



N₂

**Nitrogen Gas
Plant**

O₂

**Oxygen Gas
Plant**



**Air
Dryers**



**Gas Storage
Solutions**

NITROGEN GENERATION BY PRESSURE SWING ADSORPTION (PSA) TECHNOLOGY



PSA – N₂

Nitrogen Gas Plant separate nitrogen from compressed air utilizing Pressure Swing Adsorption (PSA) technologies. Compressed air, which consists of approximately 21% oxygen and 78% nitrogen, is passed through a bed of Carbon Molecular Sieve (CMS).



The CMS preferentially adsorbs O₂ and moisture, allowing the N₂ to pass through as a PSA Nitrogen plant product. The PSA Nitrogen gas generators operate at the specified pressure. While one of the towers is in the adsorption phase, the other tower is being regenerated, by de-pressurizing and allowing the CMS to release the adsorbed gases to the atmosphere. The cycle then repeats, allowing for constant flow of a controlled Nitrogen purity and flow.

Options / Upgrades

HMI Display Screen

Containerized or Trailer Mounted Plant

Dew Point Analyzer

Booster Compressor

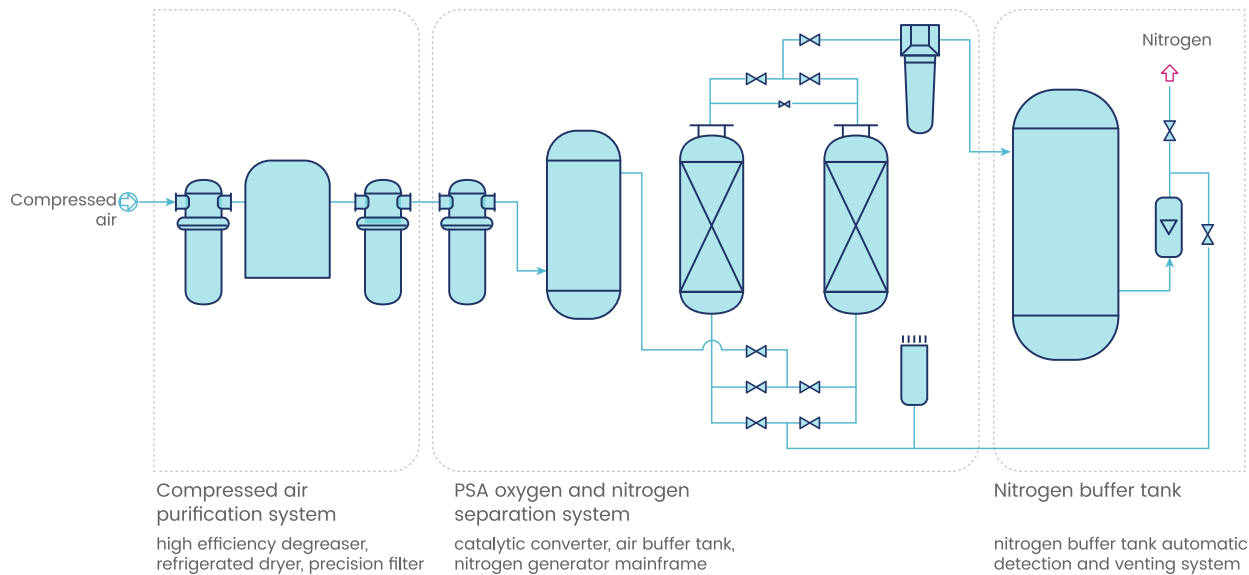
This product line is designed for medium to large flow rates and has a reduced footprint. It consists of single pairs of our Twin Tower Adsorber Vessels and air and nitrogen buffer vessels (installed on a common skid or supplied separately).

Technical Indicators

Flow Rate	5 to 500 Nm ³ /hr
Purity	95% to 99.999%
Pressure	5 Kg/cm ² g (standard)
At Dew Point	Up to (-) 80°C

- ASME Heavy Duty Adsorber Vessel
- Highest Performance Adsorbent Media
- High Cycle Life Electro Pneumatic Valves
- Online Oxygen Analyzer
- Modular Skid Mounted

- PLC Control System
- Advance Stage Filtration System
- Exhaust Silencing Muffler
- Fully automated unattended Operation



**Engineered
with you in
mind**



**Nitrogen
that makes
sense**



**Benefits for your
business and
the planet**



**Low maintenance &
generate continuously
on demand**



**24x7
Uninterrupted
Supply**



**Effective
cost reduction
& saving**



**Produce
high-quality 99.99%
purity level**



**For long term
pricing is stable
& minimal**



**No need for
high-pressure
gas storage**



**Product that is
environmentally
friendly**



**Produce
no waste
at the end**



**Design to meet
specific capacity
requirements**



LCMS



Modified Atmosphere Packing (MAP)



Chemical Blanketing



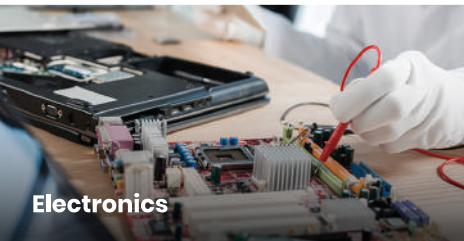
Pharmaceutical



Heat Treatment



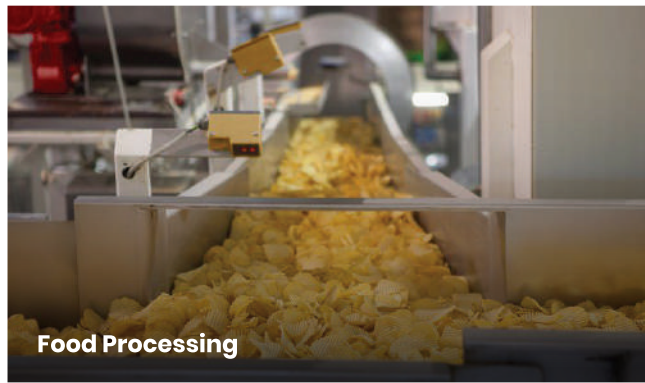
Product Storage and Transfer



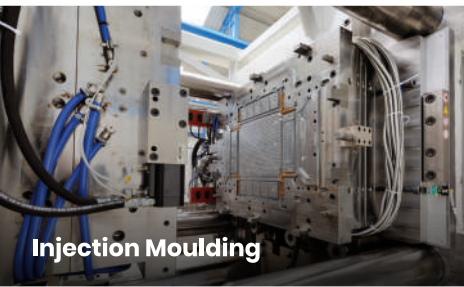
Electronics



Inerting of Flammable Liquids



Food Processing



Injection Moulding



Spray Drying



Pressure Testing



Fire Prevention



Laser Cutting

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