PRODUCT DATASHEET

Nitrogen Generator Skid (Membrane / PSA)

On-site nitrogen from compressed air, up to 99.999 %





DETAIL – MEMBRANE MODULES

OVERVIEW

The Tech Inc. Nitrogen Generator Skid (Membrane / PSA) produces nitrogen on site from compressed air, removing the need for cylinders or liquid nitrogen. Oil and gas, process and utility operators use it for purging, blanketing, seal gas and inerting. The air compressor, dryer and nitrogen generation units are sourced from leading equipment makers; Tech Inc. designs and builds the skid, with piping, instrumentation, controls and FAT.

MODELS AND CONFIGURATIONS

- **Membrane nitrogen generator** – hollow-fibre membranes separate nitrogen from compressed air, with few moving parts.
- **Pressure-swing adsorption (PSA) generator** – twin adsorber towers for high-purity nitrogen.
- **Containerised units** – air compressor, dryer and generator in one container, ready to connect.

TYPICAL DESIGN DATA

Purity, membrane	Typical 95–99.5 %, or to client specification
Purity, PSA	Up to 99.999 %, or to client specification
Flow	Typical 5 to 2,000 Nm^3/h, or to client specification
Feed air	Integrated compressor or existing plant air, or to client specification
Outlet pressure	To the user's requirement, or to client specification
Construction	Skid-mounted or containerised, or to client specification

APPLICATIONS

Purging, tank blanketing, seal gas, pipeline and vessel inerting, fire prevention.

KEY ADVANTAGES

- **No cylinders or liquid nitrogen** – nitrogen is produced on site from compressed air
- **Purity to the duty** – membrane for 95–99.5 %, PSA for up to 99.999 %
- **Ready to connect** – containerised units arrive with compressor and dryer installed
- **One tested package** – air supply, drying, generation and controls on one skid, FAT-tested
- **Remote monitoring** – PLC control with SCADA connection, engineered in-house

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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