

**USE  
RELIABLE  
INNOVATIVE  
COST EFFICIENT**

**GAS EQUIPMENTS  
AND  
GAS SYSTEMS**

**Gastech**

**CORPORATION**

*Air & Gas Technology People*

ISO 9001-2015 QMS certified Company

Opp. Pudumjee Paper Mills,  
Thergaon, Chinchwad, Pune,  
Maharashtra State, India-411033

Mobile :9422325077 / 76 / 75

Email: [gastechindia@gmail.com](mailto:gastechindia@gmail.com)

Website: <http://www.gastechcorp.com>

# Gastech

## CORPORATION

*Air & Gas Technology People*

ISO 9001-2015 QMS certified Company

## Gastech CORPORATION

**Gastech CORPORATION** is involved in manufacturing of equipment related to the production / generation of various industrial gases, gas systems and providing cost effective solutions.

Since 1989, **Gastech CORPORATION** has been involved with design, consultation and manufacturing of various industrial and medical gases systems, using Pressure Swing Adsorption (PSA) as an air separation process.

**Gastech CORPORATION** has placed in operation several systems. The main characterization that can be made is **Gastech CORPORATION** has a capability of custom design and made any system that customer needs to suit specific requirements.

**Gastech CORPORATION** has to its credit a team of dedicated, experienced, qualified Engineers & technicians to carry out specialized assignments. The company, located in PUNE industrial area and is, equipped with Pipe Cutting & bending equipment's, TIG Welding & Brazing out fits, Assembly & Pressure Testing facilities.

**Gastech CORPORATION** has several technical achievements to its credit, including the first Indigenous Gas Mixer, the first Pre-heater less CO2 regulation, first indigenous NO2 Scrubber, first indigenous Medical Oxygen Concentrator & only manufacturer of energy less LPG Vaporizers.

**For the customers Gastech CORPORATION now represents a reliable source of cost effective & innovative Gas Equipment's & systems**

For more details regarding our products please contact us on,

### **Gastech CORPORATION**

Opp. Pudumjee Paper Mills, Thergaon, Chinchwad, Pune,  
Maharashtra State, India-411033

Mobile :9422325077 / 76 / 75

Email: [gastechindia@gmail.com](mailto:gastechindia@gmail.com)

Website: <http://www.gastechcorp.com>

# Gastech CORPORATION

*Air & Gas Technology People*  
ISO 9001-2015 QMS certified Company

## Gastech CORPORATION PRODUCT RANGE

- ❖ PSA Industrial Oxygen Generator.
- ❖ **PSA Medical Oxygen Concentrator.**
- ❖ **PSA Nitrogen Generator**
- ❖ **Gas Mixing Systems for welding & heat treatment.**
- ❖ Gas Mixing Systems for Ethylene Oxide Sterilization.
- ❖ **Gas Cylinder manifold.**
- ❖ Gas flow control system
- ❖ **Energy less LPG Vaporizer**
- ❖ Energy efficient CO2 & LPG regulation equipment.
- ❖ **Metal Pickling Equipment with air pollution control.**
- ❖ Dry Compressed Air systems.
- ❖ **Vacuum Systems.**
- ❖ Compressed Air Dryer.
- ❖ **Gas & Liquid Dryers.**
- ❖ Gas Purification & Dehydration systems.
- ❖ **Turnkey engineering, & piping assignments.**
- ❖ PLC based Master Alarm Panel for Industrial & Medical Gases.
- ❖ **PLC based Area Alarm Panel for Industrial & Medical Gases.**
- ❖ PLC based PSA Plant Controllers.
- ❖ **PLC based process control systems for Industrial applications.**
- ❖ PLC based Air Compressor & Vacuum Pump Control Panels.
- ❖ **PLC based Cylinder Manifold Controllers.**

**Gastech Corporation has several technical achievements to its credit, including only manufacturer of our PATENTED ENERGY LESS LPG VAPORIZERS, the first Indigenous Gas Mixer, the first Pre-heater less CO2 regulation, first indigenous NO2 Scrubber & first indigenous Medical Oxygen Concentrator.**

**For the customers Gastech now represents a reliable source of cost effective & innovative Gas Equipment's & systems.**

**DON'T**

**BUY**



**MAKE IT YOURSELF**

**Gastech**

**CORPORATION**

*Air & Gas Technology People*

ISO 9001-2015 QMS certified Company

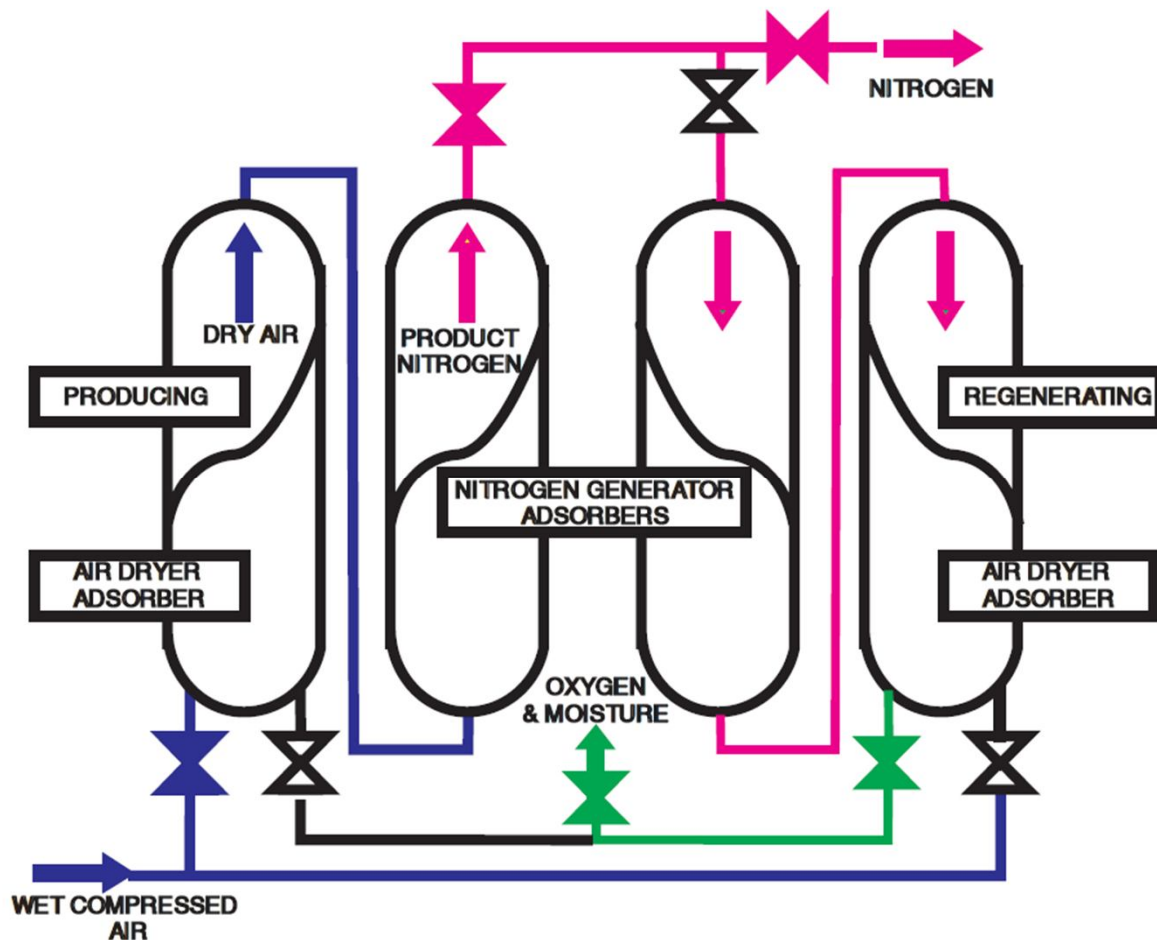
Opp. Pudumjee Paper Mills,  
Thergaon, Chinchwad, Pune,  
Maharashtra State, India-411033

Mobile :9422325077 / 76 / 75

Email: [gastechindia@gmail.com](mailto:gastechindia@gmail.com)

Website: <http://www.gastechcorp.com>

## PSA NITROGEN PRINCIPLE OF OPERATION

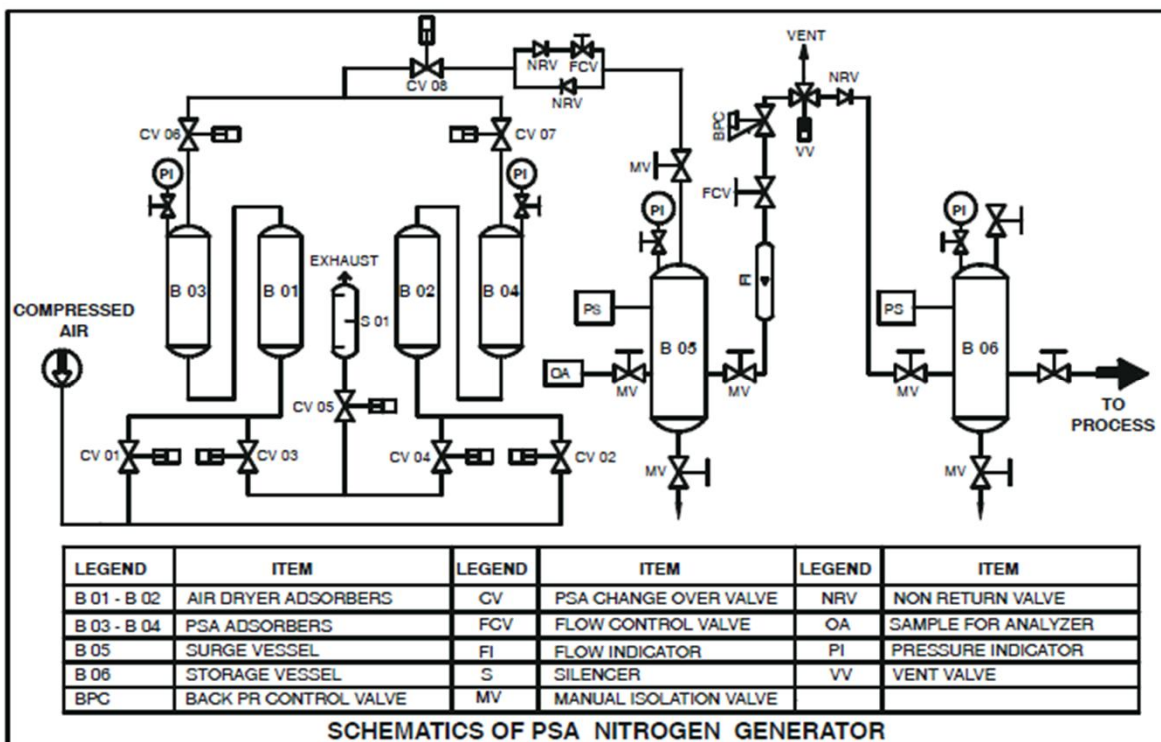


Ambient atmospheric air is compressed in the oil free Air Compressor to 7 kg/cm<sup>2</sup> (g) pressure. Due to the compression the temperature of the air increases & this Compressed Air is cooled in heat exchanger where the air temperature drops down to the ambient temperature. This Compressed Air at ambient temperature contains saturated condense moisture which is removed by a Moisture Separator & the oil contains in this Compressed Air are removed by a special filters.

## PSA NITROGEN PRINCIPLE OF OPERATION

This oil free Compressed Air containing moisture in vapor form enters at the bottom side of one of the Dryer Adsorber filled with a unique quality adsorbent Activated Alumina, which ADSORBS moisture in vapor form producing Dry Moisture free Air at the top. This Moisture free Dry compressed Air enters at the bottom of one of the Nitrogen Generator Adsorber, which is filled with unique Carbon Molecular Sieve, which ADSORBS Oxygen in the Compressed Air producing high purity Nitrogen at the top.

When the producing Dyer Adsorber & Nitrogen Generator Adsorber is saturated with moisture and Oxygen respectively, the compressed Air feed is automatically switched to the other Nitrogen Generator Adsorber via other Dryer Adsorber. The adsorbed Oxygen from Nitrogen Generator Adsorber & moisture from Dryer adsorber is DESORBED when the adsorbers are depressurized, purged & vented to the atmosphere. Each of the Adsorbers cycles between two stages; production & regeneration. One set of dryer & Nitrogen Generator Adsorber produces dry Air / Nitrogen while other set of Dryer & Nitrogen Generator adsorber regenerates themselves. The entire cycle is automatically controlled & under normal operation, no operator attention is required for Gastech Nitrogen Generator.





# Gastech

## CORPORATION

*Air & Gas Technology People*

ISO 9001-2015 QMS certified Company

## SAVE YOUR MONEY AND HEADACHE

The only running cost for our Nitrogen Generator is for Electricity. In contrast, Nitrogen suppliers charge you not only for the cost of gas or liquid, but also for transportation, equipment / cylinder rental, deposits, valves and regulators maintenance, duties and taxes.

You also pay for evaporation loss of liquid, partially filled incoming cylinders, incompletely utilized returned cylinders, and leakages through the valves.

Precious manpower is needed to procure, load, unload, move connect and disconnect heavy and high pressure cylinders which are inherently unsafe. Also there is a constant headache of unpredictable deliveries and the risk of running out.

## MAIN FEATURES OF NITROGEN GENERATOR

### ❖ **ECONOMICAL**

Saves up to 70% compared to cylinders and liquid.

### ❖ **RELIABLE**

Continuous operation, established technology.

### ❖ **LOW MAINTENANCE**

Standard air compressor is the only moving part.

### ❖ **SAFE**

Highest pressure is only 7 kg/cm<sup>2</sup>.

### ❖ **AUTOMATIC**

Microprocessor controlled unattended operation.

### ❖ **SIMPLE**

Room temperature operation wide turndown.

### ❖ **QUALITY**

Imported Carbon Molecular Sieve & reliable export quality components.

### ❖ **SERVICE**

Nationwide network for compressor maintenance, other components user serviceable.

## SPECIFICATIONS

MODEL	NITROGEN %	OXYGEN %	HYDROGEN %	DEW POINT DEG C
MS-L	96 – 99.5	0.5% - 4%	NIL	(-)40 – (-)60
MS-H	99.5 – 99.999	10PPM – 0.5%	NIL	(-)40 – (-)60
DX	99.9997 – 99.9999	1 – 3PPM(MAX)	0.5 – 1.0	(-)40 – (-)60
COPPER-DX	99.9999	1PPM(MAX)	NIL	(-)40 – (-)60

## NOTES

- ❖ Generate Nitrogen Gas from 99 to 99.9999% purity.
- ❖ Oxygen level can be obtained as low as 1 PPM.
- ❖ Nitrogen Dew Point (-) 40 to (-)60 Deg. C max.
- ❖ Delivery pressure up to 5.5 kg/cm<sup>2</sup>(g)
- ❖ Smaller, intermediate and larger capacity models are available
- ❖ Air consumption depends on purity and pressure
- ❖ Continuous monitoring of Nitrogen Purity by online Analyzer
- ❖ Detailed layout can be made to suit your site
- ❖ Three phase electricity needed for air compressor
- ❖ Optional
  - High Pressure Boosters
  - Flow Indicators & recorders
  - Purity Indicators & recorders
  - Analyzers