



HIGH PURITY GENERAL-PURPOSE NITROGEN GENERATOR (RXT-10L)

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USER MANUAL

CATALOG

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Safety Precautions

Oxygen and Nitrogen: This product generates nitrogen while adsorbing oxygen and automatically desorbing and discharging it.

Note: The machine will intermittently discharge other gases besides nitrogen, and the sound of exhaust is normal for the machine operation.

1. Do not direct the nitrogen outlet towards the face as inhaling a large amount of nitrogen can cause suffocation.
2. High oxygen content environments pose a fire hazard; ensure proper air circulation around the machine.

Electrical Safety

This product uses a 220V AC power supply. When connecting the power, the equipment casing should be reliably grounded.



01/

NITROGEN GENERATOR OVERVIEW

Nitrogen is colorless, odorless, non-toxic, non-flammable, and non-explosive, making it very safe to use. Its molecular structure is very stable and it is generally unreactive with other substances, exhibiting inertness. It is widely used as a protective gas, etc. This series of nitrogen generation devices use the principle of pressure swing adsorption (PSA) to separate oxygen from nitrogen in the air through carbon molecular sieves to produce nitrogen. It has the advantages of a simple process, small footprint, low investment, simple operation, convenient maintenance, and good adaptability. The product's nitrogen purity can be adjusted according to actual needs, and the device has good adaptability. The working principle is PSA nitrogen production, using high-performance CMS carbon molecular sieves with AB dual towers working alternately for continuous nitrogen production.

02/

WORKING CONDITIONS AND ENVIRONMENTAL REQUIREMENTS

ENVIRONMENTAL REQUIREMENTS



1. Requirements for Compressed Air Source:

- Compressed Air Pressure: 0.6 ~ 0.8MPa
- Compressed Air Dew Point: < -10°C
- Compressed Air: Oil-free, water-free, qualified compressed air
- Compressed Air Oil Content: < 0.01PPM
- Air Compressor Matching: When selecting an air compressor, the compressor's exhaust volume should be greater than the equipment's effective air consumption. The air compressor system should include a cold dry filter system and regular drainage to avoid severely affecting the nitrogen generator's service life.



2. Environmental Requirements:

- Ambient Temperature: 5 ~ 40°C with the optimal operating temperature at 20-25°C
- Relative Humidity: ≤ 80%
- Power Supply: 220V 50HZ
- Power: 50W
- Weight: 70KG
- Dimensions: 550*550*870mm
- Nitrogen Output: 0.6Nm³/h (adjustable)
- Nitrogen Purity: 99.9% (adjustable)

NITROGEN GENERATOR OPERATING PROCEDURES

- Connect the compressed air to the air inlet, and the nitrogen outlet to the usage end.
- Turn on the power switch, the pressure in Tower A will begin to rise, and Towers A and B will start to work alternately. Once the nitrogen pressure gradually rises to 0.6 MPa, open the nitrogen outlet pipeline control valve to maintain the nitrogen pressure at not less than 0.5 MPa for continuous discharge for 10 minutes. The nitrogen purity will increase, and once it meets the required purity for use, it can be supplied to the usage end.

03/

APPEARANCE AND INSPECTION

1. Before using the nitrogen generator, check its appearance for completeness, ensure the installation site has good ventilation, and there are no open flames or flammable/explosive materials nearby.

2. Ensure that the gas interface and pipeline connections, the interface of the oil-water separator with the air source or air compressor pipeline, and the interface of the air storage tank with the nitrogen pipeline are properly connected.

3. The system is ready for use, connect to a 220V power supply, the machine operates, and open the compressed air supply.

4. Special Purposes: When the equipment is used for high-purity nitrogen, it is necessary to declare to the manufacturer in advance, and the manufacturer will adjust the purity and nitrogen gas flow rate as required before shipment. No further adjustment is needed when the equipment is in use.

04/

QUALITY ASSURANCE TERMS

A

The nitrogen generator and equipment produced by our company have a warranty period of 12 months, unless otherwise agreed in the contract. With normal use and regular maintenance, the service life of the equipment should be 8-10 years. After the warranty period, our company will still be responsible for the repair of the equipment until it is scrapped. For repair services required after the warranty period, our company will only charge for the cost of the parts.

B

The scope of the product warranty during the warranty period includes any faults or failures of the equipment or instruments due to quality issues or normal wear and tear of certain components or instruments under normal operation, which are all covered under the free warranty.

Please notify our company promptly in the event of a malfunction of the equipment or instruments, and retain the faulty parts as they are until our company sends someone or confirms by phone for timely replacement.

SPECIAL STATEMENT

Our company only undertakes the warranty for products within the nitrogen system provided by us and does not assume joint liability for any other losses incurred by the user due to damage to the nitrogen equipment.

SPECIAL STATEMENT

Our company will continue to improve product technology and reserves the right to make design and technical specification improvements without prior notice!