



BOGE PSA nitrogen generators
N 8-2 P to N 64-2 P



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

HIGHLY FLEXIBLE AND ALWAYS EXPANDABLE: THE MODULAR SYSTEM OF BOGE PSA 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 1, 2 OR 3 SLAVE BANKS AS AN OPTION:

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 2.2 to 478 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 PSA 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 (0,001% purity level in % O₂).

Become independent: Instead of relying on fixed, inflexible supply contracts, produce your own nitrogen in future with a BOGE PSA 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!



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, PSA 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 PSA 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 PSA 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 PSA nitrogen generators adapt to suit you, not the other way round!



HIGH QUALITY

BOGE PSA 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 PSA nitrogen generators are fitted as standard with a Siemens S7 interactive 7" control unit with user-friendly touchscreen display. All generators also include a pressure sensor at the nitrogen outlet. The innovative "cycle time shifting" function, available as an option, enables the receiver volume to be reduced.

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AN OVERVIEW OF THE BOGE N 8-2 P TO N 64-2 P PSA NITROGEN GENERATORS

MASTER BANK

| BOGE type | 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 | 0.05 | 0.1 | 0.5 | 1 | 2 | 3 | | |
| N 8-2 P | 2.2 | 2.9 | 3.5 | 4.8 | 5.7 | 8.3 | 10.0 | 12.2 | 13.1 | 517 x 830 x 1422 | 256 |
| N 16-2 P | 4.4 | 5.8 | 7.0 | 9.6 | 11.4 | 16.5 | 19.8 | 24.3 | 26.1 | 517 x 955 x 1422 | 366 |
| N 24-2 P | 6.6 | 8.7 | 10.5 | 14.4 | 17.0 | 24.6 | 29.6 | 36.3 | 39.0 | 517 x 1183 x 1422 | 476 |
| N 32-2 P | 8.7 | 11.5 | 13.9 | 19.1 | 22.5 | 32.7 | 39.3 | 48.1 | 51.8 | 517 x 1411 x 1422 | 586 |
| N 40-2 P | 10.9 | 14.4 | 17.3 | 23.8 | 28.1 | 40.7 | 48.9 | 59.9 | 64.5 | 517 x 1639 x 1422 | 696 |
| N 48-2 P | 13.0 | 17.2 | 20.7 | 29.4 | 34.5 | 48.6 | 58.4 | 71.5 | 77.0 | 517 x 1867 x 1422 | 806 |
| N 56-2 P | 15.1 | 20.1 | 24.3 | 33.0 | 38.9 | 56.4 | 67.8 | 83.1 | 89.4 | 517 x 2095 x 1422 | 916 |
| N 64-2 P | 17.2 | 22.9 | 27.7 | 37.5 | 44.3 | 64.2 | 77.1 | 94.5 | 101.7 | 517 x 2323 x 1422 | 1026 |

The data provided is based on standard conditions at an ambient temperature of 20°C, 60 % air humidity, + altitude and 7.5 bar inlet pressure.
 The compressed air required for the PSA nitrogen generator must comply with class 1:4:1 in accordance with ISO 8573-1:2010 (plus activated carbon adsorber).

SLAVE BANK

| BOGE type | 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 | 0.05 | 0.1 | 0.5 | 1 | 2 | 3 | | |
| N 8-2 PE | 2.2 | 2.9 | 3.5 | 4.8 | 5.7 | 8.3 | 10.0 | 12.2 | 13.1 | 517 x 830 x 1202 | 213 |
| N 16-2 PE | 4.4 | 5.8 | 7.0 | 9.6 | 11.4 | 16.5 | 19.8 | 24.3 | 26.1 | 517 x 955 x 1202 | 323 |
| N 24-2 PE | 6.6 | 8.7 | 10.5 | 14.4 | 17.0 | 24.6 | 29.6 | 36.3 | 39.0 | 517 x 1183 x 1202 | 433 |
| N 32-2 PE | 8.7 | 11.5 | 13.9 | 19.1 | 22.5 | 32.7 | 39.3 | 48.1 | 51.8 | 517 x 1411 x 1202 | 543 |
| N 40-2 PE | 10.9 | 14.4 | 17.3 | 23.8 | 28.1 | 40.7 | 48.9 | 59.9 | 64.5 | 517 x 1639 x 1202 | 653 |
| N 48-2 PE | 13.0 | 17.2 | 20.7 | 29.4 | 34.5 | 48.6 | 58.4 | 71.5 | 77.0 | 517 x 1867 x 1202 | 763 |
| N 56-2 PE | 15.1 | 20.1 | 24.3 | 33.0 | 38.9 | 56.4 | 67.8 | 83.1 | 89.4 | 517 x 2095 x 1202 | 873 |
| N 64-2 PE | 17.2 | 22.9 | 27.7 | 37.5 | 44.3 | 64.2 | 77.1 | 94.5 | 101.7 | 517 x 2323 x 1202 | 983 |

The data provided is based on standard conditions at an ambient temperature of 20°C, 60 % air humidity, + altitude and 7.5 bar inlet pressure.
 The compressed air required for the PSA nitrogen generator must comply with class 1:4:1 in accordance with ISO 8573-1:2010 (plus activated carbon adsorber).