



N2 Psa Nitrogen Gas Plant Manufacturer 99.999% 10 Bar Container System

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

- Purity: 99.999%
- Pressure: 10 Bar
- Flow: 100-5000Nm3/hr
- Dew Point: -80
- Control Type: PLC Control
- Instrument: Included
- Mannometer: Included
- Oxygen Analyzer: Included
- Material: Mild Steel /stainless Steel
- Certificates: CE, ISO, ASME, GOST, KGS, NB Etc
- Medium: Clean N2
- Display: HMI 7 Or 10 Inches Available
- Alarming System: Included
- Flow Meter: Included
- Customized: Yes

Product Description

Sumairui gas PSA nitrogen plant manufacturer 99.999% 10 bar container system

PSA technology utilizes two towers which are filled with carbon molecular sieve (CMS). Compressed air enters the bottom of the "online" tower and flows up through the CMS. Oxygen and other trace gases are preferentially adsorbed by the CMS, allowing nitrogen to pass through. After a pre-set time the on-line tower automatically switches to the regenerative mode, venting contaminants from the CMS. Carbon molecular sieve differs from ordinary activated carbons as it has a much narrower range of pore openings. This allows small molecules such as oxygen to penetrate the pores and separate from nitrogen molecules which are too large to enter the CMS. The larger molecules by-pass the CMS and emerge as nitrogen gas. PSA nitrogen generators are typically used in applications where the purity requirement is higher than 99.5% (0.5% O₂ or below).

PSA Nitrogen Generators are supplied to our customers as complete systems, ready for hookup to a compressed air supply, and include air filters and controls for automatic operation. Getting started with your PSA Nitrogen Generator is simple too – just start up the PSA nitrogen generators by a switch and you're good to go. Maintenance is easy as well. You will only be required to change the filters on your PSA Nitrogen Generators every three to twelve months.

PSA nitrogen generators come pre-tested, fine tuned and inspected thoroughly to ensure that our generators are set up to meet the specific needs of our customers – as every application's nitrogen flow rate and purity differ. One of the best things about PSA Nitrogen Generators are their ability to assist various businesses with on-site nitrogen production and the various applications PSA nitrogen generators are good for.

PSA Nitrogen Generators also assist businesses with eliminating risks that are typically associated with liquid nitrogen or highly pressurized nitrogen and the best part is – it's extremely cost efficient.



The Benefits of an Onsite Nitrogen Generating System

Features include:

- Dualbed and Monobed design
- Complete package with pre-filtration and buffer tank
- Safe and reliable
- Produce 95 - 99.999% pure nitrogen continuously
- Dewpoints to -70°C

Final stage sterile air filter is USDA / FSIS accepted for use in federally inspected meat and poultry plants. In full compliance with FDA and GFSI requirements
PSA towers require no maintenance

Model of OSP120-A High purity PSA nitrogen generator

Item	Nitrogen purity (Nm ³ /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

Nitrogen Generator Applications

Here are the five most popular nitrogen generator applications in the industrial industry.

Food Packaging

Modified Atmosphere Packaging (MAP) with nitrogen and nitrogen-CO2 gas mixes are often used in the food packaging industry to preserve perishable items by preventing spoilage, ensuring freshness, maintaining flavour, and extending the product shelf life. Onsite nitrogen generation is highly beneficial in the food packaging industry to maintain a quality product. Food packagers can save hundreds of thousands of dollars by having an onsite system installed.

Beverage Storage, Transport, and Dispensing

Like the food industry, the beverage industry can also improve from having onsite nitrogen generating systems. These systems make it more efficient to transport beverages to end users such as juice packagers, vintners, breweries, and other manufacturers of beverage dispensing systems.

Laser Cutting

The success of a laser cutter depends on a lean and efficient shop, which is why it is highly beneficial to generate your own nitrogen onsite. If you are currently purchasing high-pressure cylinder gas, you can achieve incredible cost savings by switching to a local system. Bulk liquid nitrogen systems for laser cutting typically have purge losses of up to 20% of the gas you are purchasing. An onsite nitrogen generator will eliminate these costly purge losses.

Electronics Manufacturing and Soldering

Many solder applications require high-purity nitrogen to reduce dross on solder spots and reduce surface tension. High-purity nitrogen allows solder to cleanly breakaway from the solder site. Having an onsite nitrogen generating system is the most cost-effective way to meet your nitrogen requirements.

Fuel and Chemical Tank Inerting

The ideal inert gas for blanketing or purging fuel and chemical tanks is nitrogen. Having an onsite nitrogen system will reduce your costs and allow you to have a 24/7 nitrogen supply to meet your requirements.

Nitrogen Generator Services from SUMAIRUI GAS

Onsite nitrogen generators are extremely efficient and cost-effective for various industrial applications. By installing an onsite system, all you need to focus on is maintenance, while your investment pays for itself over time. We offer the following nitrogen generator services:

Maintenance Services

For help with installation, our team offers around-the-clock service support. If you require maintenance for your existing

system, we will ensure that your nitrogen generator is running in great condition, so you can get back to your operations. For nearly three decades we have been helping our clients significantly reduce their industrial nitrogen and oxygen costs by utilizing leading-edge technologies such as onsite nitrogen and oxygen generating systems. We displace the requirement of having to purchase the gas. Instead, we sell our business clients the technology and equipment they need to make their own gas on site.



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