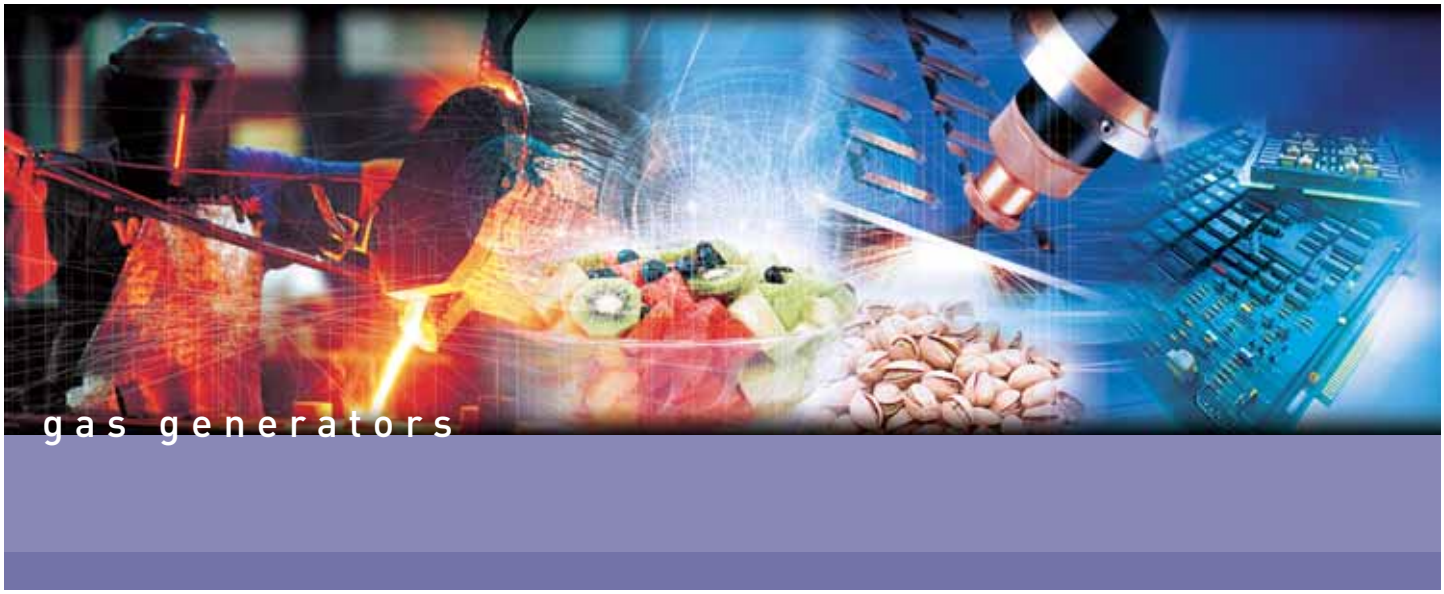
domnick hunter



Nitrogen Gas Generators

maxigas

Pure & Simple

www.domnickhunter.com

maxigas nitrogen generators from domnick hunter - the safe and reliable alternative to cylinder and liquid gas at a fraction of the cost

How important is the supply of nitrogen to your business? For many companies, a reliable supply of nitrogen gas is essential.

domnick hunter understands the key role nitrogen can play and the fundamental need for a reliable and secure supply.

For over 40 years domnick hunter has been a world leader in filtration, purification and separation technologies in a diverse range of industries, domnick hunter is universally known for developing high quality products, technical innovation and partnerships with customers.

domnick hunter

Quality nitrogen gas for:

- Modified atmosphere packaging
- Laser cutting
- Metal heat treatment
- Pharmaceutical applications
- Inert electronic assembly
- Oil and gas pipe line purging
- High demand laboratory applications
- Plastic injection molding

Whatever your need for nitrogen gas, domnick hunter has the products and experience to ensure you get the most appropriate and reliable gas supply solution.

an alternative supply

Every time you order gas cylinders or liquid nitrogen, you not only pay for the gas itself, but also for:

- **Cylinder/Tank Rental**
- **Delivery Costs**
- **Internal Order Processing**
- **Cylinder Handling Costs**
- **Safety Issues**

Now these and many other problems associated with nitrogen gas supplies can be eliminated in a manner that is not only more efficient, reliable and safe, but also at lower cost.

the simple solution – 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. Simply switch on and let your domnick hunter nitrogen generator do the rest.

MAXIGAS 120

benefits

Convenient, secure supply

With MAXIGAS, the nitrogen you need is always available on demand, 24 hours a day, eliminating the risk of lost production time due to gas running out.

The right purity

MAXIGAS systems deliver the nitrogen purity your application needs - from 5% to 10 ppm oxygen content as standard.

Space saver

The compact design of MAXIGAS means that installations take up less floor space than other systems, and will fit through a standard doorway.

No growing pains

domnick hunter's unique modular design simply means that extra banks of MAXIGAS can be added as your business grows and gas requirements increase.

The safest supply

Eliminate safety hazards of storing, handling and changing heavy, high pressure cylinders.

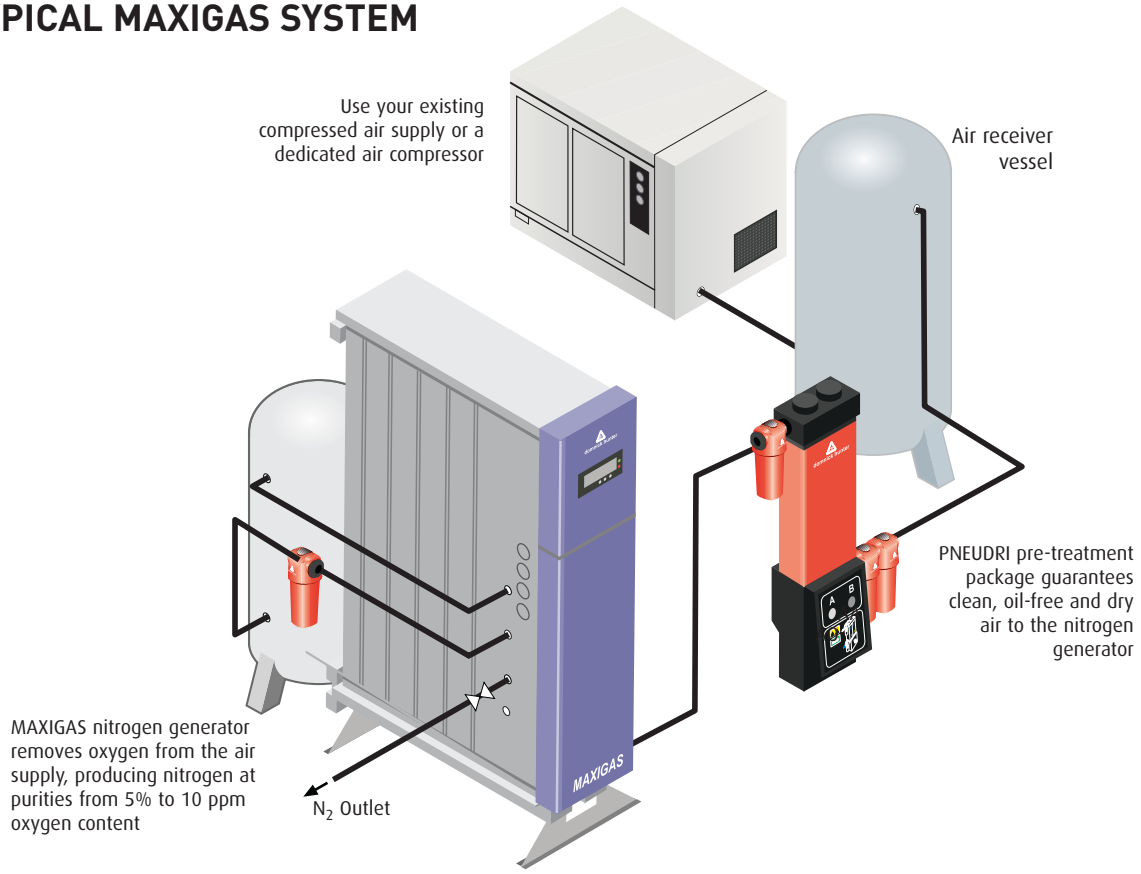
Cost savings

Producing nitrogen from compressed air with MAXIGAS can cut your operating costs significantly. No on-going cylinder costs; i.e. rental, re-fill, delivery, order processing.

The next generation of maxigas new levels of performance, reliability and efficiency unobtainable until now

The award winning MAXIGAS nitrogen generator from domnick hunter offers a unique, innovative solution to nitrogen gas supply. A reliable, secure source of nitrogen can be produced from your existing compressed air supply, eliminating the need for high pressure gas cylinders or bulk cryogenic liquefied gas. What's more the design has recently been improved to give an even more energy efficient solution.

TYPICAL MAXIGAS SYSTEM



Note: In high ambient temperature applications, it may be necessary to install an additional activated carbon stage to protect the nitrogen generator from oil vapor carryover. Please consult domnick hunter for advice.

The importance of pre-treatment

domnick hunter knows that total reliability is important to you. Using high quality compressed air to supply MAXIGAS nitrogen generators ensures long and trouble free service and guarantees optimum performance.

domnick hunter pre-treatment packages include our PNEUDRI desiccant air dryers and OIL-X EVOLUTION coalescing filters to guarantee the highest quality air supply for MAXIGAS nitrogen generators.

Guaranteed air quality:

Dewpoint:	-40°F (-40°C) PDP
Particulate:	<0.1 micron
Oil:	<0.01 mg/m^3

how it works

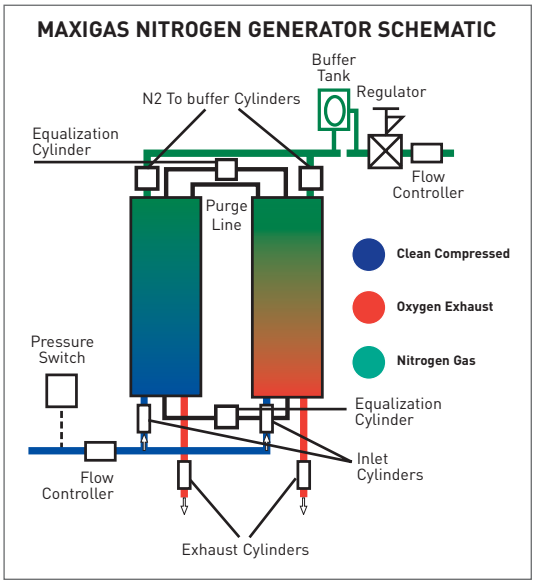
MAXIGAS operates on the Pressure Swing Adsorption (PSA) principle to produce a continuous stream of nitrogen gas from compressed air.

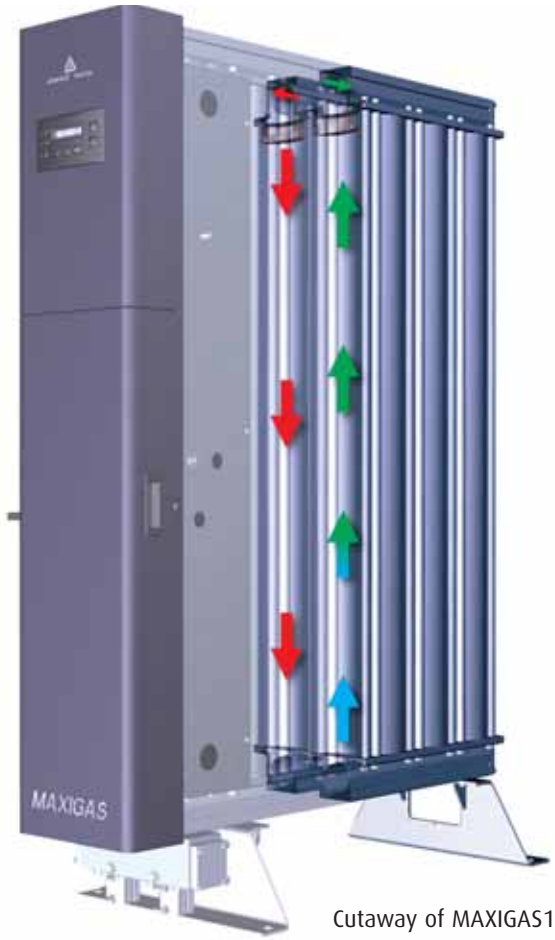
Pairs of extruded aluminum columns are filled with carbon molecular sieve (CMS). Pre-treated compressed air enters the bottom of the 'on-line' column and flows up through the CMS. Oxygen and other trace gases are preferentially adsorbed by the CMS, allowing nitrogen to pass through.

After a pre-set time the on-line column automatically switches to regenerative mode, venting contaminants from the CMS.

Carbon molecular sieve differs from ordinary activated carbons in that it has a much narrower range of pore openings. This allows small molecules such as oxygen to penetrate the pores and be separated from nitrogen molecules which are too large to enter the CMS. The larger molecules of nitrogen by-pass the CMS and emerge as the product gas.

Carbon Molecular Sieve





Cutaway of MAXIGAS112

performance data

Nitrogen outlet flowrate – scfh v Oxygen Concentration										
Model	**10 ppm**	**100 ppm**	**500 ppm**	**0.1%**	**0.5%**	**1.0%**	**2.0%**	**3.0%**	**4.0%**	**5.0%**
MAXIGAS104	71	109	284	311	496	627	769	911	1025	1135
MAXIGAS106	104	169	425	469	747	938	1165	1364	1538	1702
MAXIGAS108	136	224	567	633	998	1255	1544	1822	2045	2269
MAXIGAS110	169	278	715	791	1244	1565	1931	2275	2558	2836
MAXIGAS112	207	333	851	944	1495	1882	2318	2727	3071	3404
MAXIGAS116	278	447	1085	1200	1893	2384	2935	3464	3895	4315
MAXIGAS120	344	562	1315	1456	2291	2885	3556	4189	4713	5225

Performance data based on 102 psi g (7 bar g) air inlet pressure, 68°-77°F (20°-25°C) ambient temperature. Consult domnick hunter for performance under other specific conditions.

technical specifications

Ambient temperature range:		41 - 122°F (5 - 50°C)
Nitrogen outlet pressure:		up to 232 psi g (16.5 bar g)
Min. air inlet pressure:		87 to 261 psi g (6 to 18 bar g)*
Inlet air quality:	**Dewpoint:**	-40°F (-40°C)
	Particulate:	<0.1 micron
	Oil:	<0.01 mg/m^3
Electrical supply:		110V/1ph/60Hz Or 220V/1ph/50Hz
Inlet/outlet connections:		Air G1 / Nitrogen G$^1/_2$

* MAXIGAS only

weights and dimensions

Model	Height ins (mm)	Width ins (mm)	Depth ins (mm)	Weight lbs (kg)
MAXIGAS104	75 (1895)	22 (550)	28 (692)	741 (336)
MAXIGAS106	75 (1895)	22 (550)	34 (861)	869 (394)
MAXIGAS108	75 (1895)	22 (550)	41 (1029)	1076 (488)
MAXIGAS110	75 (1895)	22 (550)	48 (1198)	1283 (582)
MAXIGAS112	75 (1895)	22 (550)	54 (1368)	1490 (676)
MAXIGAS116	75 (1895)	22 (550)	70 (1765)	1905 (864)
MAXIGAS120	75 (1895)	22 (550)	81 (2043)	2319 (1052)

standard equipment includes

- Oxygen analyzer for continuous monitoring of nitrogen purity
- Analogue outputs for remote monitoring
- Alarm connections

User friendly customer interface

MIDIGAS

The MIDI range is designed to offer the most compact solution for smaller scale nitrogen requirements.

MIDIGAS Installation

MAXIGAS Modular Concept

For higher flow rate applications, MAXIGAS can be multibanked to offer the most cost effective solution.

The modular design of the MAXIGAS system means you can simply add extra banks as your business grows and your gas requirements increase.

N-com Networked Condition Monitor

- Secure remote condition monitoring
- Tracks critical system parameters
- Notifications by automatic alerts

domnick hunter also manufactures:

Laboratory Gas Generators

Compressed Air Filters

Compressed Air Filter Elements

Compressed Air Refrigeration Dryers

Compressed Air Desiccant Dryers

Condensate Drains

Oil / Water Separators

Breathing Air Purifiers

Sterile Air Filters

Carbon Dioxide Purifiers

Mixed Gas Dispense Systems

Liquid Filters

For further information about these and many other filtration, purification and separation products please contact domnick hunter or visit our website at www.domnickhunter.com

service

Global Support Delivered Locally
Our commitment to customer satisfaction incorporates a wide range of support services including product selection, installation, commissioning, preventative maintenance, validation and product monitoring.

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Parker

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filtration purification separation

CAGI

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