

# N<sub>2</sub>itrogen



## PCL's N<sub>2</sub> Generator and Inflator - combining the latest in high performance nitrogen generation with leading inflation technology

PCL introduces a range of products designed for the inflation of tyres with nitrogen. This makes available for the first time cost effective N<sub>2</sub> delivery with market leading tyre inflation technology. To the tyre service company, the biggest benefit is that the cost effective PCL unit provides an excellent revenue opportunity while removing the need to buy, store and handle bottles. The chief benefits for the tyre customer are that - due to nitrogen's properties compared to air - it can offer enhanced handling, improved fuel efficiency, extended tyre life, and most importantly, increased safety, which is why it is used in Formula One.

PCL is introducing two units to its range the **PCL N<sub>2</sub> Generator** and the **PCL N<sub>2</sub> Inflator**. The PCL N<sub>2</sub> Generator brings the latest in PSA nitrogen generation to a robust, cost effective and mobile design capable of delivering high levels of nitrogen to which can be added PCL's leading tyre inflation products. The PCL N<sub>2</sub> Inflator takes all the advantages of the PCL N<sub>2</sub> Generator and adds to this the latest in PCL's market leading inflation

technology developed to deliver N<sub>2</sub> inflation cost effectively.

The PCL N<sub>2</sub> Inflator incorporates the ability to preset the tyre pressure allowing the operator to automatically inflate a car tyre to the level required. It is so reliable and accurate that it enables the operator to securely continue with alternative work whilst the unit is inflating up to 4 tyres with N<sub>2</sub> saving time and money. Using proprietary software with bespoke purging and flat tyre detection the inflator can also cost effectively convert a car from air to nitrogen to give consistent provision of the 95% plus purity in the tyre required to deliver the maximum nitrogen benefits based on 97- 98% plus purity delivery.

In short, the PCL N<sub>2</sub> products provide cost effective and flexible revenue generating opportunities for tyre service providers by offering high levels of N<sub>2</sub> performance with low running costs and long lifetime all for a moderate capital outlay.

## Nitrogen Generator Nitrogen Inflator

### Key Benefits

- Revenue generation for Tyre Service Providers
- Both N<sub>2</sub> fill and Air to N<sub>2</sub> conversion service for up to 4 tyres
- Cost effective to use
- Simple to set up
- Low life time costs - with high grade filtration and high performance components
- Guaranteed accuracy and robustness with ceramic pressure sensor

### Key Features

- Rugged and reliable design
- Mobile to allow efficient and flexible positioning and usage
- N<sub>2</sub> purity check point
- Can be fitted to meet EC standards
- Easy to operate and quick installation
- Strong support
- Tank contents gauge

### For N<sub>2</sub> Inflator

- Electronic preset tyre inflation
- Auto-start inflation
- Digital display
- Up to 4 tyres at once
- Bespoke software for optimal nitrogen inflation with purge cycle
  - 1 purge inflation cycle from flat
  - 2 purge inflation cycle, as standard
- Automatic flat tyre detection
- Software programme for conversions of up to 4 tyres from air to nitrogen
- Ceramic sensor - accuracy up to ± 0.5% of full scale reading

## Technical Data Summary

Dimensions		
Height	1300mm	
Width	700mm	
Depth	640mm	
Weight	136kg – N <sub>2</sub> Generator	
Environmental		
Operating Temperature	0°C to 70°C	
Storage Temperature	-30°C to 80°C	
Humidity Range	Up to 95% RH non-condensing	
Electrical Interface		
Voltage Nominal	100-230Vac SMPS	
Current Typical (idle)	10VA	
Max	34VA	
Pressure		
Max Inlet Pressure	145psi / 10bar / 999kPa	
Max Inflation Pressure	5.5bar	
Pressure Measurement (Inflator Model only)	Accuracy to ± 0.5% of full scale reading Exceeds EC Directive 86/217	
Tyre Operating Performance		
	N <sub>2</sub> Generator	N <sub>2</sub> Inflator
N <sub>2</sub> Flow @ 8bar	60 l/min	60 l/min
To fill 195/65 R15 tyre from flat with N <sub>2</sub>	42 secs with PCL inflator	42 secs
Conversion of 4 tyres to 95% purity	n/a	6-8 mins
Passenger car tyre conversions per hour to 95% purity	n/a	26-34
Operational Specification		
	Standard Tank Volume – 50 litres , Filtration – automatic prefiltration and activated carbon filter	
Inflator Model	Zero Drift , 30mm backlit transfective LCD , Auto start , Remain at last setting , Audible and visual end of cycle signals , Contents purge and fill cycles	
Optional Features		
	Hose type and length Connector type Additional Tanks available EC Approved Tank – required for EC installations/applications	

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