



BOGE Nitrogen Generators

N 7 P to N 56 P



Manufacture in-house, combine to suit: Nitrogen to meet your specific needs!

HIGHLY FLEXIBLE AND ALWAYS EXPANDABLE: THE MODULAR SYSTEM OF BOGE NITROGEN GENERATORS.



HIGHLY EFFICIENT AND ABSOLUTELY RELIABLE: THE PRESSURE SWING ADSORPTION METHOD (PSA).

The Pressure Swing Adsorption method separates nitrogen from the other components in the air. Nitrogen generators comprise two connected containers that are used alternately to continuously adsorb the oxygen.



1 TO 8 MODULES PER BANK:

The modules are simply screwed on and can be expanded at any time, as required – to allow optimal adjustment of the nitrogen output to suit your actual requirements.

MASTER BANK PLUS EITHER 1 OR 2 SLAVE BANKS:

The modular concept offers greater flexibility to traditional twin tower PSA generators, as the BOGE generators can be multi-banked and configured to suit higher flowrate applications, or can be added to installations as and when the nitrogen demand increases. Additional modules can provide extra capacity on standby or service backup for peace of mind. Outputs from 1.3 to 265.8 Nm³/hour can be achieved. The nitrogen output can be flexibly increased beyond this limit by combining complete systems. Controls are only required for the master unit, from where all of the banks can be centrally controlled.

BOGE Nitrogen Generators use the pressure swing principle or Pressure Swing Adsorption (PSA) method to generate nitrogen. This involves passing purified compressed air through a container that contains a carbon molecular sieve (CMS), whereby the oxygen molecules in the air are absorbed while flowing through. This adsorption process continues until the activated carbon is saturated with oxygen molecules. The same process then starts in the second container while the saturated container regenerates itself. This process takes place in every single module. The result: Nitrogen with a stable purity grade of up to 5.0 (99.999 %).

Become independent: Instead of relying on fixed, inflexible supply contracts, produce your own nitrogen in future with a BOGE Nitrogen Generator. Delivery flows, nitrogen output and purity levels can be adapted individually at any time to suit your actual requirements. This system is highly flexible, allowing you greater freedom and efficiency. The system can be expanded or retrofitted whenever required – to provide nitrogen just as you need it!

- 1 Oil-injected screw compressor
- 2 Cyclone separator
- 3 Refrigerant dryer
- 4 Activated carbon adsorber

- 5 Compressed air receiver
- 6 Nitrogen generator
- 7 Nitrogen receiver



All from a single source: As a system provider, BOGE can provide you with an optimally tailored complete system including a compressor, filter, generator, refrigerant dryer, activated carbon adsorber, receivers, nitrogen generator and other treatment components. The result is: more reliability, more independence and outstanding efficiency.



COST-EFFECTIVE MAINTENANCE

Thanks to their high-quality components, BOGE Nitrogen Generators are practically maintenance-free. The valves, the adsorber material and the zirconium oxide sensor ensure a smooth operation and a reliable quality of the nitrogen. This means minimum service costs!

HIGHLY FLEXIBLE PRODUCTION

With BOGE Nitrogen Generators you can adjust the purity level, delivery flow and nitrogen output flexibly at any time to suit your current requirements. The generators waste in energy or money in producing nitrogen that is purer than required or on over-dimensioned systems. BOGE Nitrogen Generators adapt to suit you, not the other way round!

HIGH QUALITY

BOGE Nitrogen Generators are filled only with high-quality CMS adsorber material. All of the materials used are of the highest quality and the manufacturing process is rigorously monitored. Ensuring you receive a system with impressive reliability and maximised service life.

ULTRAMODERN FEATURES

BOGE Nitrogen Generators can also be equipped with microprocessor controls or with convenient touch screen controls. The controls can operate in a network via a standard modem or GPRS. An optional remote control feature via an Ethernet interface is also possible.

BOGE KOMPRESSOREN

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AN OVERVIEW OF THE BOGE N 7 P TO N 56 P NITROGEN GENERATORS.

MASTER BANK

BOGE typ	Nitrogen output (Nm ³ /h) at different purity levels (purity level in % O ₂):								dimensions (width x depth x height) mm	weight kg
	0.001	0.005	0.01	0.1	0.5	1	2	3		
N 7 P	1.3	2.0	2.2	3.7	6.9	8.0	9.8	11.1	503x 635x1345	210
N 14 P	2.5	4.0	4.4	7.4	13.8	16.0	19.6	22.1	503x 865x1345	315
N 21 P	3.9	5.8	6.5	11.1	20.6	24.0	29.4	33.2	503x1095x1345	420
N 28 P	5.2	7.6	8.7	14.8	27.5	32.0	39.2	44.3	503x1320x1345	525
N 35 P	6.4	9.3	10.9	18.5	34.4	40.0	49.1	55.4	503x1550x1345	630
N 42 P	7.6	10.9	13.1	22.2	41.3	48.0	58.9	66.4	503x1780x1345	735
N 49 P	9.2	12.4	15.2	25.9	48.1	56.0	68.7	77.5	503x2010x1345	840
N 56 P	10.5	13.9	17.4	29.6	55.0	64.0	78.5	88.6	503x2240x1345	945

The data provided is based on standard conditions at an ambient temperature of 25°C, 60 % air humidity, + altitude and 7.5 bar inlet pressure.

The compressed air required for the nitrogen generator must comply with Class 141 in accordance with ISO 8573-1 (plus activated carbon adsorber).

SLAVE BANK

BOGE typ	Nitrogen output (Nm ³ /h) at different purity levels (purity level in % O ₂):								dimensions (width x depth x height) mm	weight kg
	0.001	0.005	0.01	0.1	0.5	1	2	3		
N 7 PE	1.3	2.0	2.2	3.7	6.9	8.0	9.8	11.1	503x 635x1180	190
N 14 PE	2.5	4.0	4.4	7.4	13.8	16.0	19.6	22.1	503x 865x1180	295
N 21 PE	3.9	5.8	6.5	11.1	20.6	24.0	29.4	33.2	503x1095x1180	400
N 28 PE	5.2	7.6	8.7	14.8	27.5	32.0	39.2	44.3	503x1320x1180	505
N 35 PE	6.4	9.3	10.9	18.5	34.4	40.0	49.1	55.4	503x1550x1180	610
N 42 PE	7.6	10.9	13.1	22.2	41.3	48.0	58.9	66.4	503x1780x1180	715
N 49 PE	9.2	12.4	15.2	25.9	48.1	56.0	68.7	77.5	503x2010x1180	820
N 56 PE	10.5	13.9	17.4	29.6	55.0	64.0	78.5	88.6	503x2240x1180	925

The data provided is based on standard conditions at an ambient temperature of 25°C, 60 % air humidity, + altitude and 7.5 bar inlet pressure.

The compressed air required for the nitrogen generator must comply with Class 141 in accordance with ISO 8573-1 (plus activated carbon adsorber).