

Turbo molecular pump Cleaning Technology

- ❖ 터보분자 펌프는 반도체 분야에서 고진공을 생성하고 유지하는 데 사용되는 진공 펌프 유형입니다. 이는 로터에 장착된 터빈 블레이드의 원리로 작동합니다. 펌프는 일련의 회전 및 고정 블레이드가 적층되어 구성됩니다.
- ✓ 터빈블레이드는 알루미늄 합금으로 제작되고, 표면은 니켈로 코팅되어 부식성 가스에 대한 내 마모성, 부식방지와 더 나아가 매끄러운 표면의 니켈 코팅 블레이드는 고속으로 회전할 때 가스 분자의 마찰과 항력을 줄여 pumping process의 효율성을 향상시킬 수 있습니다.
- ✓ Pump 내부 부품에 Fouling 된 다양한 복합 생성 스케일을 제거함에 있어 Bead Blast 및 Blushing 의 물리적 세척 방법은 금속 표면이 손상을 일으킵니다.
- SkpChem 은 Wet Cleaning 용 세정제를 공급하고 있습니다.



Turbo molecular pump Cleaning

Cleaning Step

** Kind of gas used SF_6 , Cl_2 , PH_3 , SiH_4 , AsH_3 , BF_3 , BCl_3



Incoming



Sort & Inspection



Pre-Cleaning



Degreasing (Swell Out)



Cleaning



Jet Water Spray

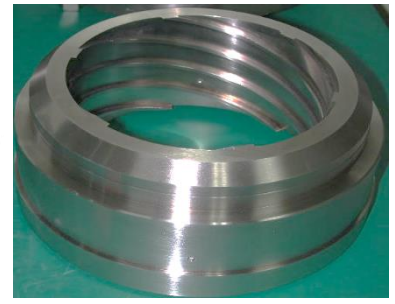
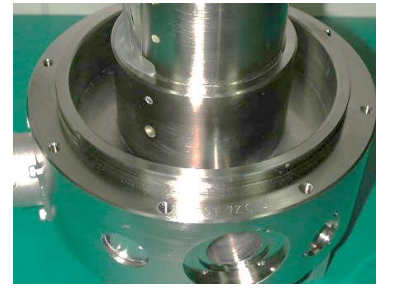
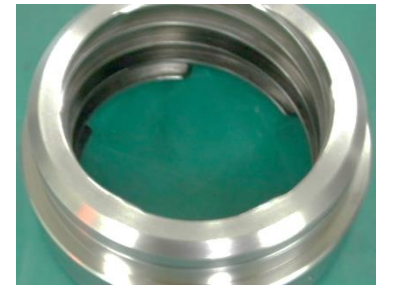
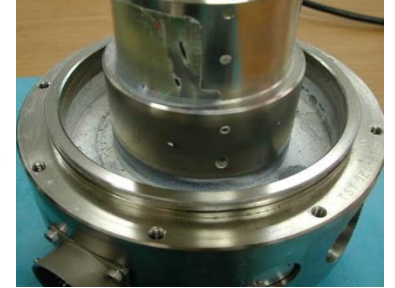


Drying (Oven)

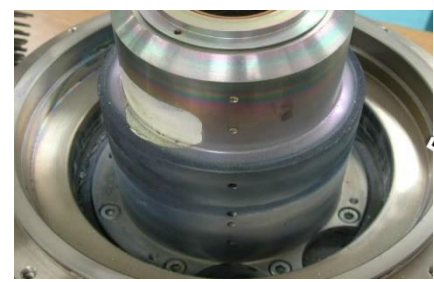
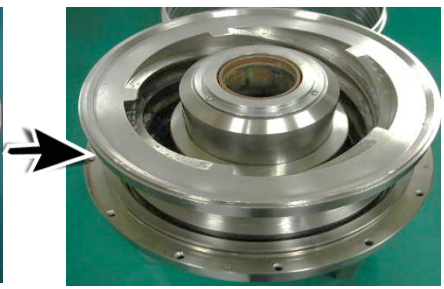
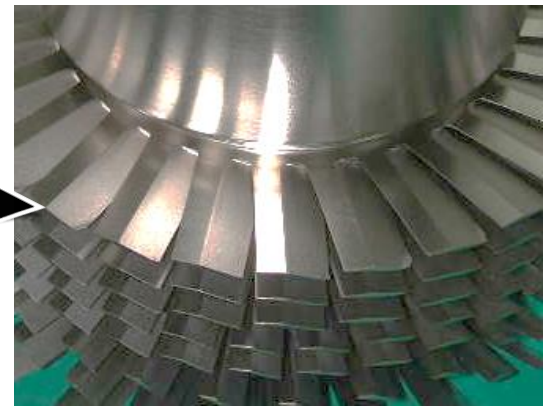
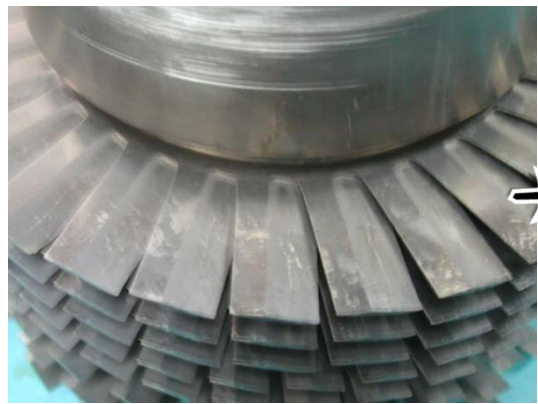


Inspection

Turbo molecular pump Cleaning Image -1

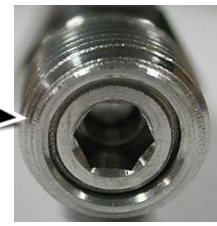
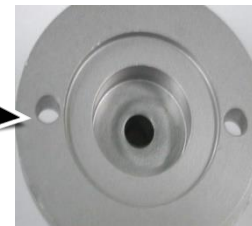
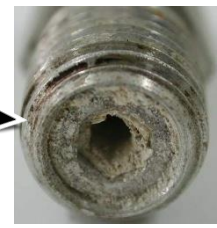
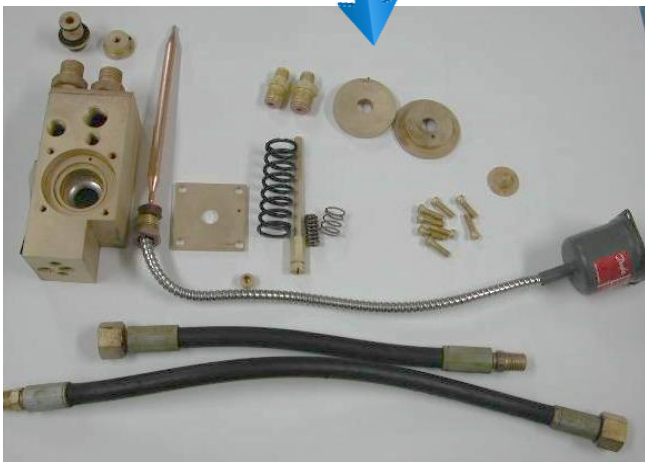
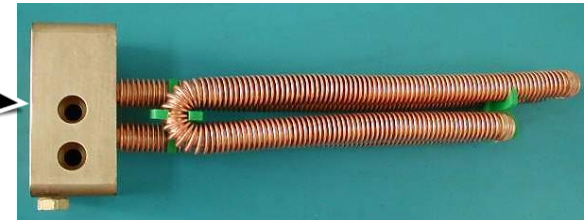
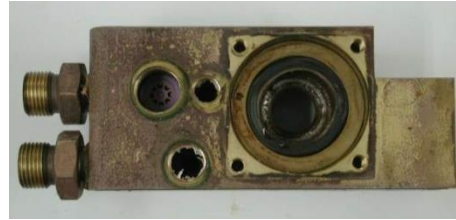


Turbo molecular pump Cleaning Image -2



Turbo pump Cleaning Image -3

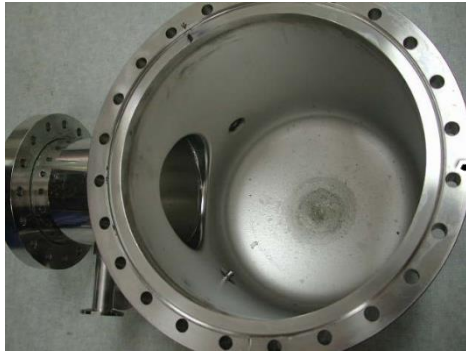
- 用途 : Dry Pump 溫度 Control (TCV manifold)
- The current washing method: Wet Bead(P.E), 세척 후 다량 폐기
- 使用Gas : CO (溫度 Sensor part)



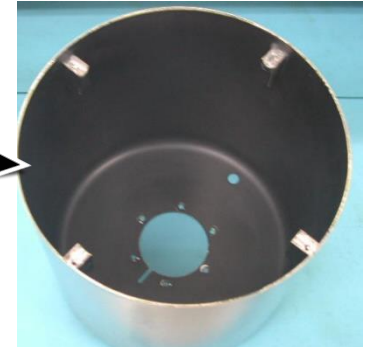
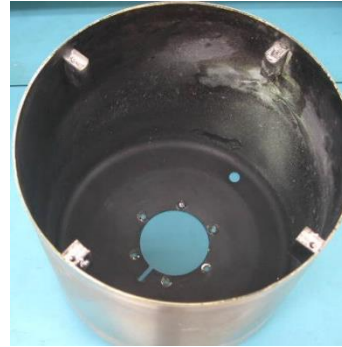
CRYO Pump Cleaning



극저온 펌프(Cryogenic Pump : CRYO Pump)는 극저온을 사용하여 높은 진공 수준을 달성하는 진공 펌프 유형입니다. 이는 진공을 생성하기 위해 가스를 얼리고 가두는 원리에 따라 작동합니다. 다양한 재질로 구성되어 있으며, 부착된 오염물을 물리적 (Bead Blasting , Blushing) 세척 방법은 부품의 손상을 일으킵니다. SkpChem은 소재의 손상이 전혀 없는 정밀화학약품을 제공합니다.



Vacuum Housing



Radiation Shield



Cylinder

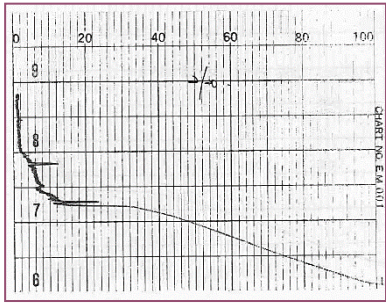
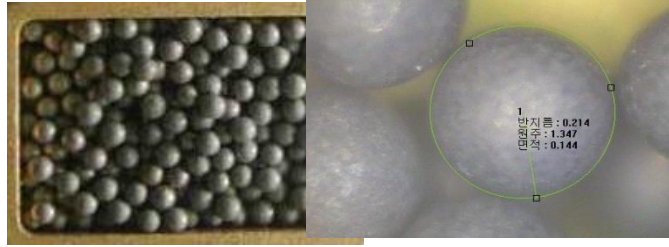
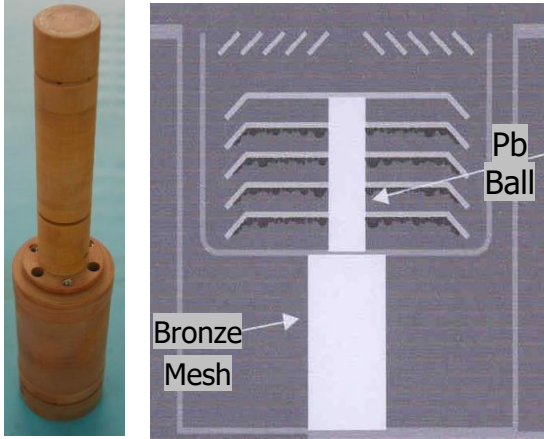


Condensing Array

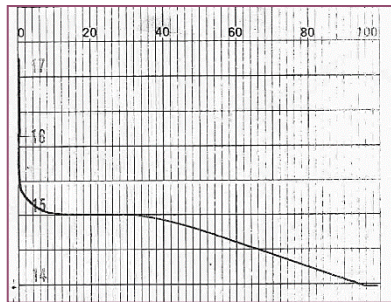
CRYO pump Cleaning

Before

After



Traditional Method



New Method

成分
分析

