

PSA NITROGEN GENERATORS



Oxywise nitrogen generators produce high quality nitrogen from compressed air by Pressure Swing Adsorption (PSA) method. Our generators represent reliable and cost effective alternative.

Nitrogen purity:	95% - 99.999% (5.0)
Min. inlet pressure (air):	7.5barG
Outlet pressure (nitrogen):	5barG
Nitrogen dew point:	-50°C
Operating conditions:	5°C - 45°C

Make your choice from the extensive selection of standard solutions or ask us to design a custom-made nitrogen generator to match your needs. The prices are very feasible.



Standard Product Range

Model	Capacity at 99,5% [Nm ³ /h]	Air requirement [Nm ³ /min]	Operating cost [kW/m ³]
N1	2	0.16	0.5
N4	4,2	0.24	0.4
N9	9	0.50	0.4
N11	11,2	0.60	0.4
N15	15	0.90	0.4
N21	21	1.20	0.3
N30	30	1.70	0.3
N40	40	2.35	0.4
N47	47	2.58	0.3
N62	62	3.15	0.3
N73	73	3.60	0.3
N92	192	5.40	0.4
N112	112	6.40	0.3
N185	185	9.90	0.3
N250	250	13.62	0.3
N420	420	23.80	0.3
N550	545	30.60	0.3
N800	800	47.00	0.3
N1100	1100	64.00	0.3

Benefits:

- Flexibility
- Cost-effectiveness
- Safety
- Easy operation
- Reliability

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A full installation comprises a compressor, refrigeration dryer, filters, air tank, generator and nitrogen buffer tank.



Scope of supply:

1. Air compressor
2. Cyclone filter with automatic drain
3. Refrigeration dryer
4. Prefilter, particle filter
5. Air tank
6. Oxygen generator
7. Oxygen buffer tank
8. Dust filter

The process

Nitrogen Generator consist of two columns filled with carbon molecular sieve (CMS). Pre-treated compressed air enters the active column and follows up through the CMS. Oxygen and the other gases are being adsorbed while the nitrogen passes through. The active column is pressurized. When pressure is released, column becomes inactive and completely regenerate. In order to secure steady flow two columns are used, one is active while the other is inactive. At the end of cycle they switch roles.

Typical applications

Electronics

Food packaging

Inerting

Laser cutting

Pharmaceutics

Plastics

Storage of flammables

Tire filling

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Weights and Dimensions

Model	Min. space for installation with full air supply [m]	Generator size [m]	Generator weight [kg]
N1	1.00 W x 2.00 L x 1.55 H	0.45 W x 0.45 L x 1.55 H	160
N4	1.00 W x 2.00 L x 1.30 H	0.60 W x 0.60 L x 1.55 H	100
N9	1.00 W x 2.00 L x 1.60 H	0.60 W x 0.60 L x 1.60 H	150
N11	1.00 W x 2.30 L x 1.50 H	0.60 W x 0.60 L x 1.60 H	180
N15	1.00 W x 3.00 L x 1.90 H	0.75 W x 0.75 L x 1.90 H	230
N21	1.10 W x 4.50 L x 1.75 H	0.90 W x 0.90 L x 1.90 H	400
N30	1.10 W x 4.50 L x 1.75 H	0.90 W x 0.80 L x 1.75 H	700
N40	1.20 W x 5.50 L x 2.10 H	0.90 W x 0.80 L x 2.10 H	800
N47	1.50 W x 6.50 L x 2.10 H	1.20 W x 0.85 L x 2.10 H	950
N62	1.50 W x 7.00 L x 2.40 H	1.20 W x 0.85 L x 2.10 H	1150
N73	1.50 W x 7.50 L x 2.40 H	1.30 W x 1.00 L x 2.40 H	1150
N92	1.50 W x 7.50 L x 2.50 H	1.30 W x 1.00 L x 2.40 H	1850
N112	2.00 W x 8.50 L x 2.50 H	2.00 W x 1.00 L x 2.50 H	2150
N185	2.00 W x 9.60 L x 2.50 H	2.00 W x 2.00 L x 2.50 H	3000
N250	2.50 W x 10.00 L x 3.40 H	2.00 W x 1.00 L x 3.10 H	3400
N420	2.50 W x 9.50 L x 2.50 H	2.20 W x 2.40 L x 3.20 H	4200
N550	3.00 W x 12.50 L x 3.20 H	2.40 W x 2.40 L x 3.20 H	4900
N800	3.00 W x 13.00 L x 3.30 H	4.00 W x 4.00 L x 3.20 H	8000
N1100	4.70 W x 14.00 L x 3.20 H	4.00 W x 4.00 L x 3.20 H	9400

Technical Data

Ambient temperature range:		5°C - 45°C
Nitrogen outlet pressure:		5barG
Nitrogen dew point:		-50°C
Air inlet pressure:		7.5barG
Inlet air quality:	Dew point:	3°C
	ISO:	8573.1:2001.2.4.1
	Filtration grade:	0.01 micron
Power supply:	Generator:	240-110 V / 50-60 Hz
	Compressor:	400-440 V / 50-60 Hz

Pressures up to 45barG can be reached with a booster or up to 450barG with the high pressure compressor if required.