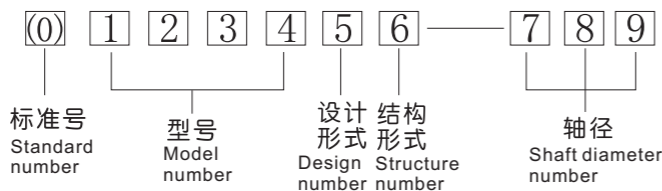


釜用机械密封型号编制说明

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

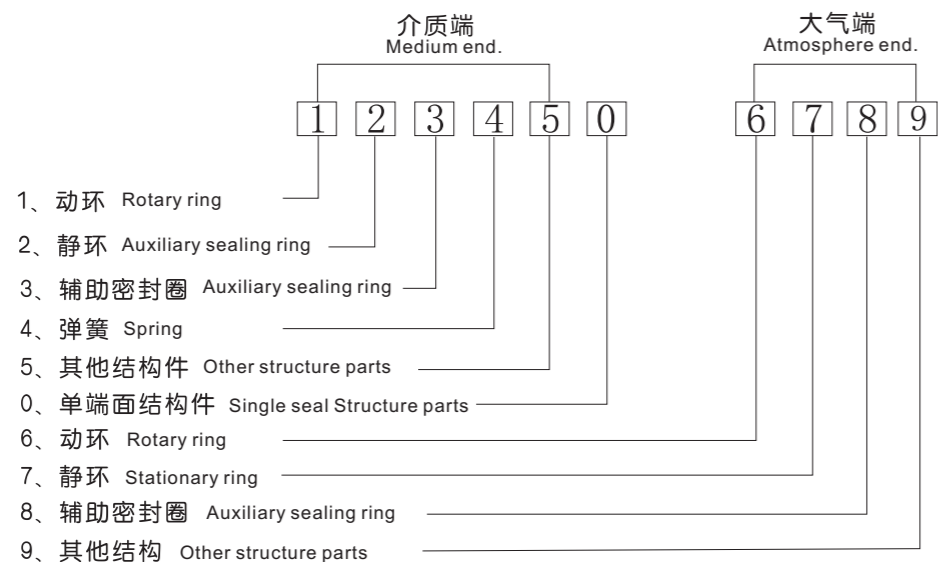
2017型不带轴承 平衡型 高温冷却水箱 轴径80mm

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

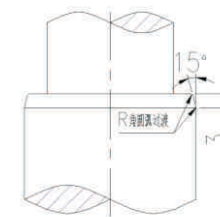
机械密封是精密的部件，设备的制造精度及安装精度要求都很严格，如果装配不当就会影响密封性能。正确安装必须注意以下几点：

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.

Specifications 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 roughness 1.6um.
- ②The shaft or shaft sleeve end of the rotating seal ring shall be chamfered and polished,as show in Figure.
- ③The maximum axial displacement of the shafts:0.3mm.
- ④The maximum 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 compressibility 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℃ and 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).