

PSA Nitrogen Generator

Model: INMATEC IMT-PN OnGo1450 OV

PSA Nitrogen Generator

Nitrogen is often delivered in cylinders, bundles or in tanks. The tank must be refilled or, if applicable, replace the cylinders or bundles. This is associated with deliveries according to specific schedules and entails logistics and handling costs. On site nitrogen generator will help improve your bottom line and enhance the safety of your operation.

Principles of Operation

The technology associated with supplying a constant and purified Nitrogen Gas is referred to Pressure Swing Adsorption (PSA). This technology uses a molecular screen bed of desiccants known as Carbon Molecular Sieve, in order to effectively remove (extract) oxygen and carbon dioxide molecules from the compressed air. The two screens switch alternatively from the filter mode to regeneration mode to ensure a consistent supply of nitrogen.



In summary the nitrogen system has the following advantages:

- Nitrogen, whenever you need it, at any location, at a self-cost price which can be calculated in advance
- Nitrogen purity up to 99.99%
- Low noise
- No logistics
- Cost savings
- Filter unit can be replaced in few minutes

Scope of Supply

Nitrogen Generator assembly

- Fully assembled on steel channel frame consisting of the following main components

PSA Tower

- 2 x pressure vessels filled with Carbon Molecular Sieve (CMS)
- Pressure Vessel code = ASME VIII (No Code Stamp)
- Piping assembly and control valves
- Manufacturer production standard paint finish

Nitrogen Generator Filtration Unit (Priced Separately)

- 1 x First stage coalescing & particulate filter
- 1 x Activated carbon filter

Control Panel

- PLC control panel –
 - Nitrogen purity
 - Outlet Pressure
- Oxygen analyzer
- Local alarms =
 - Low nitrogen purity



Nitrogen Surge / Buffer Vessel (Priced Separately)

- Pressure vessel code = AS1210
- Pressure indicator & pressure safety relief valve

Technical Specifications

Model:	IMT-PN OnGo 1450 OV						
Nitrogen Generator Type:	PSA						
Nitrogen Outlet Purity: %	95.0%	97.0%	98.0%	99.0%	99.5%	99.9%	99.99%
Nitrogen Outlet Capacity: [Nm ³ /h]	31.2	25.6	23.7	18.9	14.2	9.5	4.8
Feed Air Supply (Normal Capacity to DIN 1343 Reference Conditions): [Nm ³ /h]	59.3	53.8	54.5	47.3	41.2	37.1	26.4
Dry Air Receiver: [L]	270	270	270	270	270	270	270
Nitrogen buffer Tank: [L]	270	270	270	270	270	270	270
Nitrogen Outlet Pressure: [Bar g]	6						
Nitrogen Dew Point: °C PDP	-10 to -20						
Feed Air Requirement:							
Feed Air Pressure: [Bar g]	7 to 8						
Feed Air Pressure Dew Point: °C	3 – 5						
Power Supply: Vac / Ø / Hz	230 / 1 / 50						
Dimensions (L x W x H): mm	880 x 680 x 1690						
Weight: kg	310						
Air Inlet Port: G “ (DN mm)	1/2”						
Nitrogen Outlet Port: G “ (DN mm)	1/2”						
Noise	Approx. < 70dB(A)						
Supply Termination Points / Battery Limits:	<ul style="list-style-type: none"> • Electrical: Local Control Panel • Mechanical: Package Base, Air Inlet Port & Nitrogen Outlet Port 						
Note:	<ul style="list-style-type: none"> • Operating amb temp range = 20 to 40DegC • Compressed air temp range = 10 to 50DegC • Additional Options / Accessories are separately described & priced from Base / Standard Package – Refer to Other Options & Price Adders (unless otherwise specified). 						