

# N<sub>2</sub>Evolution

## Take Control of Your Nitrogen Gas Cost



**simply generate your own supply**

**You can now generate your own nitrogen gas at the press of a button – as much or as little as you need, at a fraction of the cost of your existing supply and at the purity your process requires. The generators are virtually maintenance free. Turn the switch on and let the nitrogen generator do the rest. The N<sub>2</sub>Evolution only produces nitrogen when there is a demand and the rest of the time it is in sleep mode to conserve energy.**

Available in single or multi-bank to cover Systems from 10 scfh – 60,000 scfh

### Benefits of N<sub>2</sub>Evolution

- The Safest Supply
- Convenient, Secure Supply
- The Right Purity
- Space Saver
- Cost Savings
- Environmentally Friendly

### Why PMG Industries?

- The Tri-States Most Experienced Nitrogen Generation Team
- Custom Designed Systems
- Committed Partner Mentality To All Projects

### Other Capabilities:

- CO<sub>2</sub> Bulk Storage
- Gas Blenders/Mixers
- Industrial Gases
- Laboratory Gas Generators
- Gas System Design & Service
- Sterile Air & Gas Filtration
- Industrial Chillers

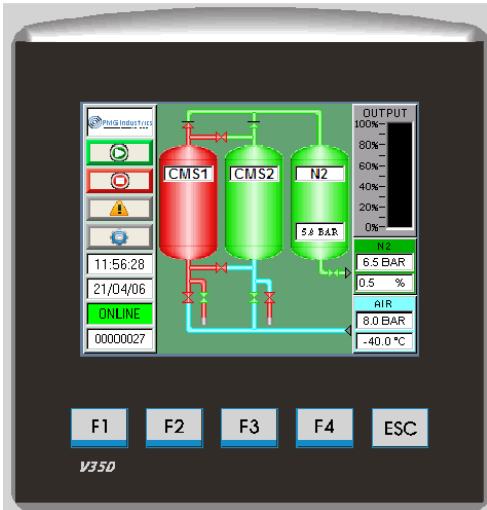
PMG's N<sub>2</sub>Evolution nitrogen generators operate on the Pressure Swing Adsorption (PSA) principle to produce a continuous stream of nitrogen gas from compressed air. The PSA system is the reliable method of nitrogen generation and designed for industrial use. The system uses pairs of extruded aluminum columns filled with carbon molecular sieve (CMS). Compressed air enters the bottom of the 'on-line' bed and flows up through the CMS. Oxygen and the other trace gases are preferentially adsorbed by the CMS, allowing nitrogen to pass through. The pair of CMS beds switch between separation and regeneration to ensure continuous and uninterrupted nitrogen production.

Nitrogen gas is the fourth largest utility in industry today behind power, water and natural gas. With your current nitrogen gas supplier you not only pay for the nitrogen but also for:

- Tank/Cylinder Rental
- Delivery Fee
- Cylinder / Material Handling Fee
- Hazmat Charges
- Safety Issues

**Take control of your nitrogen gas supply today by contacting PMG.**

## HMI Touch Screen Technology



### Features Include:

- HMI control displaying real time process
- Inlet air quality monitoring (dewpoint)
- Outlet nitrogen purity readout (O2 analyzer)
- Alarm display with help menu
- Outlet flow indicator (%)
- Trend Graphing for QC reports
- Energy saving mode
- Remote access using Ethernet
- Maintenance records screen with alarm

## Technical Specifications

Nitrogen Outlet Flowrate - SCFH vs. Oxygen Concentration

Model	10ppm	100ppm	0.1%	0.5%	1.0%	2.0%	3.0%	4.0%	5.0%
MNG104	71	194	318	498	629	777	911	1024	1137
MNG106	106	300	477	742	939	1158	1366	1536	1705
MNG 108	141	388	636	993	1254	1547	1822	2048	2274
MNG 110	177	494	794	1254	1568	1931	2277	2560	2839
MNG 112	212	583	953	1497	1889	2320	2733	3076	3407
MNG 116	282	742	1204	1896	2383	2938	3464	3895	4318
MNG 120	353	893	1455	2295	2885	3556	4191	4714	5226

Specifications based on 102 psig air inlet @ 68° - 77° F ambient air temperature. For conditions outside the specifications please contact PMG.

Ambient Temp Range	41° - 77° F
Air Inlet Pressure	87 - 232 psig
Nitrogen Outlet Pressure	72 - 217 psig
Air Inlet Requirement	Dewpoint: -40°
	Oil: <0.01 mg/m <sup>3</sup>
	Particulate: <0.1 micron
Electrical Supply	110 - 248V AC/1 ph
	50 - 60 Hz
Signal Outlet / Monitoring	Ethernet (RJ45)
Inlet / Outlet connections	1/2" Female

Dimensions & Weight				
Model	Height Inches	Width Inches	Depth Inches	Weight lbs.
MNG 104	74"	23"	25"	507
MNG 106	74"	23"	30"	771
MNG 108	74"	23"	35"	981
MNG 110	74"	23"	41"	1186
MNG 112	74"	23"	46"	1393
MNG 116	74"	23"	58"	1800
MNG 120	74"	23"	68"	2100

