





Purity- 95% to 99.5 %



Purity- 99.9% to 99.999 %



Purity- 97% to 99.9 %



Plastic





Electronics Semi conductors



Purity- 99.9% to 99.99 %



Purity- 95% to 99.9 %



Pharmaceutical









Purity- 95% to 99.9 %

NITROGEN
GENERATOR

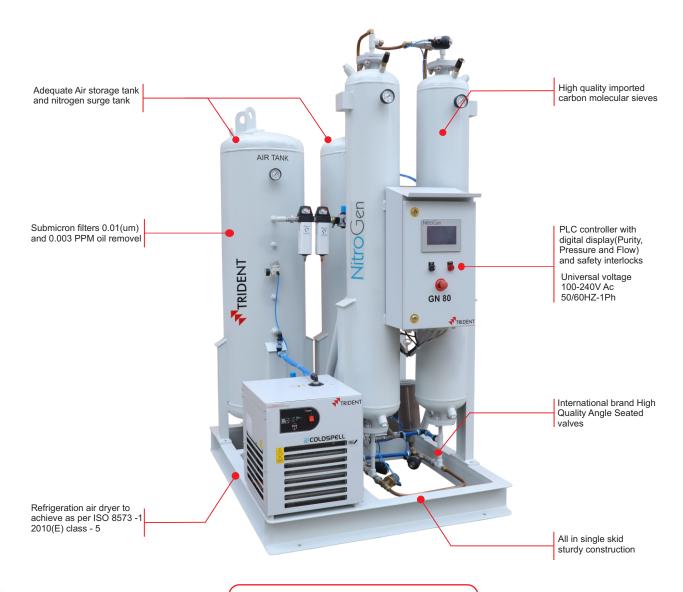


MODULAR NITROGEN GENERATOR

• Capacity ranges from : 0.56 Nm³ / hr to 20.80 Nm³ / hr

• Purity ranges from : 95% to 99.99%







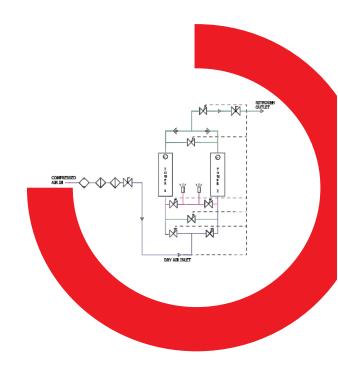
• Capacity ranges from : 4.84 Nm³/ hr to 328 Nm³/ hr

• Purity ranges from : 95% to 99.99%



Benefits:

- Produce as per demand
- Avoid Cylinder Availability Issues
- Avoid Logistics and Management Problem
- Faster payback period within 1 year and lesser
- Eliminate safety risk associated with handling high pressure cylinders
- Can be used as mobile application also
- Avoid unused gas in the cylinder



Principle of Operation

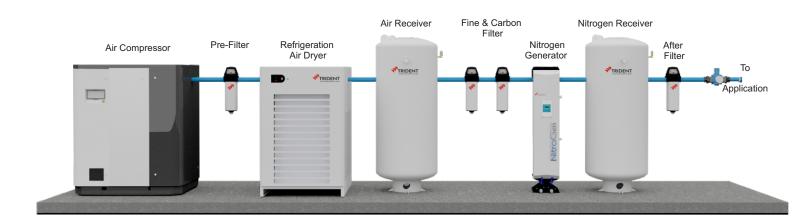
Drying Cycle: Purified (Moisture and oil free) air from the compressed air system, Passing through one of the tower filled with Carbon Molecular Sieves. The CMS selectively adsorbs oxygen, allowing nitrogen to through at the desired purity level.

Regeneration Cycle: During regeneration cycle, the sudden depressurisation brings out oxygen molecules strapped in the CMS pores to the surfaces of the beads. Small portion of Nitrogen from the drying tower is passes over the CMS through the regeneration office. The results in complete regeneration of Carbon Molecular sieves.

The automatic cycling of the adsorption and desorption between the tow beds enables the continuous of Nitrogen.

Detailed design of process parameters followed by extensive validation has resulted in consistant performance in Nitrogen Series.

Recommended installation for on -site Gas Generation







		Rated Capacity at various Purity Level																
		Nitrogen Purity%		99.99		99.9		99.5		99		98		97		95		Inlet air
₹TRIDENT	ш	Oxygen Level%		0.01		0.1		0.5		1.0		2.0		3.0		5.0		require- ment in
		Air Factor		4.9		3.5		2.7		2.5		2.2		2.0		1.8		
444%		Model	Item Code	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr
(D),	Ш	NitroGen 10	PG001	0.56	9.36	1.22	20.40	1.80	30.00	2.16	36.00	2.52	42.00	2.88	48.00	3.60	60.00	5.76
Nitro	Ш	NitroGen 20	PG002	0.81	13.52	1.77	29.47	2.60	43.33	3.12	52.00	3.64	60.67	4.16	69.33	5.20	86.67	8.32
Ē	Ш	NitroGen 30	PG003	1.62	27.04	3.54	58.93	5.20	86.67	6.24	104.00	7.28	121.33	8.32	138.67	10.40	173.33	16.64
	J	NitroGen 40	PG004	2.43	40.56	5.30	88.40	7.80	130.00	9.36	156.00	10.92	182.00	12.48	208.00	15.60	260.00	24.96
5-6		NitroGen 50	PG005	3.24	54.08	7.07	117.87	10.40	173.33	12.48	208.00	14.56	242.67	16.64	277.33	20.80	346.67	33.28



Rated Capacity at various Purity Level															
Nitrogon Pu	rity (0/	99.9	00	99.9		99.5		99		98		97		95	
Nitrogen Purity% Oxygen Level%		0.01		0.1		0.5		1.0		2.0		3.0		5.0	
Air Factor		4.9		3.5		2.7		2.5		2.2		2.0		1.8	
Model	Item Code	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM	Nm3/ Hr	LPM
NitroGen 80	PG036	4.84	80.60	10.54	175.67	15.50	258.33	18.60	310.00	21.70	361.67	24.80	413.33	31.00	516.67
NitroGen 150	PG037	9.36	156.00	20.40	340.00	30.00	500.00	36.00	600.00	42.00	700.00	48.00	800.00	60.00	1000.00
NitroGen 200	PG038	12.79	213.20	27.88	464.67	41.00	683.33	49.20	820.00	57.40	956.67	65.60	1093.33	82.00	1366.67
NitroGen 300	PG039	19.03	317.20	41.48	691.33	61.00	1016.67	73.20	1220.00	85.40	1423.33	97.60	1626.67	122.00	2033.33
NitroGen 450	PG040	28.08	468.00	61.20	1020.00	90.00	1500.00	108.00	1800.00	126.00	2100.00	144.00	2400.00	180.00	3000.00
NitroGen 850	PG041	51.17	852.80	111.52	1858.67	164.00	2733.33	196.80	3280.00	229.60	3826.67	262.40	4373.33	328.00	5466.67

For higher capacity please contact factory. Specifications are subjected to change based on continuous improvement

Specification

Design operation Pressure range	7- bar (g) to 9- bar (g)						
Nitrogen Pressure	5.5 - bar (g) to 7.5 - bar (g)						
Inlet temperature	+5 Deg C to +40 deg C						
Air quality requirement	as per ISO 8573.1-1.5.1						
Eletrical requirement for nitrogen generator	100 to 230 V,50/60 hz, single phase						

Ordering Procedure : Eg: If you required flow rate of 2.43 Nm3/ Hr at 99.99% Purity.

Your ordering code would be: Nitrogen 40.



Other Products:



Timer Operated and Level sensing drain valves

- LDV Series
- CTD Series
- EDV Series

Heatless Desiccant Air Dryers

- Modular Dry Spell Plus Series
- Fabricated DP Series
- Medical Breathing Air Dryer TBAS Series



Refrigeration Air Dryer

CS Series

Submicron Filters

- Cleansweep Filter Series
- Medical Vacuum Filter Series
- Bacteria Filter Series



Medical Oxygen Plant

- PSA GO Series
- Vacuum DMOG Series











ABOUT US

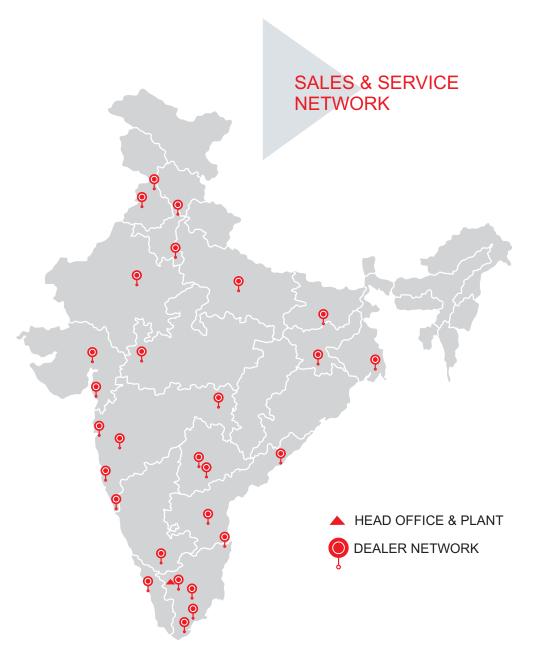
One of the leading Manufacturers of Compressed Air treatment products like:

- Auto drain valves
- Micro filters
- Nitrogen Generator
- Refrigeration / Desiccant Air dryer
- Medical Breathing Air dryer
- Oxygen Generator

- Established in the the year 1988 more than three decades of service to the industry.
- Strong presence in the country with wide network of more than 100 dealers / associates for Customer support.
- ISO 9001-2015 Certified by TUV Nord-NABCB Accredited body
- ISO 13485 Certified by TUV Norad-NABCB Accredited body
- UL for controllers
- Following Six Sigma process and techniques in design.
- O CE certification for the Air dryers and Drains.







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