

CRYOGENIC TRAP PUMP

低温水汽捕集器

产品概述

CP 系列低温捕集器主要用于真空系统中。利用捕集器冷头（迈斯纳阱）-120℃以下的低温表面，迅速凝聚真空系统中的水蒸气、油蒸汽以及其它高沸点的气体从而获得洁净的高真空环境，大大减少抽气时间，提高工作效率和产品品质。它可与机械泵、油扩散泵或分子泵系统组合，广泛地应用于高品质真空镀膜、低温医疗、生物工程以及微电子等领域。



CP series cryotrap pump is mainly used in vacuum system. Using the trap cold head (Meissner trap) -120℃, the low temperature surface below rapidly condenses in the vacuum system Water vapor, oil vapor, and other high boiling gases to obtain a clean high vacuum environment, greatly reduce pumping time, improve work efficiency and product quality. It can be related to mechanical pump, oil diffusion pump or molecular pump system combination, Widely used in high quality vacuum coating, low temperature medical treatment, bioengineering and microelectronics.

工作原理

CP 系列低温捕集器是利用闭循环新型工质制冷原理，采用单级压缩制冷流程，使捕集器冷头表面温度达到-120℃以下，利用该低温表面迅速捕集真空工作腔中的水蒸汽、油蒸汽及其它高沸点的气体，从而获得洁净的真空环境。

CP series cryogenic trap pump is the use of closed cycle new working medium refrigeration principle, using a single stage compression refrigeration process, so that the surface temperature of the cold head of the trap can reach below -120℃, using the low temperature surface to rapidly trap water steam, oil steam and other high boiling point gases in the vacuum working chamber, so as to obtain a clean vacuum environment.

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低温水汽捕集器

● 制冷时快速超强冷凝

Fast super strong condensation during refrigeration

低温捕集器可快速降温。从冷头（迈斯纳阱）安装在真空室内。

室温降到-120，时间小于5分钟。

Low temperature traps allow rapid cooling. From the cold head (Meissner trap) installed in the vacuum chamber.

Reduce the room temperature to -120 °C for less than 5 minutes.

● 回温快速除霜

Quick defrosting with return temperature

从-120回温到室温的时间小于2分。

The time from -120 °C back temperature to room temperature is less than 2 minutes.

● 快速获得洁净真空

Fast access to clean vacuum

能有效地捕集到真空系统中水蒸汽、油气及其它高沸点气体，

从而获得洁净的真空环境。

It can effectively capture water vapor, oil vapor and other high boiling point gases in the vacuum system, so as to obtain a clean vacuum environment.

● 提高生产效率

Enhance productivity

瞬间吸附水蒸气、油气及高沸点气体，大大缩短了真空系统的

排气时间，从而提高生产效率。

The adsorption of water vapor, oil and gas and high boiling point gas greatly reduces the exhaust time of the vacuum system, thereby improving the production efficiency.

● 安装操作简便

Easy to install

安装在真空室。

Install in vacuum chamber.



技术参数

型号 Model	CP300	CP1000	CP1800	CP3000	功能	说明
制冷量 (w)	300	1000	1800	3000	远程控制	支持
抽气速率 (l/s)	15000	45000	90000	120000	高、低压保护	支持
工作电流 (A)	5	10	18	22	冷却水温度保护	支持
额定功率 (kw)	1.5	4	10	12	压缩机保护	支持
制冷温度 (°C)	< -120	< -120	< -120	< -120	电子保护	支持
回温时间 (min)	/	< 2	< 2	< 2	保护时间	300s
速冷时间 (min)	/	< 5	< 5	< 5	控制方式	触摸屏
冷凝管表面积(m²)	0.1	0.4	0.7	1	参数可调	支持
重量 (kg)	210	330	450	490	电源要求	380V
长宽高 (cm)	50×40×100	90×81×176	90×81×176	90×81×176	总电源线	三相四线
冷却方式	风冷、水冷	水冷	水冷	水冷	连接方式	焊接（建议）
20°C时冷却水流量(1/h)	20	25	30	32	压缩机功率	11(P)