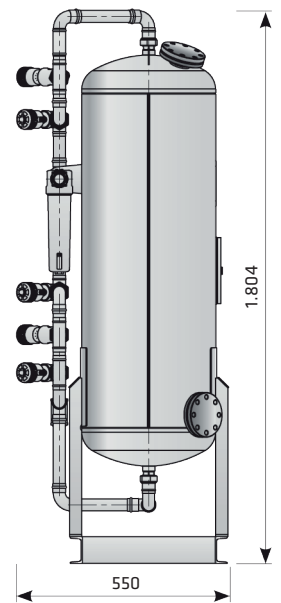
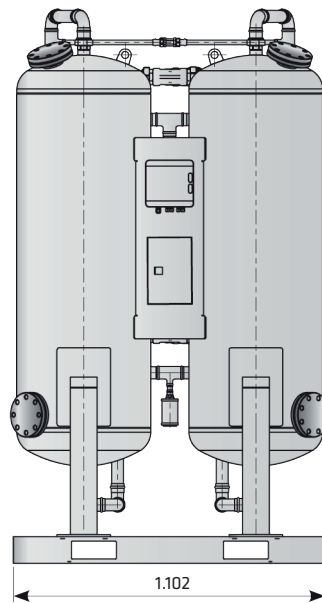


# PSA NITROGEN GENERATOR N-GEN 15

The N-GEN nitrogen generators extract the available nitrogen in the ambient air from the other gases by applying the Pressure Swing Adsorption (PSA) technology. During the PSA process compressed, cleaned ambient air is led to a molecular sieve bed, which allows the nitrogen to pass through as a product gas, but adsorbs other gases.

The sieve releases the adsorbed gases to the atmosphere, when the outlet valve is closed and the bed pressure returns to ambient pressure. Subsequently the bed will be purged with nitrogen before fresh compressed air will enter for a new production cycle. In order to guarantee a constant product flow N GEN nitrogen generators use two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase.



## APPLICATIONS

- Blanketing of Chemicals and Pharmaceuticals
- Heat Treatment of Ferrous & Non-Ferrous Metals
- Inerting of Flammable Liquids
- Laser Cutting
- Prevention of Dust Explosions
- Re-flow and Wave Soldering of PCBs
- Food Processing

## MATERIALS

Columns, construction, support:	Carbon Steel
Column inner protection:	/
Column and construction protection:	Epoxy powder painted
Valves:	Brass, Stainless steel
Fitting, screws, plugs:	Stainless steel, brass, carbon steel (zinc coated)
Outside protection:	Epoxy powder painted
Adsorbent:	Carbon molecular sieve (CMS) and inert material

## TECHNICAL SPECIFICATIONS

Operating pressure:	from 6 to max 10 barg
Inlet temperature range (feed air):	10°C up to 55 °C
Dew point (at ambient pressure):	< -45°C
Voltage, Frequency:	110-230 V / 50-60 Hz
Power consumption:	<60 W
Sound level:	up to 90 dB(A)
Protection class (controller):	IP 54
Compressed air quality (inlet):	Class 1.4.1 acc. to ISO 8573-1 (0,1 µm; 3°C; <0,01 mg/m <sup>3</sup> /h)
Filters (inlet + outlet):	Included

### PERFORMANCE at inlet temperature 30°C

Type		Inlet pressure barg	Discharge pressure barg	Residual Oxygen [vol. %]						
				3	2	1	0,5	0,1	0,01	0,001
				Total inert gas purity [vol. %]						
				97	98	99	99,5	99,9	99,99	99,999
N-GEN 15	N <sub>2</sub> flow [Nm <sup>3</sup> /h]	7,5	6,3	23,8	22,7	20,9	14,8	11,2	6,6	3,7
Feed air consumption [Nm <sup>3</sup> /h]				49,9	48,8	44,9	41,3	41,3	32,8	21,2

For concentrations at higher purity please contact manufacturer. All flow rates valid for generator operation at ambient conditions 20 °C, 1.013,25 mbar and 60% RH. Performance ±5%.



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