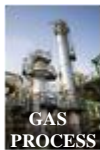




N2GS Series Nitrogen Generation Systems

Integrated Flow Solutions N2GS Series Nitrogen Generation Membrane Systems are designed and for applications requiring purities between 95% and 99.95% product nitrogen. In collaboration with our technology partner Air Products, we offer a range of proven technology solutions for: High ambient temperatures, fixed dew point control for buffer gas, coil tubing for well servicing and export line commissioning.

Industries



Membrane Based Technology – Utilizes a permeable membrane filter which selectively separates the air depending on the size of the molecule of the constituents. This process requires a conditioning (pre-filtering) of the feed air due to the very small pore sizes in the final filter.



Benefits:

- Single Source Accountability
- Pre-Packaged Modular Design Costs Less than component based site built which reduces overall project cost
- Minimizes field erection time – shorter overall project delivery schedule
- Complete system function testing prior to shipment
- 24/7 Customer service

Industry Standards

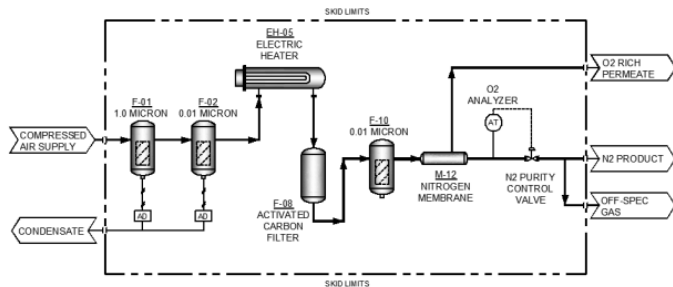
- Vessels code stamped ASME Section VIII & National Board Registered
- Piping designed to ANSI B31.1/ANSI B31.3
- Pipe fabrication to ASME Section IX
- Structural Steel Assembly Designed to AWS D1.1

Standard Features

- 0.01 µm Filter Coalescers
- Immersion heater
- Activated Carbon & Particulate Filter
- Oxygen Analyzers (Zirconium Oxide or Galvanic Fuel cell)
- Purity Control Valve
- Process validation / guarantee using “Aspen Plus” simulation software

Optional Features

- Feed Air Compressors
- IEC / CENELEC / CSA compliant control panel, conduit & wiring
- AB Compact Logix PLC control system w/ HMI
- Pneumatic pressure test after re-assembly
- Third party inspection by ABS, Lloyd’s, and DNV
- Compliance with plant / engineering specifications



Efficiency is the amount of N₂ you produce vs the amount of feed air supplied to the membrane. Efficiency is affected by one of the following variables

- Feed Air Temperature (Produce more at higher temps)
- Feed Air Pressure (Produce more at higher pressure)
- Product O₂ content (more efficient at higher O₂ content)

High Ambient Designs – Operating in extreme ambient temperatures (50°C and above) creates operational issues with equipment sizing and operation. IFS engineering team has solved this issue with the PA6050 membrane.

Fixed Dew Point Control for Buffer Gas – Patent Pending design offers fixed dew point of 20-40% humidity while producing 95% nitrogen purity throughout the total flow range.

Custom Engineered Systems – Can be integrated with compression, customized air dryers as well as redundancy to ensure a constant flow of nitrogen, even during maintenance.