

ATS

**Air & Gas
Treatment
Solutions**

PSA Technology

N2 Generator

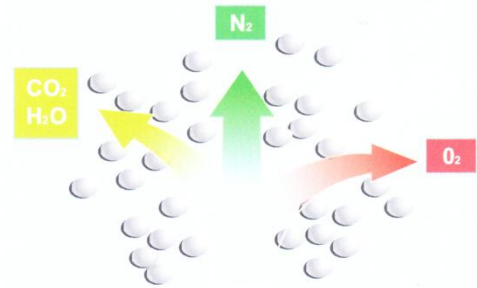


ATS Nitrogen Generator (Pressure Swing Adsorption (PSA) Technology)

ATS N2 Generator is a well studied, designed and proven reliable n2 generator system. It is widely applied in industrial facilities that require High Purity Nitrogen.

PSA Technology:-

This Pressure Swing Adsorption technology of air-to-nitrogen, uses absorptive separation ways to take clean compressed air and separate N2 from other compounds and gases (H2O, O2 and CO2) by using two beds of Carbon Molecular Sieve (CMS).



Carbon Molecular Sieve (CMS), imported from JAPAN TAKEDA, is a kind of carbon adsorbent made out of coal with carbon atoms porous materials and it specializes in separating oxygen from nitrogen via PSA technology.

N2 Generator is supplied in a complete system, which consists of Air Compressor, Air Tank, Pre-filters, Air Dryer, After-filter, N2 Generator and N2 Tank.

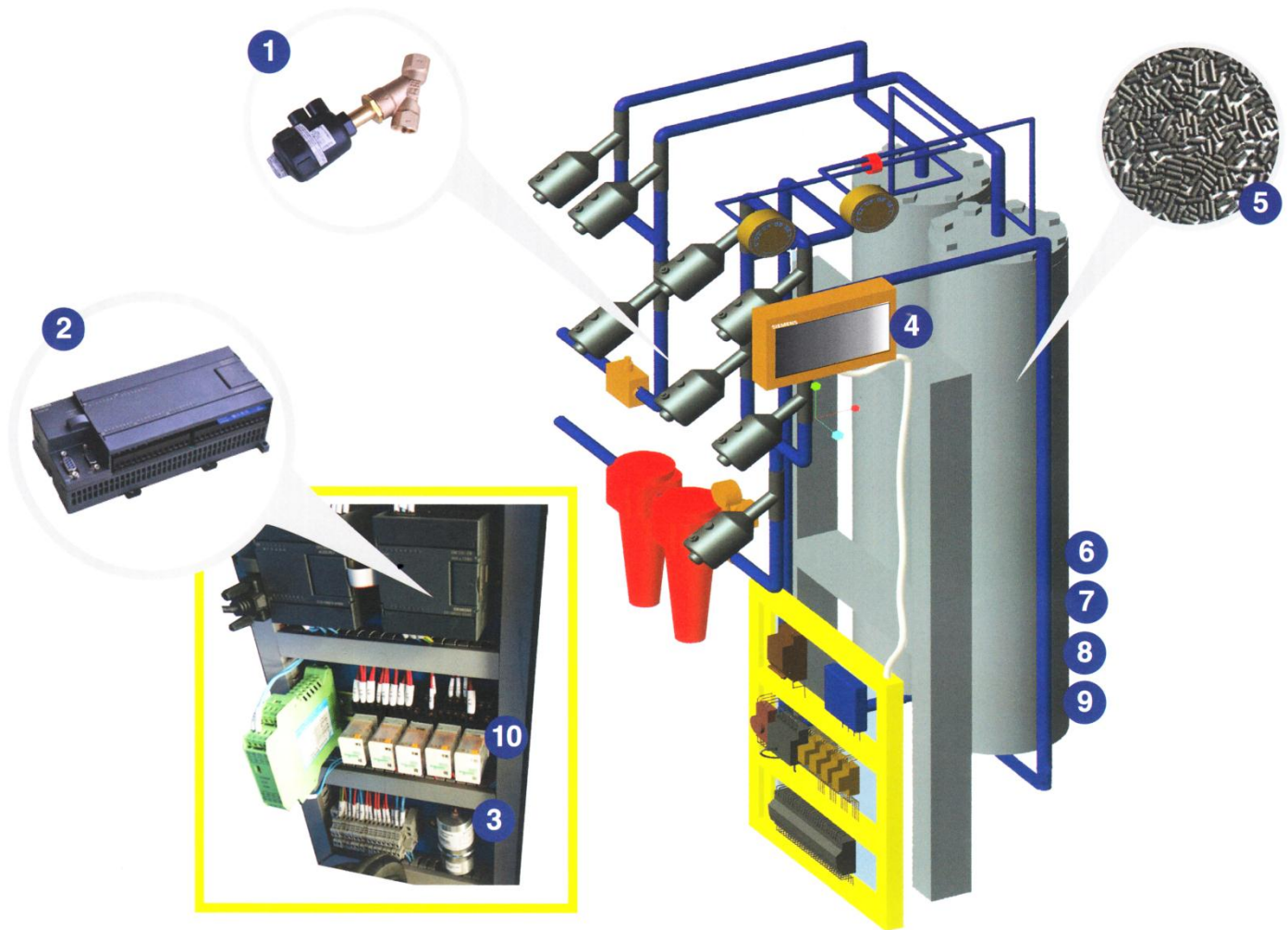
Application:-

Food, Beverage & Pharmaceutical (packaging & process), Electronic & Metal Works (laser cutting, aluminum extrusion & heat treatment), Chemical (blanketing polymer & solvent production, processing & storage) and Others (leak testing, surface equipment Inerting, glass industry, plastic injection moulding, metallurgy and etc.)

Advantages:-

ATS N2 Generator provides up to 99.9995% high purity Nitrogen with savings more than 50%, low operating cost and customers now are able to produce their own Nitrogen without paying for expensive rental of liquid nitrogen and storage of cylinder.

Excellent Performance & Quality Assurance



1 Burkert Valve

Reliable valve control. Imported brand new Burkert pneumatic valve-Germany.

2 Siemens PLC

Advanced control system Siemens PLC, most reliable, human friendly and fully automatic.

3 CiTiceL Oxygen Sensor

Efficient Oxygen Sensor. Imported brand new from Britain.

4 Siemens TS

Process display, true color HMI display system operation, parameters, etc..

5 Japan Takeda CMS

Efficient Carbon Molecular Sieve Imported brand new from Japan TAKEDA.

6 Automatic alarm

For purity & system monitoring.

7 N2 quality assurance

Unqualified N2 will be alarmed, emptied and recycle automatically.

8 Turbo air distribution

Unique turbine air distribution, no CMS Adsorption wastage.

9 Excellent energy Saving

Quick Equalizing pressure, unique N2 supplement & Dynamic Circulation Process.

10 SchneiderElectric

Quality brand from France.

Main Technical Specification:-

N2 capacity	1 Nm3/hr to 2000 Nm3/hr
N2 purity	95% to 99.9995%
N2 pressure	0.1 MPa to 20 MPa
Pressure Dew Point	less than -40°C
Maxium particle content	0.01 micron
Control Mode	intelligent

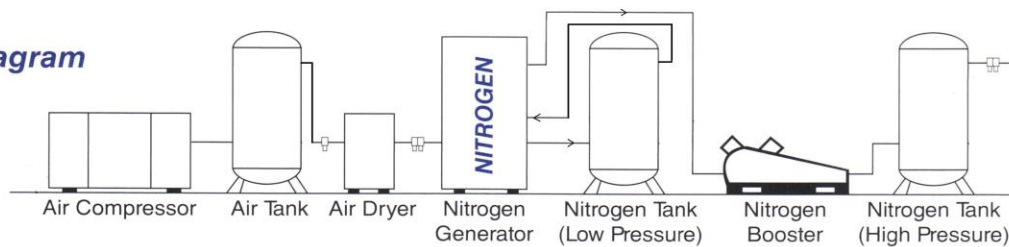
Types of Nitrogen Generator



Nitrogen Generator with Canopy

Skid mounted Nitrogen Generator

High Pressure Diagram



Low Pressure Diagram

