# **HNS High Flow PSA Series**

## Nitrogen Generator

### Summary

HNS PSA Series nitrogen generators use patented technology to produce an uninterrupted supply of gaseous nitrogen, on site. This compact system is ideally suited for low-flow applications that presently employ high-pressure gas cylinders or dewars of nitrogen. With the HNS, the inconvenience of gas cylinders and liquid dewars is eliminate. Nitrogen is generated at your location, continuously and reliably, requiring only a supply of compressed air.

The HNS operates on the Pressure Swing Adsorption (PSA) principle to produce a continuous stream of nitrogen gas from compressed air. Two towers are filled with carbon molecular sieves (CMS). Pretreated compressed air enters the bottom of the "on-line" tower and follows 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 regenerative mode, venting contaminants from the CMS.



#### **Features & Benefits**

- Nitrogen flows from 3,500-150,000 scfh
- Nitrogen purity adjustable from 99%-99.9999%
- Continuous stream of gaseous nitrogen on demand
- High flow design
- Energy saving mode: auto-shutdown during periods of low demand

- High efficiency CMS
- · High efficiency compressed air and extractment
- Custom designed systems to meet your exact requirements
- 40 standard models to meet almost any requirement



# **Technical Specs**

Delivery Types	Skid mounted PSA nitrogen generator Skid mounted PSA nitrogen generator plant, complete with feed air compressor, air dryer, and nitrogen buffer tank
Purity	Matching your specific requirements from 95% – 99.999%
Flow Capacity	3,500-150,000 scfh (purity dependent)
Pressure	Standard: 10–100 psig (high pressure options available)
Electrical	115/1/60 — nitrogen generator only
Temperature	Working environment from 32° to 95° F
Separation Technology	Pressure Swing Adsorption (PSA) using Carbon Molecular Sieves (CMS)
Codes	ASME VIII Div 1 CRN UL & CUL UL & CUL (NEMA 4)
Options	Containerized units High pressure up to 4500 psig Cylinder filling stations Low and high ambient conditions Engineered packages to meet any specification Communication protocols to meet any specifications Energy savings mode at partial load



Let our technical representatives help you determine the right system to meet your specific nitrogen needs or answer any question you may have.

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