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**Nitrogen Generators**  
**PMNG Tire Inflation Series**

The science is simple. Nitrogen molecules are bigger than air molecules, so they leak out of tires more slowly, meaning they stay inflated at the correct pressure longer. Proper tire inflation is key to gaining so many great benefits like superior handling, increased gas mileage, longer tire life and overall safety. Pneumatech's nitrogen generators offer an easy to use, superior product with great value.

Nitrogen tire inflation is Green Technology. Tires inflated with nitrogen will hold pressure longer, saving energy and benefiting the environment. There are energy savings with properly inflated tires by producing better gas mileage, therefore creating less pollution. Increasing gas mileage reduces emissions and limits air pollution. Properly inflated tires will extend tire life, so fewer tires fill our landfills. Filling tires with nitrogen is an easy and affordable way to participate in Go Green efforts.



## APPLICATIONS

- Automobiles
- Commercial trucks and trailers
- Limousines
- Motorcycles
- Buses - public, coach & school
- Government & city vehicles
- Construction equipment
- Farm equipment
- Safety vehicles
- Trailers
- Motor homes
- Military and commercial aircraft
- Race cars
- Space shuttle



## TIRE INFLATION BENEFITS

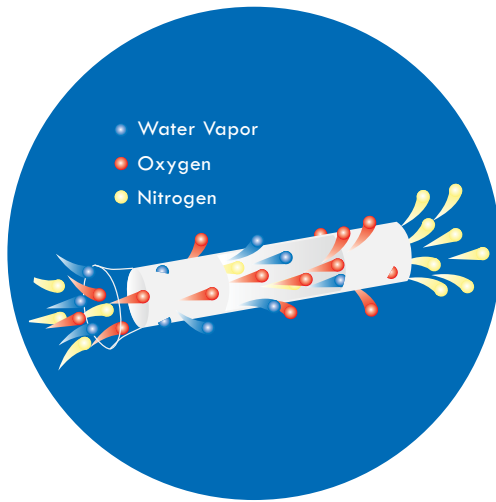
- Increases fuel efficiency
- Increases tire life
- Improves safety
- Fewer tire pressure alarms; less nuisance
- Saves time on tire maintenance
- Improves handling
- Reduces blowouts



## WHY NITROGEN IS BETTER THAN AIR

- Tire rubber is permeable and oxygen in the air leaks out faster
- Nitrogen has larger diameter molecules and stays in tires longer
- Less pressure loss due to seasonal temperature changes.
- Nitrogen is a very dry gas, which helps eliminate rim corrosion
- Nitrogen will not allow rubber to deteriorate
- Nitrogen will not oxidize with aluminum rims; minimizing rim leaks
- Tires run cooler, reducing chance of failure

## HOW IT WORKS



Atmospheric air contains essentially 78% nitrogen and 21% oxygen. Compressed air is passed through a technically advanced bundle of hollow membrane fibers. Nitrogen gas is separated from the feed air by selective permeation. Water vapor and oxygen rapidly permeate safely to the atmosphere while the nitrogen gas is discharged under pressure into the user's nitrogen piping system, where it is ready to inflate tires.

### FEATURES

Fully packaged and self regulating

Dual pressure gauges

Advanced high efficiency membrane

Easy access cabinet

Highest quality components

Four stage filtration

No moving parts

No electricity

Optional tank mounting

Optional accessories

Custom packages available

### BENEFITS

Simple to use

Provides quick status check

Inexpensive to run

Simple to maintain

Totally reliable

Assured performance

Minimal maintenance

Fast, easy and inexpensive to install

For space considerations

Gives application flexibility

Single source supply for all applications



# SPECIFICATIONS

	Air In SCFM	N <sub>2</sub> Out SCFM	Tires/Hour 225/60 R16 35 PSI	Tires/Hour 11 R22.5 105 PSI	Air In SCFM	N <sub>2</sub> Out SCFM	Tires/Hour 225/60 R16 35 PSI	Tires/Hour 11 R22.5 105 PSI
Model	Produces 95% N2 - Single Fill				Produces 97% N2 - Single Fill			
PMNG-20	1.8	0.9	17	2	1.4	0.6	12	1
PMNG-40	3.4	1.7	32	4	2.9	1.2	24	3
PMNG-80	8.6	4.3	82	9	7.1	3.0	57	6
PMNG-160	17.2	8.6	164	19	14.0	5.9	113	13
PMNG-240	25.8	12.9	246	28	21.2	8.9	170	19
PMNG-320	34.4	17.2	328	37	28.1	11.8	226	26
PMNG-500	61.0	30.5	582	66	50.5	21.2	404	46
	Produces 98% N2 - Single Fill				Produces 99% N2 - Single Fill			
PMNG-20	1.4	0.5	9	1	1.1	0.3	7	1
PMNG-40	2.7	1.0	19	2	2.5	0.7	13	1
PMNG-80	6.2	2.3	44	5	5.4	1.5	29	2
PMNG-160	12.4	4.6	87	10	11.1	3.1	58	7
PMNG-240	18.6	6.9	131	15	16.4	4.6	87	10
PMNG-320	24.9	9.2	175	20	21.8	6.1	116	13
PMNG-500	43.8	16.2	309	35	40.0	11.2	214	24

Note: Feed Pressure @ 145 PSI, Air Temperature @ 77°F

Model	Tank Mounted Dimensions L x W x H (in)	Approx. Shipping Weight (lbs)	Wall/Floor Mounted Dimensions L x W x H (in)	Approx. Shipping Weight (lbs)
PMNG-20	31 x 34.5 x 72.5	430	10.5 x 22.5 x 46.75	164
PMNG-40	31 x 34.5 x 72.5	434	10.5 x 22.5 x 46.75	168
PMNG-80	31 x 34.5 x 72.5	443	10.5 x 22.5 x 46.75	173
PMNG-160	31 x 34.5 x 72.5	452	10.5 x 22.5 x 46.75	183
PMNG-240	31 x 34.5 x 72.5	467	10.5 x 22.5 x 46.75	199
PMNG-320	31 x 34.5 x 72.5	476	10.5 x 22.5 x 46.75	209
PMNG-500	NA	NA	20.5 x 24.5 x 60.75	405

# SAVINGS

Scientific research has shown that nitrogen inflated tires save money, both from increased fuel mileage and increased tire life. University studies show that nitrogen inflated tires save an average of **6%** in fuel consumption, while increasing tire life by an astounding **31%**. Additionally, a reduction of up to **55%** in pressure loss greatly lessens those nuisance tire pressure monitoring system (TPMS) alarms.

According to the Federal Motor Carrier Safety Administration (FMCSA), tires and tire related costs are the single largest expense for truck fleets. In these larger tires, the dry nitrogen gas ensures that the tire casing will not oxidize, allowing for more retreads over the lifetime of the tire compared to compressed air. Furthermore, studies show nitrogen extends tire life by up to **86%**, which, in a truck fleet of any size, can represent tremendous savings.



## Costs of a Blowout

Nitrogen inflated tires help reduce blowouts. Take into account the following factors that add costs from a blowout.

- Potential Accident/Insurance Costs
- Tire repair or replacement
- Travel time for a mechanic
- Repair time based on field conditions
- Lost time for the driver
- Delayed delivery penalties
- Parts damage
- Products spoiled
- Shipping cost refunds
- Overhead costs



## ACCESSORIES



### Portable Auto Inflator

Pneumatech's Portable Auto Inflator gives ultimate flexibility to tire mechanics. It can be used with an on board nitrogen bottle as a stand alone, all-in-one nitrogen tire inflation system or it can be connected to nitrogen distribution piping anywhere in the shop. The software in the inflator will purge the air out of any tire size, designate the number of purge cycles required to maintain purity within the tire and maintain pressure accuracy within .3 PSI.

### Auto Inflator

Pneumatech's Auto Inflator is the ultimate compliment to any nitrogen generator. The auto inflator can be wall mounted, or panel mounted directly on any of the PMNG series nitrogen generators. The simplified software allows any technician to simply attach the four fill hoses to the tires on the vehicle, set the desired pressure and walk away! The Auto Inflator will automatically purge the air out of the tire, designate the number of purge cycles required to maintain purity within .3 PSI. The aluminum enclosure allows the inflator to be mounted in any environment and an optional heater is available for colder climates.

### Handheld Nitrogen Analyzer

A quality, low cost tool for checking nitrogen purity once the tire inflation is complete. This simple analyzer gives an accurate reading on the easy to read LCD display when connected to the tire valve. Calibration of the sensor is a simple, one touch process that allows the technician to get to work quickly and easily.

### Inflation Hoses

High quality rubber hoses with attached chuck. Hoses are available in various lengths and colors. Attached chucks are spring loaded to ensure a minimal loss of expensive nitrogen. Hoses are also available with dual foot chucks for truck tire inflation.

### Tire Caps

Chrome plated plastic tire caps prevent cap seizure due to dissimilar metals, while still maintaining a high end look. Cost efficient, green plastic caps are also available.

**PNEUMATECH®**



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