Membrane High Pressure Nitrogen Generator Compressor Oil Gas Electrical Diesel

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
- 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

- Design Code: ASME, CE, ISO9001
- Capacity: 300SCFM
- Purity: 99.99%-99.999%
- Pressure: 80-105 Psig
- Material: Mild Steel
- Certificates: CE, ISO, ASME, GOST, KGS, NB Etc
- PLC: Siemens S7-1200/1500
- HMI: 7inches/12 Inches
- Flow Meter: Vortex Type/ Metal Rota
- Oxygen Analyzer: Yes
- Monometer: 1 Lot
- Working Mode: Fully Automatic
- Type Of N2 Generator: PSA Modular CMS
- Working Life: ＞10 Years
- Movable: Yes

Our Product Introduction

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Product Description

Containerized nitrogen plant with high pressure supplys for oil & gas industry by electrical /diesel driving type

Nitrogen generators that are based on membrane and pressure swing adsorption (PSA) technologies are both capable of generating nitrogen gas and use compressed air as a means to feed their systems and produce nitrogen. But when deciding which technology will best serve your business, several issues need to be considered.

Pressure Swing Adsorption Generators

A PSA nitrogen generator uses a Carbon Molecular Sieve (CMS) to adsorb oxygen under high pressure while allowing the nitrogen to pass through for collection in a storage unit.

PSA Nitrogen Generator – The Process

With the majority of pressure swing adsorption nitrogen generators, two vessels are packed with carbon molecular sieves (CMS) to adsorb oxygen as compressed air moves through the vessel. As one vessel is adsorbing the second vessel is depressurized, and a small amount of nitrogen flows downward to release the oxygen collected during the adsorption process. The two vessels alternate between the adsorption and desorption processes. The entire process for a PSA generator takes approximately 60 seconds.

PSA Nitrogen Generator Systems

Purity Levels

PSA nitrogen generators can provide higher gas purities than can be accomplished with a membrane nitrogen generator. PSA generators manufactured by On Site Gas Systems offer the ability to achieve a set purity level between 95% and 99.9995%.

Reliability

On Site Gas Systems PSA nitrogen generators have only a few moving parts and if properly maintained can last for many years. It is not uncommon for an On Site Gas Systems PSA nitrogen generators to maintain its performance for over twenty years.

Very Little Maintenance

An On Site Gas Systems PSA nitrogen generator requires very little maintenance. With clean, dry feed air most of the annual maintenance is simply changes filter cartridge. Pellets that form the hub of the pressure swing adsorption gas filtering process (Zeolite or CMS) have an extensive lifespan and can last for at least for decades.

Consistency

Pressure swing adsorption generators can provide the same high volume of nitrogen for the life of the generator

Features and benefits

Cost-effective gas supply :
Standard, pre-engineered product range.
Highly skidded, modular design for low-cost site installation.
Compact design requires minimal plot space.
Fully automated controls for unattended operation.
High reliability for dependable gas supply:
Full local and remote operation with automatic callout for 24/7 support
(available also on customer-owned plants); remote monitoring by Provides optimal performance at virtually all times.
Integrated instrument air system.

Liquid backup under a sale of gas contract provides even higher onstream supply reliability and optimization of plant capital.

Low operating cost :

Turndown for power savings at reduced consumption rates.

Air Products' proprietary adsorption process minimizes power consumption.

Preventive maintenance program reduces overall maintenance costs.

Flexibility:

Customer and local code requirements can be supported within product
design envelope.

Project execution strategies are optimized to local cost structure and infrastructure available at the jobsite.

Provide a plant we own and operate, one owned by the customer, and hybrid options in between.

Item	Nitrogen purity (Nm3/hr)							Dimensions	Weight
	95%	99%	99.5%	99.9%	99.99%	99.995%	99.999%	(L*W*H) mm	KG
OSP5	21	13	11	8	5	4.2	3	1100*600*1700	300
OSP10	38	29	25	15	10	7.5	6.1	1200*650*1800	350
OSP20	80	56	52	32	20	16	14	1600*1000*2200	450
OSP40	160	116	105.2	67.2	40	34	28	1800*1000*2200	600
OSP60	252	174	157.8	100.8	60	51	45	1900*1200*2200	750
OSP80	339.2	232	211	132	80	70	62	2000*1200*2400	980
OSP100	420	290	263	168	100	90	78	2100*1600*2500	1300
OSP150	630	435	394.5	252	150	135	120	2500*1800*2600	1600
OSP200	848	580	526	336	200	180	160	2800*1900*2850	2200
OSP250	1060	725	657.5	420	250	225	200	3100*2000*3200	2600
OSP300	1270	870	780	500	300	260	240	3900*2600*3400	3850
OSP400	1696	1160	1052	672	400	360	320	4500*3250*3600	5000
OSP500	2120	1450	1300	840	500	450	400	4900*3600*3800	6500
OSP600	2540	1740	1578	1000	600	540	480	5300*3600*3900	7800
OSP800	3390	2320	2100	1340	800	720	640	5600*3900*4100	10200
OSP1000	4240	2900	2630	1680	1000	900	800	5800*4000*4500	11800

Design reference :
Compressed air inlet pressure 7.5 bar(g)/108 psi(g)
Air quality 1.4.1 according to ISO 8573-1:2010
Nitrogen outlet pressure 6 bar(g)/87psi(g)
Nitrogen quality 1.2.1 according to ISO 8573-1:2010.
Designed working temperature max 50 ℃
Dew point at Nitrogen outlet - 40 ℃

Notes:
OSP nitrogen generator max working pressure 10 bar(g)/145psi(g)
Following request of PSA on-site nitrogen generator will be customized :
Working pressure ＞10 bar(g)/145 psi(g)
Dew point ＜ - 50 ℃
Plug and play
Movable/containerized
Other special requirements as per site conditions

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