Palladium Catalyst Hydrogenation Purifier Psa Nitrogen Gas Generator Metallurgy Field

Our Product Introduction

Basic Information

- Place of Origin: SUZHOU, CHINA
- Brand Name: SUMAIRUI GAS
- Certification: ISO9001, CE, BV, SGS, TUV, ASME, GOST,NB,NR ETC
- Model Number: OSP-H
- Minimum Order Quantity: 1 set
- Price: Negotiable
- Packaging Details: Exporting wooden case /Film packing
- Delivery Time: 30-45 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 100 sets/months

Product Specification

- Flow: 100-10000Nm3/hr
- Purity: 99.999-99.9999%
- Ppm: ＜3
- Consume: Hydrogen And Water
- Raw Nitrogen: ＞99%
- Hydrogen Required: ＞99.5%
- Cooling Type: Water
- Application: Chemical Industry
- Working Duration: 24 Hrs Non-stop
- Operation Mode: Fully Automatic
- Control Type: Remote Start And Stop
- Data Upload: Modbus 485, Ethernet,Profibus, DP， Hart,TCP Etc
- Temperature Control: Schneider
- Heating Rod: Included

Our Product Introduction

for more products please visit us on n2-nitrogengenerator.com

Product Description

Palladium catalyst high purity hydrogenation purifier to get 99.9995% purity N2 used for metallurgy field brightness

Technical indicators:

The raw nitrogen will be produced by PSA or membrane separation, and mixed with small amount of hydrogen. Residual oxygen reacts with hydrogen to produce water vapor in a reactor filled with metal palladium catalyst, therefor, most of the water vapor is condensed through the after-cooler, and the condensed water is removed through the high-efficiency water separator. After deep dehydration and dust removal in the dryer, the high purity nitrogen is obtained finally.

By the way, The adsorption dryer can make the dew point of product gas below - 70℃. The purity of product gas continuously monitored online by analyzer.

The chemical equation is: 2H2 + O2 = 2H2O + Heat

In order to ensure that oxygen is completely removed, the actual ratio of H2 to O2 is slightly higher than the theoretical value, so that the reaction is very complete to obtain the high purity nitrogen, and the purity can reach more than 99.9995% after refining.

Main Characters:

1. Advanced technique------The highly active deovo catalyst which is rather advanced in the country is adopted. The activity is excellent and can be regenerated without heating.
2. Automatic control------This equipment adopt the Siemens PLC control system with automatic switch to control work regeneration, with optional quality flow controller, and with automatic hydrogenation under controlled ratio.
3. Reliable running status-----This equipment adopts German pneumatic valves and Japanese RKC temperature controller.
4. Reasonable design------The totally enclosed design ensures a compact structure, a good looking appearance and a small floor space.

Handling capacity of airflow: 10~500Nm^3/h
Purity of nitrogen raw material: >=99%
Purity of nitrogen product: 99.9995% O2< =5ppm H_2: Slight amount
Dew point: ≤-70
Outlet pressure of nitrogen product: 0.1~0.6Mpa.

TECHNICAL SPECIFICATIONS OF OSP-H

NO	Model	Capacity (Nm^3/hr)	Install Power (KW)	Inlet (mm)	Outlet (mm)	Weight (KG)	Dimensions (L*W*H mm)
1	OSP-H-100	100	27	DN25	DN25	500	Customized
2	OSP-H-120	120	28	DN32	DN32	650	
3	OSP-H-150	150	29	DN32	DN32	950	
4	OSP-H-180	180	41	DN40	DN40	1200	
5	OSP-H-200	200	42	DN40	DN40	1350	
6	OSP-H-250	250	61	DN40	DN40	1650	
7	OSP-H-300	300	62	DN40	DN40	1950	
8	OSP-H-350	350	63	DN50	DN50	2200	
9	OSP-H-400	400	81	DN50	DN50	2350	
10	OSP-H-450	450	84	DN50	DN50	2650	
11	OSP-H-500	500	84	DN65	DN65	2800	
12	OSP-H-600	600	109	DN65	DN65	3000	
13	OSP-H-800	800	111	DN80	DN80	3200	
14	OSP-H-1000	1000	114	DN80	DN80	3600	

Design reference:

- Crude Nitrogen : purity @ 99% pressure @ 7 bar (g)
- Nitrogen quality 1.2.1 according to ISO 8573-1:2010.
- Designed working temperature max 150 °C
- Dew point at Nitrogen outlet - 65 °C
- O_2 ppm :< 5 ppm
- CO_2, CO free

Notes:

※ OSP-H models suitable for strict requirements for oxygen content field
※ Dimensions will be customized
※ Other special requirements as per site conditions

SUMAIRUI **Suzhou Sumairui Gas System Co.,Ltd.**

+8613812659092 dylan@sumairui.com n2-nitrogengenerator.com

No 161,ZhongfengJie, Suzhou High technology district, Suzhou