Psa Pressure Swing Adsorption Hydrogen Psa Dryer For Cooper Production Line

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: OSH-100
- 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

- Material: Mild Steel
- Capacity: 100 Nm3/hr
- Purity: 99.99-99.999%
- Pressure: 10 Bar
- Dew Point: -60 ℃
- Towers: 4
- Operation Mode: Fully Automatic
- IP Grade: IP54
- Explosion-Proof: Customized
- Application: Green & New Field
- Control Method: PLC Control
- Cooling Method: Air Cooling
- Noise Level: ≤65dB
- Operating Humidity: ≤90%RH
- Operating Temperature: 5-45℃

Our Product Introduction

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Product Description

Cooper production line PSA hydrogen generator used for the bell type furnace /continuous furnace technics

Description:

Pressure swing adsorption (PSA) is a technology used to separate some gas species from a mixture of gases under pressure according to the species' molecular characteristics and affinity for an adsorbent material. It operates at near-ambient temperatures and differs significantly from cryogenic distillation techniques of gas separation.

Specific adsorptive materials (e.g., zeolites, activated carbon, molecular sieves, etc.) are used as a trap, preferentially adsorbing the target gas species at high pressure. The process then swings to low pressure to desorb the adsorbed material.

Pressure swing adsorption processes rely on the fact that under high pressure, gases tend to be attracted to solid surfaces, or "adsorbed". The higher the pressure, the more gas is adsorbed; when the pressure is reduced, the gas is released, or desorbed. PSA processes can be used to separate gases in a mixture because different gases tend to be attracted to different solid surfaces more or less strongly.

If a gas mixture such as air, for example, is passed under pressure through a vessel containing an adsorbent bed of zeolite that attracts nitrogen more strongly than it does oxygen, part or all of the nitrogen will stay in the bed, and the gas coming out of the vessel will be enriched in oxygen. When the bed reaches the end of its capacity to adsorb nitrogen, it can be regenerated by reducing the pressure, thereby releasing the adsorbed nitrogen. It is then ready for another cycle of producing oxygen enriched air.

This is the process used in medical oxygen concentrators used by emphysema patients and others who require oxygen-enriched air to breathe.
Using two adsorbent vessels allows near-continuous production of the target gas. It also permits so-called pressure equalisation, where the gas leaving the vessel being depressurised is used to partially pressurise the second vessel. This results in significant energy savings, and is common industrial practice.

Features:

1. It operates quickly, qualified Hydrogen can be made immediately

2.The machine can fully automatic operate, without workers during the whole course

3. High efficiency molecular sieves filling, more compress, more solid, more lifelong

4. Pressure, purity, capacity can be made, to meet different customers needs.

5.Perfect structure, advanced procedure, stable@safety, little investment, lower consumption

Hydrogen gas application :

Stainless steel
Cold rolled sheets
Cooper production
Galvanization line
Oil refining line
Float Glass production
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TECHNICAL SPECIFICATIONS OF OSH

NO	Model	Capacity (Nm^3/hr)	Install Power (KW)	Outlet (mm)	Weight (KG)	Dimensions (L*W*H mm)
1	OSH10	10	1	DN15	300	Customized
2	OSH20	20		DN15	600	
3	OSH30	30		DN20	750	
4	OSH40	40		DN20	880	
5	OSH50	50		DN32	1050	
6	OSH60	60		DN32	1100	
7	OSH80	80		DN32	1200	
8	OSH100	100		DN40	1350	
9	OSH200	200		DN50	1600	
10	OSH300	300		DN65	1900	
11	OSH400	400		DN65	2200	
12	OSH500	500		DN80	2500	

Design reference:

- Designed working pressure 1.2 Mpa(g)
- PSA technology

Notes:

Following conditions will be customized :

※ Crude hydrogen less than 75%

※ Other working pressure or special requirements

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