NITROGEN TYRE FILLING SYSTEM FOR LARGE TYRES

TyreGas TRUCK 23

Fill your fleet's tyres with nitrogen!
This saves fuel, prevents unnecessary
tyre wear and is a lot safer!

The TyreGas TRUCK 23 nitrogen generator from Avilo has been specially developed for filling large-sized tyres, such as aircraft, construction or truck tyres.



Why use nitrogen to fill tyres

The air that we breathe daily and also use for our car tyres contains $\pm 78\%$ nitrogen, 21% oxygen and 1% other gases such as Argon, Ozon and CO2. The oxygen in the air has the property of seeping through rubber. Like a balloon that shrivels over time, a large tyre can lose up to 200mbar of pressure in 1 month. Nitrogen doesn't do this and keeps tyre under pressure, but that's certainly not the main reason why it's much better to fill your tyre with nitrogen.

200 Tyres a hour

Supplied with a compressed air pressure of 13 bar, the system produces about 23 Nm3/hour, 95% pure nitrogen per hour. With this flow rate, a truck tire (size 385-22.5) is pumped to 9 bar in approximately 4.5 minutes. Resulting in a capacity of \pm 14 truck tires per hour. When the TRUCK 23 is used to fill car tires with nitrogen, this translates to 200 tires per hour.





TYREGAS TRUCK 23

The benefits of nitrogen tyre filling for transportation businesses

· Save on fuel and service costs

Nitrogen keeps the tire inflated and the rolling resistance low. This not only saves fuel, but also shortens the maintenance time of the service department. It does not have to spend as much time topping up tires.

• No tarnish & Less wear

Tyres at pressure wear less and therefore last longer. In addition, nitrogen prevents deterioration of the rim, the rubber and the cord layers inside the tyre. Tyres that are fitted with a new tread (retreading) in particular benefit from this. When ozon/oxygen-containing air has damaged the rubber and the cord layers too much, it is not possible to renew the tyre. Nitrogen reduce these negative effects.

• No moisture... No blowout!

Normal air contains a lot of moisture, which expands when the temperature rises. The changing of the seasons, but even more so – driving itself – will increase the temperature in the tyre. A blowout is caused in 80% of cases by moisture that expands in the tire when the temperature rises. Nitrogen is a very dry gas that does not react to temperature and is therefore much safer.

• Favorable Return-On-Investment

The investment in a nitrogen system for companies with their own fleet is guaranteed to have a positive ROI. Often the compressed air required for a nitrogen generator is already available, which further reduces the investment costs. Tires are filled with relatively low purity nitrogen, which means that a nitrogen generator based on membrane technology can be used. These systems have hardly any moving parts and are low in maintenance. The expected life of a generator is ±10 years, within which it pays for itself several times over.

Specifications TYREGAS TRUCK 23

Capacity N² at 9 bar 23 Nm³/hour

Truck Tyres a hour 14 (size 385-22,5 > 9bar)

Car Tyres a hour 200

Purity N² > 95% (adjustable)

Max. N² Pressure 12 bar (G) 1

Compressed Air Quality ISO8573-1:2010

Class 3.4.3

Operating Temperature $5^{\circ}\text{C} - 35^{\circ}\text{C}$

Weight 40kg

40Kg

Connections 1/2" G (fm) 1

Dimensions (H x W x D) $84 \times 44 \times 14$ cm

Maintenance Kit

AVMK05 Maintenance Kit (12 months)

Required Peripherals

Compressor Min. 11 kW - 13 bar

 N_2 Vessel Min. 150 liter - > 13 bar

Avilo can supply all required components for a turn-key nitrogen system



¹ Inlet pressure at least 1 bar above required N² pressure