27+ YEARS OF EXCELLENCE

summits
Enabling Innovation. Enhancing Lives.

N_2 nitroPAK
Nitrogen Generators

NEW | DIMENSIONS SOLUTIONS

- N_2 Flow upto 1000 nm^3 / hr
- N_2 purity upto 99.9999%
- Plug-and -play
- Fastest ROI
- Reduced CO_2 Foot Print

Scan QR Code For Product Animation

27 plus years of excellence in PSA Technology

- Innovation
- Flexbility
- Sustainable engineering

Complete In-house Facility

Fully-equipped production facility built across an area of 68,000 ft^2.

Engineering Design

Dedicated Research and Development

Summits core strength lies in R&D. Our Product researches, designers and engineers work on the frontiers of applied science to build world-class solutions in gas generation products. Our R&D lab has sophisticated tools such as 3D modeling software like solid edge, Simulation analysis & CFD software, and test rigs.

Automated Welding Facility

nitroPAK Fabrication

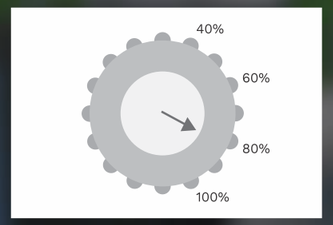
Pre Treatment Products Assembly

R & D Center

Modular | N_2 nitroPAK Nitrogen Generator

Key Features

Unlimited flexibility
Expandable. Reduces investment when in need of additional capacity.

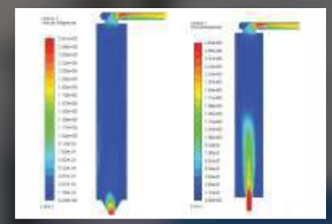


Energy Economizer
offers potential savings during varying load condition.

Feed air quality monitoring
ensures stringent pretreatment.

Inbuilt Nitrogen purity indicator
helps to ascertain outlet gas purity.

Uniform distribution
of gas flow over the entire CMS, this technology ensures the highest efficiency of the adsorption process and lowest air ratio.



CMS is packed with support of **Vibration Table** which assures high packing density and lowest air consumption.

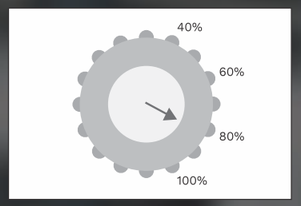
Advanced PLC
Integrated PLC with numerous facilities, controls, maintenance alert and compatible to industries required communication protocol

Quite operation
Silent and No back pressure. Aluminium end covers for longer life.

Twin Tower | N_2 nitroPAK Nitrogen Generator

Key Features

CMS is packed with support of **Vibration Table** which assures high packing density and lowest air consumption.

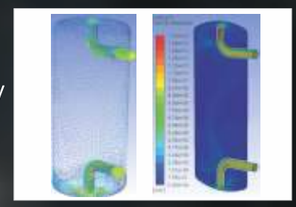


Energy Economizer offers potential savings during varying load condition.

Feed air quality monitoring ensures stringent pretreatment.

Inbuilt Nitrogen purity indicator helps to ascertain outlet gas purity.

Simulation Driven Every parameter affecting the reliability is carefully analyzed and culminated using simulation techniques.



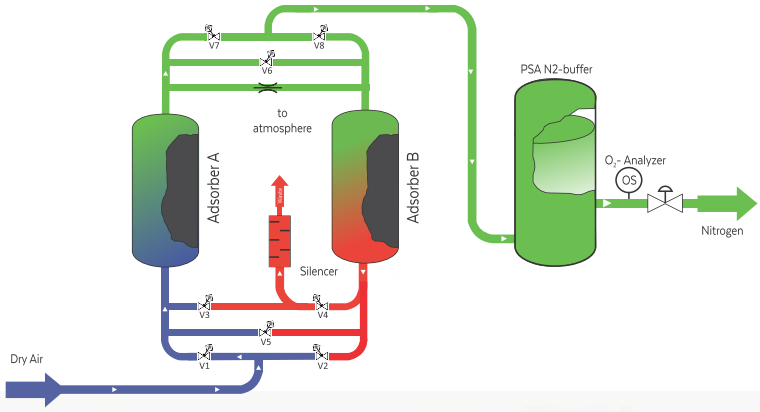
Valve Leak Check offers trouble free operation 24 X 7

7" Touch screen display with remote monitoring of N_2 Purity, Flow & Pressure

Integrated PLC with numerous facilities, controls, maintenance alert and compatible to industries required communication protocol.

Working Principle

PSA Nitrogen Generators operate on the Pressure Swing Adsorption (PSA) principle to produce a continuous stream of nitrogen gas from compressed air. Two towers are filled with carbon molecular sieve (CMS). Pretreated compressed air enters the bottom of the on-line tower and follows up through the CMS. Oxygen and other trace gasses are preferentially adsorbed by the CMS, allowing nitrogen to pass through. After a pre-set time, the on-line tower automatically switches to regenerative mode, venting contaminants from the CMS.



Specifications	
Design operating pressure range	6 - 10 barg
Design operating temperature range	5 - 50°C
Recommended operating temperature	5 - 45°C
Maximum inlet particulate	0.1 micron
Maximum inlet oil content	0.01ppm
Recommended inlet dew point	3°C PDP

Pressure correction factors

Inlet air pressure (bar g)	6	7	8	9	10
	0.88	1	1.1	1.2	1.3

Temperature correction factors

Inlet air temperature (°C)	5	10	15	20	25	30	35	40	45	50
	0.8	0.9	0.94	1.03	1.06	1	1	0.95	0.85	0.72

For High pressure contact factory

Modular Type

MODEL	Free Nitrogen delivery (FND) in Nm^3/hr								
N2 Purity (%)	95.0	97.0	99.0	99.5	99.9	99.95	99.99	99.995	99.999
nitroPAK 3	7.5	5.8	5.0	3.4	2.6	2.2	1.7	1.0	0.8
nitroPAK 6	15.0	11.6	10.0	6.8	5.2	4.4	3.4	2.0	1.6
nitroPAK 10	22.5	17.4	15.0	10.2	7.8	6.6	5.1	3.0	2.4
nitroPAK 13	30.0	23.2	20.0	13.6	10.4	8.8	6.8	4.0	3.2
nitroPAK 17	37.5	29.0	25.0	17.0	13.0	11.0	8.5	5.0	4.0
nitroPAK 20	45.0	34.8	30.0	20.4	15.6	13.2	10.2	6.0	4.8

Twin Tower Type

MODEL	Free Nitrogen delivery (FND) in Nm^3/hr								
	95.0	97.0	99.0	99.5	99.9	99.950	99.990	99.995	99.999
nitroPAK 30	66.7	51.0	33.9	30.0	22.5	19.5	14.7	9.0	7.0
nitroPAK 35	77.8	59.5	39.6	35.0	26.3	22.8	17.2	10.5	8.2
nitroPAK 40	88.9	68.0	45.2	40.0	30.0	26.0	19.6	12.0	9.4
nitroPAK 50	111.1	85.0	56.5	50.0	37.5	32.5	24.5	15.0	11.7
nitroPAK 60	133.3	102.0	67.8	60.0	45.0	39.0	29.4	18.0	14.1
nitroPAK 70	155.5	119.0	79.1	70.0	52.5	45.5	34.3	21.0	16.4
nitroPAK 80	177.8	136.0	90.4	80.0	60.0	52.0	39.2	24.0	18.8
nitroPAK 100	222.2	170.0	113.0	100.0	75.0	65.0	49.0	30.0	23.5
nitroPAK 150	333.3	255.0	169.5	150.0	112.5	97.5	73.5	45.1	35.2
nitroPAK 200	444.4	340.0	226.0	200.0	150.0	130.0	98.0	60.1	46.9
nitroPAK 250	555.5	425.0	282.5	250.0	187.5	162.5	122.5	75.1	58.6
nitroPAK 300	666.6	510.0	339.0	300.0	225.0	195.0	147.0	90.1	70.4
nitroPAK 350	777.7	595.0	395.5	350.0	262.5	227.5	171.5	105.1	82.1
nitroPAK 400	888.8	680.0	452.0	400.0	300.0	260.0	196.0	120.2	93.8
nitroPAK 450	999.9	765.0	508.5	450.0	337.5	292.5	220.5	135.2	105.6
nitroPAK 500	1111.0	850.0	565.0	500.0	375.0	325.0	245.0	150.2	117.3

Reference Conditions

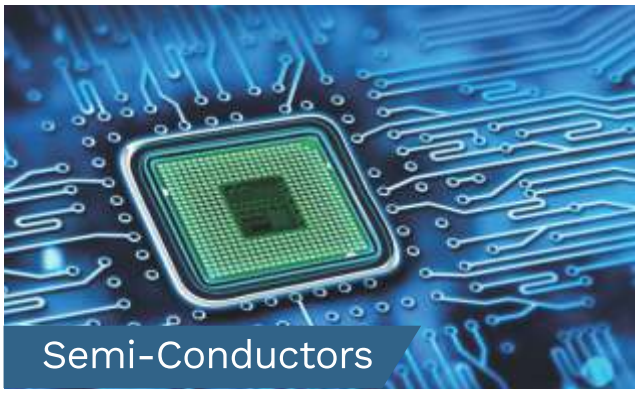
Ambient temperature : 5°C/45°C
Feed air pressure : 7.0 bar(g)
Nitrogen outlet pressure : 5.0 bar (g)

Pressure dew point of nitrogen : minus 40°C
Inlet air quality 1.4.1 according to ISO 8573-1:2010.
Typical nitrogen quality 1.2.1 according to ISO 8573-1:2010.

Applications

Oxygen presence in the processed air is an uninvited and unwanted element in various process that includes Food processing and Packing, Pharma Industries, Laser cutting, Semi conductor, Heat treatment process, Wine industries, LCMS Laboratory Applications Etc.. Nitrogen in gaseous form with desired purity is an effective and proven inert gas.

Food and Beverages

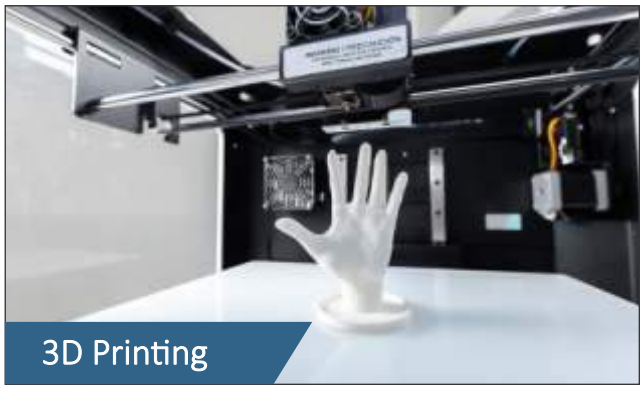

Semi-Conductors


Heat Treatment furnace


Laser Cutting of metals


Pharma


Laboratory


3D Printing


Aluminium Degassing

Our Clientele

nitroPAK is proven in various segments across India, Erurope, The Far East, The Middle East and African Countries

Harvesting the elements of air through innovation for

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Enabling Innovation. Enhancing Lives.

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