NITROGEN GENERATOR SYSTEM

Marine PSA Nitrogen Generator Purity 99.5%

ISO9001 Supplier

Class Certificate

Export Supply

Principle of pressure swing adsorption (PSA) for nitrogen production The carbon molecular sieves can simultaneously adsorb oxygen and nitrogen in the air, and the amount of adsorption increases with the increase of...



Key Highlights

Category	Nitrogen Generator System
Standard	EN
Material	With air as the raw material, the energy consumption is only the energy ...
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS

We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.

Technical Specifications

Category	Nitrogen Generator System	**Model / SKU**	Marine-PSA-Nitrogen-Generator-Purity-99-5
Standard	EN	**Material**	With air as the raw material, the energy consumption is only the energy consumed by the air compressor.
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS	**Warranty**	12 Months unless specified otherwise
Origin	China		

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China Marine PSA Nitrogen Generator Purity 99.5%:

Principle of pressure swing adsorption (PSA) for nitrogen production

The carbon molecular sieves can simultaneously adsorb oxygen and nitrogen in the air, and the amount of adsorption increases with the increase of pressure, and there is no obvious difference in the equilibrium adsorption between oxygen and nitrogen under the same pressure.

Therefore, it is difficult to complete the effective separation of oxygen and nitrogen by the change of pressure. If the adsorption velocity is further considered, the adsorption characteristics of oxygen and nitrogen can be effectively separated.

The diameter ratio of nitrogen oxygen molecules is small, so that the diffusion speed hundreds of times faster than nitrogen, so the carbon molecular sieve adsorption oxygen adsorption rate is also very fast, about 1 minutes to reach more than 90%; and only 5% of the nitrogen adsorption capacity, so the general adsorption are oxygen, and the rest of the body. Is nitrogen.

So, if the adsorption time control in less than 1 minutes, it can be preliminarily separated oxygen and nitrogen, that is to say, the adsorption and desorption by differential pressure to achieve, adsorption pressure increased, desorption pressure drop.

However, the difference between oxygen and nitrogen is the difference between the adsorption rate and the adsorption time. The time control is very short, and the oxygen has been fully absorbed, and the adsorption process is stopped before the nitrogen has enough time to adsorb. Therefore, pressure swing adsorption to nitrogen pressure changes, but also to control the time within 1 minutes.



Equipment features

1.Nitrogen production is convenient and quick:
Advanced technology, unique air distributor, so that the distribution of airflow more evenly, efficient use of carbon molecular sieve, 20 minutes or so to provide qualified nitrogen.
2.Easy to use:
The utility model has the advantages of compact structure, integral skid, small occupation area, no capital construction investment and little investment, and the nitrogen can be obtained only by connecting the power supply on the spot.
3.More economical:
PSA process is a simple method of nitrogen production. With air as the raw material, the energy consumption is only the energy consumed by the air compressor. It has the advantages of low operating cost, low energy consumption and high efficiency.
4.Mechanical and electrical integration design to achieve automatic operation:
Imported PLC control, fully automatic operation, nitrogen flow, pressure, purity, adjustable and continuous display, can be unattended.

Marine PSA Nitrogen Generator Purity 99.5% Main Specification

Model	Output (m3/h)	Gas consumption(m3/h)	Air inlet(DN mm)	N2 inlet(DN mm)

JBN5-295	5	18	15	15
JBN10-295	10	35	25	15
JBN20-295	20	70	25	15
JBN30-295	30	105	25	15
JBN40-295	40	140	25	20
JBN50-295	50	175	32	20
JBN60-295	60	210	32	25
JBN80-295	80	280	32	25
JBN100-295	100	300	40	25
JBN150-295	150	525	50	32
JBN200-295	200	700	50	32
JBN250-295	250	875	65	40
JBN300-295	300	1050	65	40
JBN400-295	400	1400	80	40
JBN500-295	500	1750	80	50
JBN600-295	600	2100	80	50
JBN800-295	800	2800	100	65
JBN1000-295	1000	3500	125	80
JBN1500-295	1500	5250	150	80
JBN2000-295	2000	7000	150	100
JBN2500-295	2500	8750	200	100
JBN3000-295	3000	10500	200	125