



Nitropak Nitrogen Generator

Nitrogen generators are made from columns filled with a material called CMS (Carbon Molecular Sieve). Under pressure, these columns will hold on to all materials except for Argon and similar noble gases. These molecules such as oxygen, carbon dioxide and water will temporarily bind to the molecular sieve and will be released after pressure is lifted. This process is called Pressure Swing Adsorption or PSA.

Nitrogen generators provide on-site solutions for sectors which require high purity nitrogen, perfect for Fibre Laser cutting machinery. Increasing cutting efficiency, and reducing reliance on bottled gas to save costs and reduce cost per part to maximise profitability.

The Nitropak Nitrogen Generator produces 99.999% pure Nitrogen (5N). It is suitable for flowrates higher than 10 Nm³/hr. While adsorption happens in one of the towers, the other tower will be regenerated and with this cycle nitrogen is separated from other gases such as oxygen, argon and carbon dioxide.

It is designed to be placed anywhere inside a workshop, only requiring compressed air and power supply.





40 BAR NITROGEN BOOSTER (OPTIONAL)

Machine Features

- Water separator for inlet of feed pressure air, 1 unit
- Water discharge system with zero air loss, 1 unit (Zeromat)
- Line filters for feeding pressurized air, 2 units (0,5 and 0,01 mg/m³)
- Outlet filter, 1 pc, 0.01 mg/m³
- Pneumatic valves
- PLC control system with fully automated operations
- Pressure switch for automated Idle-Mode
- Sensor for compressed air inlet
- Exhaust mufflers
- Regulator for nitrogen pressure
- Nitrogen Purity Up to 99.999%
- Nitrogen Pressure up to 300 bar (g) (With Nitrogen Booster Compressor)
- Min. Air Pressure 6 Bar
- Max. Particle Consumption - 0.01µm

Optional Equipment

- 40 Bar Nitrogen Booster



TECHNICAL SPECIFICATIONS

MODEL		213	226	239	252	265	278	291	304	305	307	309	311	313	315	317	319	321
Content	µm	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Inlet Air Pressure	Barg	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
N ₂ Output Pressure	Barg	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Power	V	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230	110-230
	ph	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Hz	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60
99Minimum N ₂ Flow (Nm ³ /h) with compressed Air Inlet - Operating Pressure - Up to 11.5 Bar (Standard 7 Bar)	95%	155	310	465	620	775	930	1,085	1,240	1,395	1,550	1,705	1,860	2,015	2,170	2,325	2,480	2,635
	97%	103	206	309	412	515	618	721	824	927	1,030	1,133	1,236	1,339	1,442	1,545	1,648	1,751
	98%	89.1	178.2	267.3	356.4	445.5	534.6	623.7	712.8	801.9	891	980.1	1,069.2	1,158.3	1,247.4	1,336.5	1,425.6	1,514.7
	99%	70.3	140.6	210.9	281.2	351.5	421.8	492.1	562.4	632.7	703	773.3	843.6	913.9	984.2	1,054.5	1,124.8	1,195.1
	99.5%	58.4	116.8	175.2	233.6	292	350.4	408.8	467.2	525.6	584	642.4	700.8	759.2	817.6	876	934.4	992.8
	99.9%	39.6	79.2	118.8	158.4	198	237.6	277.2	316.8	356.4	396	435.6	475.2	514.8	554.4	594	633.6	673.2
	99.95%	32.7	65.4	98.1	130.8	163.5	196.2	228.9	261.6	294.3	327	359.7	392.4	425.1	457.8	490.5	523.2	555.9
	99.99%	19.8	39.6	59.4	79.2	99	118.8	138.6	158.4	178.2	198	217.8	237.6	257.4	277.2	297	316.8	336.6
	99.995%	16.8	33.6	50.4	67.2	84	100.8	117.6	134.4	151.2	168	184.8	201.6	218.4	235.2	252	268.8	285.6
	99.999%	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221
Length	mm	750	800	900	1,000	1,000	1,000	1,000	1,200	2,245	2,375	2,370	2,370	2,370	2,370	2,400	2,590	2,590
Width	mm	750	1,060	1,270	1,400	1,600	1,800	1,900	2,000	4,074	4,024	4,020	4,020	4,120	4,120	4,125	4,200	4,200
Height	mm	2,500	2,500	2,500	2,500	2,500	2,500	3,000	3,000	2,787	3,054	3,317	3,317	3,350	3,350	3,611	3,900	3,900
Weight	kg	740	950	1,850	2,000	2,150	2,600	3,200	3,600	4,000	4,400	4,800	5,200	5,600	6,000	6,400	6,800	7,200