



## Membrane Nitrogen Generator

TyreBooster – Nitrogen Generators for Tyre Filling

Using nitrogen to inflate tyres is nothing new, it has been used for many years and particularly in high-tech sector such as aircraft military, formula 1 and aerospace.

Why Nitrogen

Nitrogen offers many benefits over using plain compressed air to fill your tyres. Nitrogen is a dry, inert gas with no corrosive properties as found in compressed air, it use to prevent auto- ignition, maintain longer inflation pressure and help tyre to run cooler.

Nitrogen isn't just about improved tyre performance, nitrogen also increaser your driving safety and and goes a little way to helping reduce global CO<sup>2</sup> emissions. For truck fleet operators, those vehicles in continual operation, the savings can have a large impact on their operational costs.



### How Does Nitrogen Benefit Your Vehicle Tyres?

Extended Tyre Life

Industry field tests tyre inflated with nitrogen can last 25% longer or more. Since nitrogen is a clean, inert and moisture-free, it's eliminate internal tyre oxidation, which slow down the chemical aging of tyres. Slower aging lengthens tyre core life, which yields extra retreads and lower fleet costs.

mprove Fuel Efficiency

Maintaining tyre pressure can boost fuel economy by up to 6%. This is due to two factors, reduced rolling resistance from proper tyre pressure and reduced heat in the tyres. Nitrogen disperses heat more quickly than ambient air, thus minimising heat build-up in tyres and enhancing fuel efficiencies.

Better Pressure Retention

The oxygen in regular compressed air permeates through tyre walls 3- 4 times faster than nitrogen, leadingto accelerated under-inflation. Since nitrogen permeates more slowly, it helps maintain proper tyre pressure longer.



Nitrogen Run Cooler Tyres

Nitrogen is non-flammable and does not support combustion. It reduces the risk of excessive heat build-up in your tires. Nitrogen inflated tires run consistently 20% cooler than air-filled tires. By allowing them to keep their cool, nitrogen can help to prolong the life of your tires and reduce tire failures.

Enhanced Safety

80% of tyre explosion are caused by poorly maintained tyre pressure, especially on heavy vehicles. Nitrogen helps improve pressure retention, tyre's handling, and control, minimising the risk of catastrophic road failures like blowouts when that happens serious injuries can occur. A blowout at high speeds can lead to a dangerous car accident.

Improved Retreadability

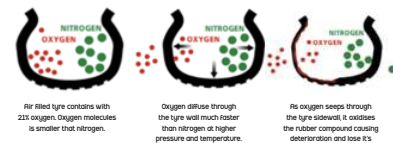
Eliminating oxidation also improves the retreadability due to more flexibility in the tire casing. Less tire aging and tire cord rust could very well increase the number of retreadable casings and also increase the number of times a casing can be retreaded.

Fact About Air Filled Tyre

The compressed air traditionally used to inflate tyres contains significant amounts of oxygen and moisture, when air inflate under pressure, the air condenses to a liquid. As the tire heats up during operation the liquid changes to a vapor expanding tremendously causing pressure increase and fluctuation.

In addition, oxygen and water vapor attacks the wheel itself by forming rust in steel body plies, inner liners and valve stem which may result in wheel corrosion and tyre pressure loss.

Oxygen in tyre permeates through the tyre sidewall 3 - 4 times faster than nitrogen, leading to accelerated under inflation and increased rolling resistance.



Air filled tyre contains with 21% oxygen. Oxygen molecules is smaller than nitrogen.

Oxygen diffuse through the tyre wall much faster than nitrogen at higher pressure and temperature.

As oxygen seeps through the tyre sidewall, it oxidises the rubber compound causing deterioration and lose it's

### TyreBooster – An Outstanding Investment – Nitrogen in Tyre

The concept of nitrogen in tyres has been know to the industry for many year and particularly in high-tech sector such as aircraft military, formula 1 and aerospace. Nitrogen keeps tyres pressure longer, save you money and increase your driving safety. ANOX utilizes the latest advancements in air separation technology to allow transport companies to inflate tyres with nitrogen instead of air, it's cost effective, reliable and user friendly.

TyreBooster solutions are designed with one essential benefit in mind: to save fleet operator's money. Our solutions are designed to save you over few thousands a year per truck and only for a one time investment. Once converted, you will realise the benefits for the life of your tyres.

We guarantee our equipment meet the highest level of safety and unequalled performance to give you the benefits you deserve.

Technical Performance

Feed Air Pressure @ 12.0 bar(g) / 174 psig

Model	Inlet Pressure	Flow	N2 Purity	Outlet Pressure	Inlet/Outlet Connection	Dimension	Weight
	PSI (bar)			PSI (bar)			
T05-NE	100-188 (6.8-13)	5	>95.0	Inlet pressure minus 14.5 (1)	G ½"	120x80x30	100
T10-NE	100-188 (6.8-13)	10	>95.0	Inlet pressure minus 14.5 (1)	G 1/2"	140x80x40	130
T20-NE	100-188 (6.8-13)	20	>95.0	Inlet pressure minus 14.5 (1)	G ½"	140x80x40	140
T30-NE	100-188 (6.8-13)	30	>95.0	Inlet pressure minus 14.5 (1)	G ½"	140x80x40	150



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