速:  $\leq 10$  m/s  
Pressure  $\leq -0.1 \sim 1.6$  MPa,  
Temperature  $\leq 180^\circ\text{C}$   
Medium: sulfureted hydrogen and others with microparticle  
Rotation speed  $\leq 10$  m/s

## 聚丙烯专业传动密封装置

Parameters for mechanical seals applied to polypropylene medium



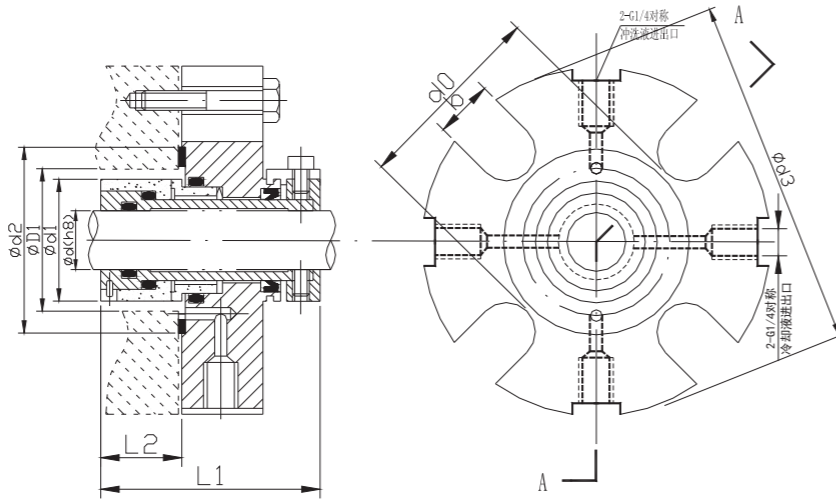
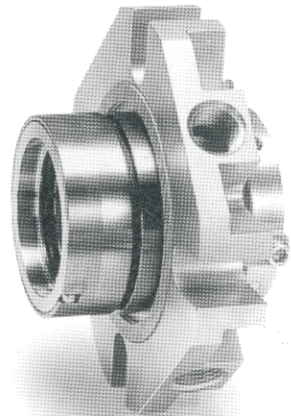
### 使用参数 OPERATION PARAMETERS

压力  $\leq 0.1 \sim 4.0$  MPa  
温度  $\leq 180^\circ\text{C}$   
介质: 聚丙烯, 丙烯等其他聚合物介质  
转速:  $\leq 200$  rpm  
Pressure  $\leq 0.1 \sim 4.0$  MPa,  
Temperature  $\leq 180^\circ\text{C}$   
Medium: polypropylene propylene and other polymer  
Rotation speed  $\leq 200$  rpm



## 1500B型机械密封

1500B mechanical seal



### 适用范围

#### Application

浆液泵、多级泵。  
Slurry pump, multi-stage pump

### 使用参数

#### OPERATION PARAMETERS

设计压力: PN-0.1~1.6MPa  
Design pressure: PN-0.1~1.6MPa  
设计温度: -20~180°C  
Design temperature: -20~180°C  
设计转速: 20m/s  
Design rotating speed: 20m/s  
轴径: 20~100mm  
Shaft diameter: 20~100mm  
介质: 油、水、弱酸、弱碱、  
等带颗粒结晶性等工况。  
Medium: Oil, water, weak acid, weak base and  
working conditions with granules and crystals.

### 结构特点

集装式单端面结构传动无方向性。  
静止式结构适合高速工况。  
超短型设计可保证设备在最短的悬臂下使用。

#### Structure features

Cartridge single seal, and Non-directional transmission.  
Static structure suits for high speed working conditions.  
Short pattern design is suitable for short extension pumps.

### 易损件明细

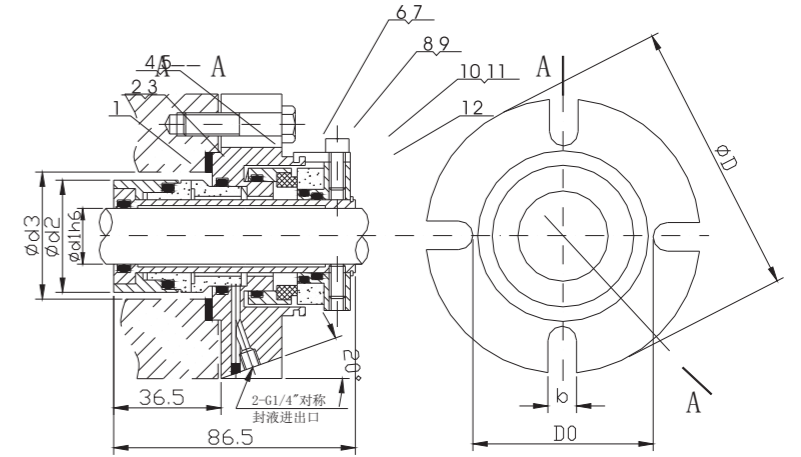
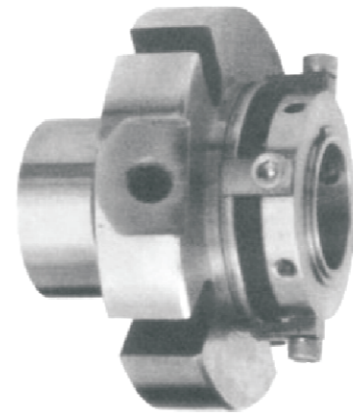
#### Wearing parts details

1. 轴套O型圈  
O ring for shaft sleeve
2. 动环O型圈  
O ring for rotary ring
3. 动环  
Rotary ring
4. 静环O型圈  
O ring for stationary ring.
5. 静环  
Stationary ring
6. 弹簧  
Springs

d	d1	D1(MIN)	D1(MAN)	d2	d0	d3	b	L2	L1
20	38	40	54	61	63	104	12	28.5	68.5
25	43	45	54	61	63	104			
30	48	50	59	66	68	108			
35	53	55	69	76	78	118	14	28.5	68.5
40	58	60	69	76	78	118			
45	63	65	74	81	83	128			
50	68	70	84	91	93	138			
55	73	75	84	91	93	138	18	32.5	77.5
60	78	80	99	107	109	164			
65	87	89	99	107	109	164			
70	92	95	105	113	115	178			
75	99	102	117	125	127	193	20	32.5	79.5
80	104	107	117	125	127	193			
85	109	112	127	135	137	208			
90	114	117	127	135	137	208			
95	119	122	137	145	147	218	20	32.5	79.5
100	124	127	137	145	147	218			

## 1100B型机械密封

1100B mechanical seal



### 适用范围

#### Application

浆液泵、多级泵。  
Slurry pump, multi-stage pump

### 使用参数

#### OPERATION PARAMETERS

使用压力: PN-0.1~2.5MPa  
Design pressure: PN-0.1~2.5MPa  
设计温度: -20~180°C  
Design temperature: -20~180°C  
设计转速: 20m/s  
Design rotating speed: 20m/s  
轴径: 20~100mm  
Shaft diameter: 20~100mm  
介质: 油、水、弱酸、弱碱、  
等带颗粒结晶性等工况。  
Medium: Oil, water, weak acid, weak base and  
working conditions with granules and crystals.

### 结构特点

集装式双端面结构传动无方向性。  
静止式结构适合高速工况。  
超短型设计可保证设备在最短的  
悬臂下使用。

#### Structure features

Cartridge single seal, and Non-directional transmission.  
Static structure suits for high speed working conditions.  
Short pattern design is suitable for short extension pumps.

### 易损件明细

#### Wearing parts details

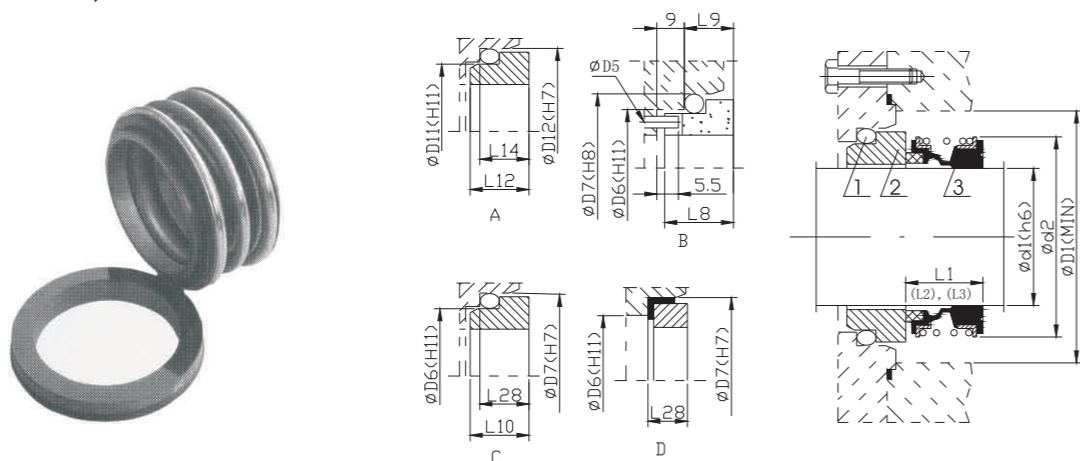
1. 轴套O型圈  
O ring for shaft sleeve
2. 介质端动环O型圈  
O ring for rotary ring
3. 介质端动环  
Rotary ring
4. 介质端静环O型圈  
O ring for stationary ring
5. 介质端静环  
Stationary ring
6. 介质端弹簧  
Springs
7. 大气端弹簧  
Springs
8. 大气端静环O型圈  
O ring for stationary ring
9. 大气端静环  
Stationary ring
10. 大气端动环  
Rotary ring
11. 大气端动环O型圈  
O ring for rotary ring
12. 动环座O型圈  
O ring for rotary ring retainer

d	d2	d3(MIN)	d3(MAN)	D	D0	b
25	43	44	51	105	62	12
28	46	47	52	105	65	12
30	48	49	56	105	67	12
32	49.8	51	57	110	70	12
33	49.8	51	57	110	70	12
35	53	54	61.5	115	72	12
38	56	57	66	125	75	12
40	58	59	68	125	77	14
42	60.5	61.5	69.5	133	80	14
43	61	62	70.5	133	80	14
45	62.5	64	73	141	82	14
48	65.6	67	75	141	85	14
50	68	69	78	150	87	14
55	73	75	83	150	92	18
60	78	80	91	157	102	18
65	84.8	87	98.5	165	109.2	18
70	93	95	108	180	118.3	18

# MY 200 型机械密封

## MY 200 Mechanical Seal

符合欧洲DIN24960, 国际ISO3069和英国BS5257-1975标准  
Conform to DIN24960, ISO3069andBS5257-1975standards



### 使用参数

#### OPERATION PARAMETERS

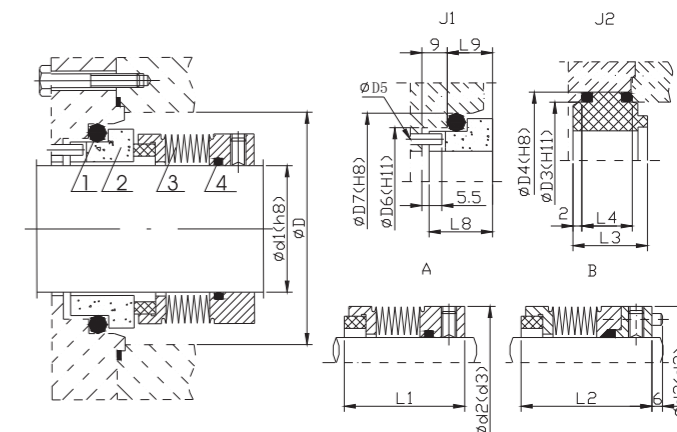
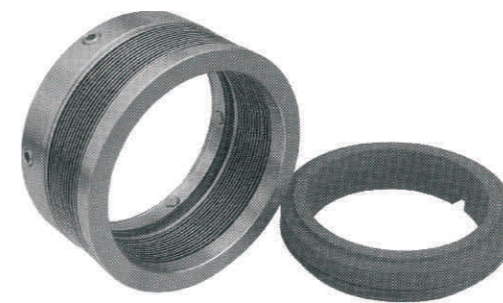
压力:0~1.0MPa  
Pressure:0~1.0MPa  
温度: -20~180℃  
Temperature: -20~180℃  
转速: ≤ 10m/s  
Rotating speed: ≤ 10m/s  
介质: 油、水、盐、碱、有机溶剂等  
Medium:oil,water,salt,baes,organic solvent and so on.  
动、静环材料: 浸渍树脂(金属)石墨、碳化硅、硬质合金、1Cr18Ni9Ti堆焊钴钨合金。  
Materials for rotating and static ring:Impregnating resin(metal)graphite,carborundum,hard alloy,1Cr18Ni9Ti surfacing alloy of cobalt,chromium and tungsten.

1.静环密封环  
Seal ring for Static ring  
2.静环  
Static ring  
3.动环组件  
Rotating ring subassembly

d1	d2	D1	L1	L2*	L3*	D11	D12	L14	L12	D6	D7	D5	L8	L9	L10	L28
18	32	33	19.5	30	37.5	24	30	8	8	27	33	3	19.5	11.5	8.5	7.5
20	37	38	21.5			29.5	35	7.5	8.5	29	35					
22	37	38	2.5	32.5	40	29.5	35	7.5	8.5	31	37	3	19.5	11.5	8.5	7.5
24	42.5	44	2.5			32	38			33	39					
25	42.5	44	23	35	42.5	32	38	10.5	11.5	34	40	3	19.5	11.5	8.5	7.5
28	49	50	26.5			36	42			9	10					
30	49	50	27.5	36	45	39.2	45	10.5	11.5	39	45	3	19.5	11.5	8.5	7.5
32	53.5	55	27.5			42.2	48			42	48					
33	53.5	55	28.5	38	47.5	44.2	50	11.6	12.6	42	48	3	19.5	11.5	8.5	7.5
35	57	59	28.5			46.2	52			44	50					
38	59	61	30	36	45	49.2	55	10.3	11.3	49	56	3	19.5	11.5	8.5	7.5
40	62	64	30.5			52.2	58			10.8	11.8					
43	62.5	67	33	38	47.5	53.3	62	12	13.2	54	61	3	19.5	11.5	8.5	7.5
45	68	70	30.5			55.3	64			56	63					
48	70.5	74	33	36.5	52.5	59.7	68.4	11.6	12.6	59	66	3	19.5	11.5	8.5	7.5
50	74	77	33			60.8	69.2			62	70					
53	78.5	81	35	41.5	52.5	63.8	72.3	12.3	13.5	65	73	3	19.5	11.5	8.5	7.5
55	81	83	35			66.5	75.4			67	75					
58	88.5	88	37	41.5	52.5	69.5	78.4	13.3	14.5	70	78	3	19.5	11.5	8.5	7.5
60	88.5	91	38			71.5	80.4			72	80					
65	93.5	96	40	48.7	60	76.5	85.4	13	14.2	77	85	3	19.5	11.5	8.5	7.5
68	96.5	100	40			82.7	91.5			13.7	14.9					
70	99.5	103	43	48	60	83	92	13	14.2	83	92	3	19.5	11.5	8.5	7.5
75	107.5	110	43			90.2	99			14	15.2					
80	112	116	41	43	65	85.2	104	15	16.2	95	105	3	19.5	11.5	8.5	7.5
85	120	124	41			100.2	109			14.8	16					
90	127	131	45	51	65	105.2	114	15.8	17	105	115	3	19.5	11.5	8.5	7.5
95	132	136	46			111.6	120.3			110	120					
100	137	140	47	114.5	123.3	115	125									

# MY 600,700 型机械密封

## MY 600,700 Mechanical Seal



### 使用参数

#### OPERATION PARAMETERS

压力:MY600型 PN 0~1.0MPa  
MY700型 PN 0~2.5MPa  
Pressure:Type MY600 PN 0~1.0MPa  
Type MY700 PN 0~2.5MPa  
温度: A型 -20~180℃  
B型 -20~450℃  
Temperature: Type A -20~180℃  
Type B -20~450℃  
转速: ≤ 10m/s  
Rotating speed: ≤ 10m/s  
介质: 油、水、盐、碱、有机溶剂等  
Medium:oil,water,salt,baes,organic solvent and so on.  
粘度: ≤ 100厘泊  
Viscosity: ≤ 100 centipoise  
动、静环材料: 浸渍树脂(金属)石墨、碳化硅、硬质合金、1Cr18Ni9Ti堆焊钴钨合金。  
Materials for rotating and static ring:Impregnating resin(metal)graphite,carborundum,hard alloy,1Cr18Ni9Ti surfacing alloy of cobalt,chromium and tungsten.

1.静环密封环  
Seal ring for Static ring  
2.静环  
Static ring  
3.波动环  
Rotating ring  
4.动环密封环  
Seal ring for Rotaing ring

d0	D	d2	(d3)	L1	L2	D3	D4	L3	L4	D5	D6	D7	D8	d1
20	40	38	33.5	38	43	40	46	26	19	3	29	35	19.5	11.5
22	42	40	36.5			42	48				31	37		
24	47	44	39	40	45	46	50	27	20	3	33	39	22	14
25	47	45	39.6			47	53				34	40		
28	50	48	42.8	43	47.5	50	56	29	22	4	37	43	23	15
30	52	50	45			52	58				39	45		
32	54	52	46	45	53	54	60	31	24	4	42	48	26	18
33	54	53	48			55	61				42	48		
35	57	55	49.2	55	52.8	57	63	32	25	4	44	50	25.2	17.2
38	61	58	52.3			61	67				49	56		
40	64	61	55.5	54	53.8	64	70	32	25	4	51	58	26.2	18.2
43	66	63	57.5			67	73				54	61		
45	69	66	58.7	55	52.8	69	75	32	25	4	56	63	26.2	18.2
48	72	68	61.9			72	78				59	66		
50	76	73	65	54	53.8	76	82	32	25	4	62	70	25.2	17.2
53	78	73	68.2			79	85				65	73		
55	81	76	70	55	52.8	81	87	32	25	4	67	75	25.2	17.2
58	83	80	71.7			83	89				70	78		
60	85	82	74.6	55	53.8	85	91	32	25	4	72	80	25.2	17.2
63	87	84	79			88	93				75	83		
65	90	86	84.1	54	52.8	90	95	32	25	4	77	85	25.2	17.2
68	93	90	87.3			93	99				81	90		
70	95	93	87.3	55	53.8	95	101	32	25	4	83	92	25.2	17.2
75	104	97	95			104	110				88	97		
80	109	102	98.4	54	53.8	109	115	32	25	4	95	105	25.2	17.2
85	114	107	104.7			114	120				100	110		
90	119	112	111	54	53.8	119	125	32	25	4	105	115	25.2	17.2
95	124	117	114			124	130				110	120		
100	129	122	117.4	129	135	115	125							



泵用机械密封

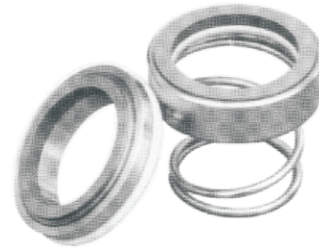
mechanical seal for Pump



M103U/M104U  
M105U/M110U



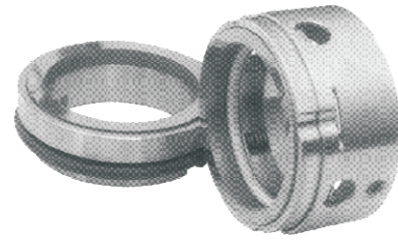
MY58U/MY59U



M117U



1110B



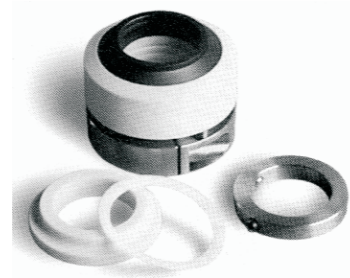
M116U



1200B



1600B/1700B



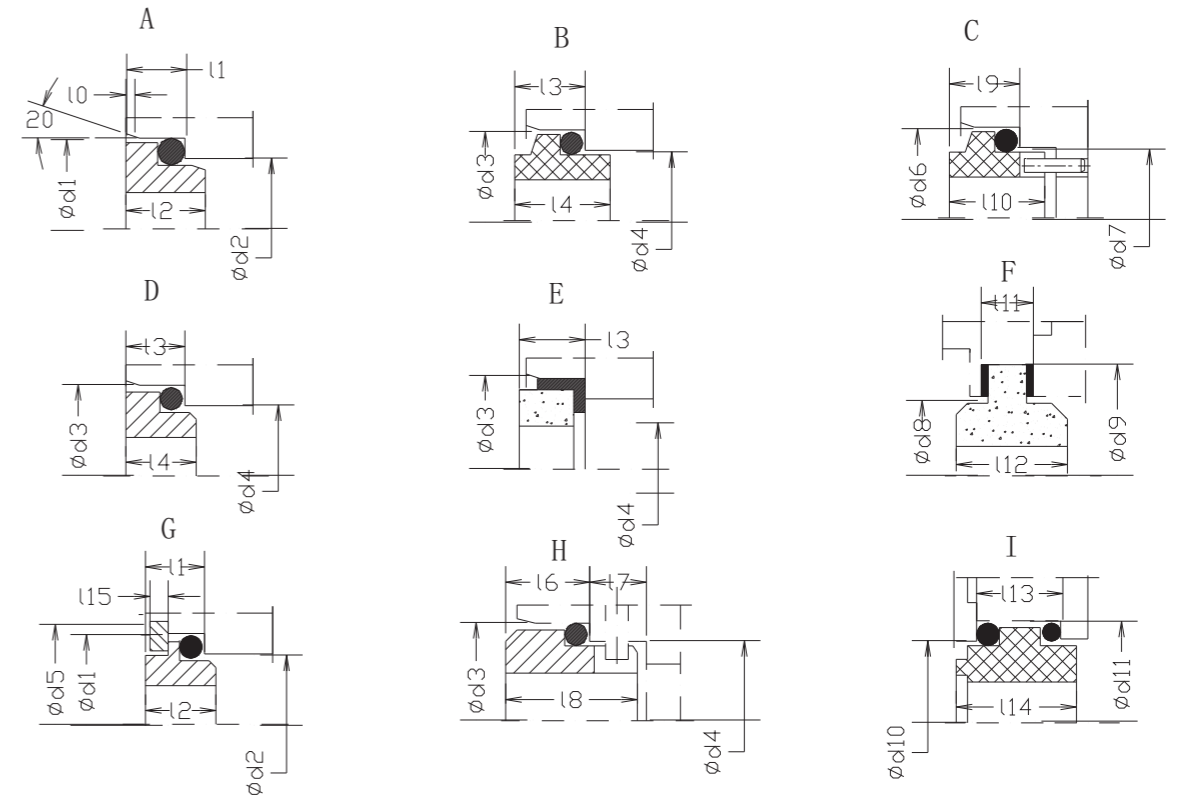
M152B



MWB2B

静环详图

Static Ring Details



d	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11	10	11	12	13	14	16	17	18	19	110	111	112	113	114	115		
10	19.2	15.5	21	17	-	-	-	-	-	-	-	1.2	6.6	7.5	6.6	7.5	10	8.5	17.5	-	-	-	-	-	-	1		
12	21.6	17.5	23	19	-	-	-	-	-	-	-	1.2	5.6	6.5	6.6	7.5	10	8.5	17.5	-	-	-	-	-	-	1		
14	24.6	20.5	25	21	30	-	-	-	-	-	-	1.2	5.6	6.5	6.6	7.5	10	8.5	17.5	-	-	-	-	-	-	1		
15	24.6	20.5	-	-	-	-	-	-	-	-	-	1.2	6.6	7.5	-	-	-	-	-	-	-	-	-	-	-	1		
16	28	22	27	23	32	33	25	-	-	-	-	1.5	7.5	8.5	6.6	7.5	10	8.5	17.5	12	16	-	-	-	-	1		
18	30	24	33	23	38	-	-	-	-	-	-	1.5	8	9	7.5	8.5	11.5	9	19.5	-	-	-	-	-	-	1		
19	-	-	-	-	40	-	-	-	-	-	-	1.5	7.5	-	-	-	-	-	-	-	-	-	-	-	-	1		
20	35	29.5	35	29	40	40	30	-	-	36	42	1.5	7.5	8.5	7.5	8.5	11.5	9	19.5	15	19	-	-	-	18	23	1	
22	35	29.5	37	31	42	-	-	-	-	38	44	1.5	7.5	8.5	7.5	8.5	11.5	9	19.5	-	-	-	-	-	18	23	1	
24	38	32	39	33	43	-	-	-	-	40	46	1.5	7.5	8.5	7.5	8.5	11.5	9	19.5	-	-	-	-	-	18	23	1	
25	38	32	40	34	46	45	35	-	-	41	47	1.5	7.5	8.5	7.5	8.5	11.5	9	19.5	15	19	-	-	-	18	23	1	
28	42	36	43	37	48	48	38	-	-	44	50	1.5	9	10	7.5	8.5	11.5	9	19.5	15	19	-	-	-	18	23	1	
30	45	39.2	45	39	50	50	40	65	52	46	54	1.5	10.5	11.5	7.5	8.5	11.5	9	19.5	15	19	8	18	18	23	1		
32	48	42.2	48	42	53	-	-	-	-	48	55	1.5	10.5	11.5	7.5	8.5	11.5	9	19.5	-	-	-	-	-	18	23	1	
33	50	44.2	48	42	53	-	-	-	-	49	57	1.5	-	12	7.5	8.5	11.5	9	19.5	-	-	-	-	-	18	23	-	
35	52	46.2	50	44	60	55	45	70	57	51	64	1.5	11	12	7.5	8.5	11.5	9	19.5	15	19	10	26	20	25	1		
38	55	49.2	56	49	62	-	-	-	-	58	66	1.5	10.3	11.3	9	10	14	9	22	-	-	-	-	-	20	25	1	
40	58	52.2	58	51	65	60	50	75	62	60	68	1.5	10.8	11.8	9	10	14	9	22	15	19	10	26	20	25	1		
42	-	-	-	-	-	-	-	-	-	62	69	2	12	13.2	-	10	-	-	-	-	-	-	-	-	-	20	25	1.2
43	62	53.3	61	54	67	-	-	-	-	63	71	2	-	13.2	9	10	14	9	22	-	-	-	-	-	20	25	-	
45	64	55.3	63	56	70	65	55	80	67	65	74	2	11.6	12.8	9	10	14	9	22	15	19	10	26	20	25	1.2		
48	68.4	59.7	66	59	72	-	-	-	-	68	76	2	11.6	12.8	9	10	14	9	22	-	-	-	-	-	20	25	1.2	
50	69.3	60.8	70	62	75	70	60	85	72	70	78	2	11.6	12.8	9.5	10.5	15	9	23	15	19	10	26	20	25	1.2		
53	72.3	63.8	73	65	77	-	-	-	-	73	79	2	-	13.5	11	12	15	9	23	-	-	-	-	-	20	25	-	
55	75.4	66.5	75	67	86	75	65	90	77	75	81	2	13.3	14.5	11	12	15	9	23	15	19	14	34	20	25	1.2		
58	78.4	69.5	78	70	88	-	-	-	-	83	89	2	13.3	14.5	11	12	15	9	23	-	-	-	-	-	22	28	1.2	
60	80.4	71.5	80	72	91	80	70	95	82	85	91	2	13.3	14.5	11	12	15	9	23	15	19	14	34	22	28	1.2		
65	85.4	76.5	85	77	96	90	80	100	87	90	96	2	13	14.2	11	12	15	9	23	17	22	14	34	22	28	1.2		
68	91.5	82.7	90	81	98	-	-	-	-	93	99	2	13.7	14.9	11.3	12.5	18	9	26	-	-	-	-	-	24	28	1.2	
70	92	83	92	83	103	97	85	-	-	95	101	2	13	14.2	11.3	12.5	18	9	26	20	25	-	-	-	24	28	1.2	
75	99	90.2	97	88	108	102	90	-	-	104	110	2	14	15.2	11.3	12.5	18	9	26	20	25	-	-	-	24	28	1.2	
80	104	95.2	105	95	120	107	95	-	-	109	109	2	15	16.2	12	13	18.2	9	26.2	20	25	-	-	-	25	31	1.5	
85	109	100.2	110	100	125	112	100	-	-	114	114	2	14.8	16	14	15	18.2	9	26.2	20	25	-	-	-	25	31	1.5	
90	114	105.2	115	105	130	117	105	-	-	119	119	2	14.8	16	14	15	18.2	9	26.2	20	25	-	-	-	25	31	1.5	
95	120.3	111.6	120	110	135	122	110	-	-	124	124	2	15.8	17	14	15	17.2	9	26.2	20	25	-	-	-	25	31	1.5	
100	123.3	114.5	125	115	140	127	115	-	-	129	129	2	15.8	17	14	15	17.2	9	25.5	20	25	-	-	-	25	31	1.5	



发往上海展宇新材料有限公司

Miyou equipments shipping to Headway Group, Shanghai, China



发往大连多相触媒有限公司

Miyou equipments shipping to customer in Dalian province, China.



平朔煤业应用现场

Pingshuo Group Co., Ltd







### 山梨醇高压加氢搅拌密封生产线应用于长春大成集团

Miyou high pressure mixing, driving and sealing equipment for sorbitol production with hydrogen catalyzing in Changchun Dacheng Industrial Group Company Ltd., China

该高压、高温加氢催化生产山梨醇装置为国内采用机械密封最高参数的生产线，压力 $\leq 16\text{MPa}$ ，温度 $\leq 260^\circ\text{C}$ ，我们提供整个搅拌传动密封装置，实现整个系统自动化远程控制，采用多级防爆保护，使得整个装置在高安全的环境中运行。

This high pressure mixing, driving and sealing equipment is an application of mechanical seal with a highest working parameter in domestic market. The working pressure $\leq 16\text{MPa}$ , The working temperature $\leq 260^\circ\text{C}$ , This system adopts automatic remote control and multiple anti-explosion protection to meet our client's high safety requirement.



### 高压加氢催化装置生产线应用于浙江东港集团

Miyou equipment for high pressure with hydrogen catalyzing in Dankong Gourp Co., Ltd. Zhejiang province ,China.

为浙江东港集团提供了转速达 $480\text{r}/\text{min}$ ，压力 $\leq 4.0\text{MPa}$ 的加氢催化反应釜、高压、高速搅拌传动密封装置，整个系统自动控制，解决了客户高效率状态下使用的高要求。

This equipment is a high pressure & high rotating speed device with hydrogen catalyzing whose rotating speed is up to  $480\text{r}/\text{min}$ , pressure $\leq 4.0\text{Mpa}$ . The whole system adopts automatic control. It is satisfying the requirement of high yield.



### 涂料生产线设备应用于浙江鹏孚隆化工有限公司

Our dispersing reactor and paint mixing reactor in Zhejiang Pfluon Technology Co., Ltd.

整个装置从自动化控制到安装平台均为密友设计制造，为客户提供交钥匙工程。

This automatic control system was designed and manufactured by Miyou Group Co., Ltd.



### 聚丙烯反应釜生产线应用于山东恒源石化

Miyou polypropylene reactor in Shandong Hengyuan petrochemical company limited in Shandong province, China.

为山东恒源石化提供了连续生产聚丙烯用搅拌传动密封装置，使用压力 $\leq 4.0\text{MPa}$ ，整个产品一体化设计，自动化连续控制。

We supplied with continuous production polypropylene reactor which is a remote control and integrated system , working pressure $\leq 4.0\text{Mpa}$ .



# 密友MIYOU·国家高新技术企业



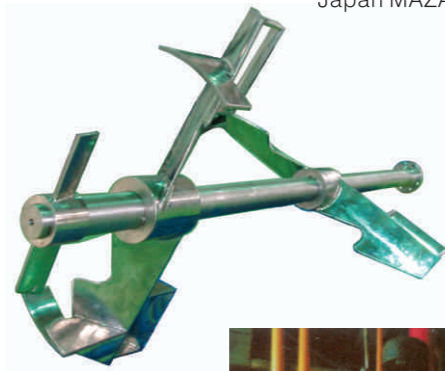
日本小巨人机床有限公司的立式加工中心  
Japan LGMazak vertical process center



仓敷机械株式会社的数控铣床  
Japan KURAKI CNC milling machine



为大震锅炉生产的搅拌密封传动装置  
The Agitator Drive transmission device for TAIJUNE BOILER company



为大震锅炉生产的搅拌叶轮  
The Agitator drive Impeller for TAIJUNE BOILER company



日本山崎马扎克公司的卧式加工中心  
Japan MAZAK horizontal process center



产品在中国科学院上海有机化学研究所开发公司使用  
The product be used in the China Science Research Institute Shanghai organic chemical company.



产品在升华拜克生物化工有限公司使用  
The product be used in Shenghua Biok Biological Chemical Company.



产品在台湾台联精细化工有限公司使用  
The product be used in Taiwan TAILIAN fine chemicals company.

# 密友MIYOU·国家高新技术企业



全国人大常委会副委员长顾秀莲(左一)在《节能减排》会议上接见吴建明董事长(左三)

图左二为：中国化工报社社长郝长江先生  
图左四为：巴斯夫大中华地区总裁关志华先生

Gu xiulian- Vice-chairman of Standing committee of the NPC interviewed Mr. Wu Jianming in the Emission Reduction and Energy-saving Meeting

Left pic. Second: Mr. Hao Changjiang-China Chemical Industry News Proprieter

Left pic. Fourth: Mr. Guan Zhihua-BASF China Area CEO



原中国石油和化学工业协会会长谭竹州先生来我公司参观指导

Mr. Tan Zhuzhou, Vice President of China Petroleum & Chemical Industry Association, inspected our company



中共第十七届中央委员会委员、吉林省省委书记王珉同志来我公司视察

Wang Ming-the former Jilin Province secretariat came to our factory for inspection.



2003年10月18日密友迁入新厂区  
Miyou moved into new plant on Oct.18,2003



2008年7月23日密友集团有限公司揭牌  
July 23rd, 2008, Miyou Group Founded