Jinbo Marine

Marine & Offshore Equipment Datasheet

PRODUCT DATASHEET

NITROGEN GENERATOR SYSTEM

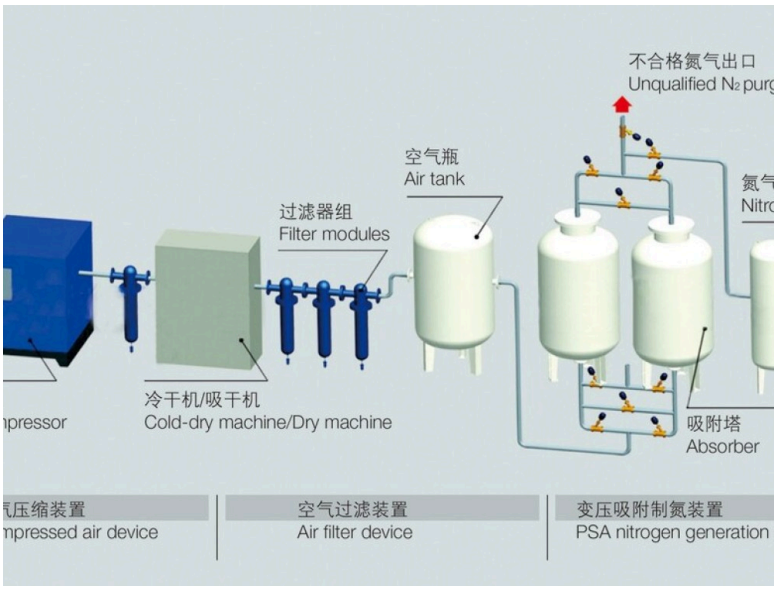
PSA Nitrogen Generator System

PSA Nitrogen Generator System is mostly used nitrogen generator system in marine fields, can get the higher nitrogen purity. Applicable Fields: Vessel Oil tank, chemical carrier--- for gas-freei...

ISO9001 Supplier

Class Certificate

Export Supply



Key Highlights

Category	Nitrogen Generator System
Standard	DIN
Material	Steel
Weight / Size	Model No Flow Rate(Nm3/h) Gas Consumption(Nm3/h) Working Pressure(Mpa) S...
Certificate	CCS

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

Technical Specifications

Category	Nitrogen Generator System	**Model / SKU**	PSA-Nitrogen-Generator-System
Standard	DIN	**Material**	Steel
Weight / Size	Model No Flow Rate(Nm3/h) Gas Consumption(Nm3/h) Working Pressure(Mpa) Size (mm) L W H YT-CPD10-95 10 24.39 0.8 1100 550 941 YT-CPD30-95 30 73.18 0.8 1200 600 1190 YT-CPD50-95 50 121.96 0.8 1300 750 1224 YT-CPD100-95 100 243.92 0.8 1600 850 1354 YT-CPD150-95 150 365.88 0.8 1900 1050 1428 YT-CPD200-95 200 487.84 0.8 2100 1150 1472 YT-CPD250-95 250 609.8 0.8 2200 1300 1546 YT-CPD300-95 300 731.76 0.8 2350 1400 1674 YT-CPD400-95 400 975.68 0.8 2350 1400 1874 YT-CPD500-95 500 1219.61 0.8 2350 1400 2093 YT-CPD800-95 800 1951.37 0.8 2500 1600 2279 YT-CPD1000-95 1000 239.21 0.8 2500 1600 2559 YT-CPD1200-95 1200 2927.05 0.8 2500 1600 2759 YT-CPD1500-95 1500 3658.82 0.8 2500 1600 2809 YT-CPD1800-95 1800 4390.58 0.8 2500 1600 2409 YT-CPD2000-95 2000 4878.42 0.8 2500 1600 2559 YT-CPD2500-95 2500 6098.03 0.8 2500 1600 2821 YT-CPD3000-95 3000 7317.64 0.8 6000 1800 2859 Note:	**Surface**	The surface and inner is full of microporous bar granular adsorbent that were black.
Certificate	CCS	**Warranty**	12 Months unless specified otherwise
Origin	China		

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China PSA Nitrogen Generator System:

PSA Nitrogen Generator System is mostly used nitrogen generator system in marine fields, can get the higher nitrogen purity.

Applicable Fields:

Vessel

Oil tank, chemical carrier--- for gas-freeing, inerting and cleaning for cargo tank;

LPG, LNG carrier---for inerting and replacement for cargo tank

Offshore platform

Drilling, completion of oil and gas wells, workover treatment, pipeline cleaning, seal, compression, tank blanketing, pigging and maintenance.

Petrochemical Industry

For nitrogen purging, tank nitrogenization, replacement, leak hunting, protection of flammable gas, tank cleaning.

Principle:

PSA takes advantage of the characteristic of selective adsorption of the CMS. In the cycle period of pressing absorption and depressing desorption, the air separation is achieved in the scrubbers when the compressed air into it alternately, then the high purity N2is produced continuously.

Carbon molecular sieve is a kind of using coal as the main raw material, through grinding, oxidation, molding and carbonization and by the special semi-ellipse treatment processes. The surface and inner is full of microporous bar granular adsorbent that were black. Carbon molecular sieve of O2, N2 separation effect is based on the differences of two kinds of gas dynamics diameter. The diameter of O2 molecular is smaller, so the rate of spread is quicker; the diameter of N2molecule is larger, as a result, the rate of spread is slower.

Working Procedure:

Compressed air device

The air is compressed to a rated pressure with the air compressor.

Air filter devices

Removing the impurities from air with a filter and colddry machine/dry machine to insure the quality of the air source.

PSA nitrogen generation devices

Composed with the air tank, absorbers and nitrogen tank, etc., two absorbers work alternately, one is absorbing to produce nitrogen gas meanwhile the other is desorbing to generate. The nitrogen gas is sent to the buffer tank of low pressure in where purity of nitrogen gas will be tested by the analyzer. The qualified nitrogen gas will be sent to use and the unqualified will be discharged automatically.

Features:

1. The superior performance CMS is used to ensure the stability and longevity of the system.

2. The advanced filling technology and special structure to prevent CMS pulverization to extent the service life.

3. High level of automation, real-time monitoring and recording operating parameter.

4. Kid-mounted integrated design is convenient in transport and stallation.

5. Widely working pressure range (0.4~2.0Mpa).

6.High recovery, reducing air consumption and saving cost.

7. Flexible design can meet different demands of the customers.

8.The scientific structure design, special air flow diffusion apparatus to improve the adsorbed efficiency and avoid the pulverization of sieve from high speed attack caused by airflow.

9. Small scale, large application and low cost.

Technology Parameters:

Capacity: 0~3000Nm3/h

Purity: 90%~99.99%

Pressure:≤35Mpa

Temperature: 20~45℃

Dew point:≤-40℃

Model No and Specification:

Model No	Flow Rate(Nm3/h)	Gas Consumption(Nm3/h)	Working Pressure(Mpa)	Size (mm)		
				L	W	H
YT-CPD10-95	10	24.39	0.8	1100	550	941

YT-CPD30-95	30	73.18	0.8	1200	600	1190
YT-CPD50-95	50	121.96	0.8	1300	750	1224
YT-CPD100-95	100	243.92	0.8	1600	850	1354
YT-CPD150-95	150	365.88	0.8	1900	1050	1428
YT-CPD200-95	200	487.84	0.8	2100	1150	1472
YT-CPD250-95	250	609.8	0.8	2200	1300	1546
YT-CPD300-95	300	731.76	0.8	2350	1400	1674
YT-CPD400-95	400	975.68	0.8	2350	1400	1874
YT-CPD500-95	500	1219.61	0.8	2350	1400	2093
YT-CPD800-95	800	1951.37	0.8	2500	1600	2279
YT-CPD1000-95	1000	239.21	0.8	2500	1600	2559
YT-CPD1200-95	1200	2927.05	0.8	2500	1600	2759
YT-CPD1500-95	1500	3658.82	0.8	2500	1600	2809
YT-CPD1800-95	1800	4390.58	0.8	2500	1600	2409
YT-CPD2000-95	2000	4878.42	0.8	2500	1600	2559
YT-CPD2500-95	2500	6098.03	0.8	2500	1600	2821
YT-CPD3000-95	3000	7317.64	0.8	6000	1800	2859

Note: 1. The based condition is 0.8Mpa, 20℃temp, 1000mbar atm pressure and 80% relative humidity.

2. O2<5% (VOL).

3. Listed in the table is only a part of the specification, we can properly design according to customer requirements.