

# PRESUS<sup>™</sup> N10. Pressure-boosting plant for high-pressure nitrogen supply.





PRESUS<sup>TM</sup> N10 is a modern, cost-effective and energy-efficient unit that delivers nitrogen at high pressures. PRESUS N10 does not degrade the gas purity when liquid nitrogen is gasified.

## Area of application

The PRESUS N10 pressure-boosting plant is the ideal choice when high-pressure nitrogen or argon is needed. PRESUS N10 pressurises liquid nitrogen or argon by a hydraulically operated, slow-moving piston before evaporation. Therefore, PRESUS N10 is a cutting-edge technology for industrial processes such as gas(-assisted) injection moulding, laser-beam cutting or other processes for which high-pressure gases are necessary.

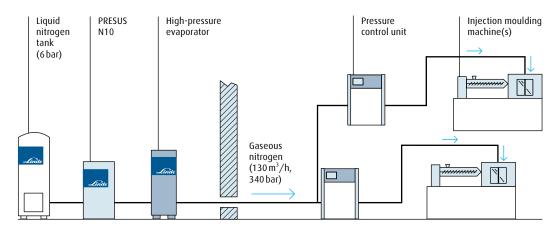
#### Operation benefits

- → Low energy consumption, up to 90% less than state-of-the-art gas compression units
- → Flow rate at least five times higher than with state-of-the-art gas compressors
- → Non-continuous operation without heating up of liquid nitrogen
- → No degradation of nitrogen purity due to absolutely oil-free operation compared with gas compressors
- → Easy to operate by automatic PLC control system

#### Installation benefits

- → Small footprint compared with state-of-the-art compression units for the same capacity and pressure
- → Only a small gas buffer required to boost high pressures
- → Outdoor installation is possible and saves space inside the production hall

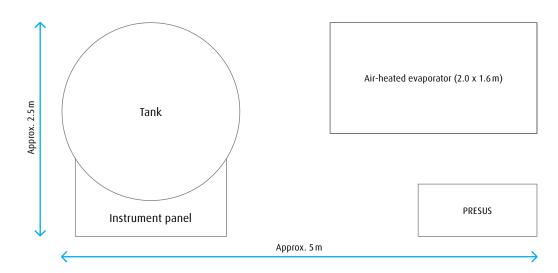
## Schematic of complete set-up for exemplary application of gas injection moulding



## **Technical specifications**

Medium	Liquid nitrogen or liquid argon
Maximum final pressure	340 bar
Flow rate	$5-130 \mathrm{m}^3/\mathrm{h} (\mathrm{N_2})$
Liquid nitrogen supply pressure	4–15 bar recommended
Power supply	400 VAC, 50 Hz, 5 x 16 A
Required energy	Depends on final pressure and consumption
	(average consumption: 25 W/m³)
Gas quality	Depends on the liquid supply, 100% oil-free
Dimensions (H x W x D)	1950 x 1200 x 660 mm
Weight	Approx. 660 kg
Noise level	73 dB(A)

## Layout example



## Declarations and certificates

- → EU Declaration of Incorporation
- ightarrow EU Declaration of Conformity, as requested by customer
- → Acceptance test certificate 3.1 bulk
- → Test report 2.2 bulk

## Maintenance and service

- → Express and weekend delivery service
- → Period test of electronics according to BGV A3
- → LIPROTECT®SP
- → ACCURA®/SECCURA® bulk management
- → Delivery service PRO

## Linde GmbH

Gases Division, Dr.-Carl-von-Linde-Strasse 6–14, 82049 Pullach, Germany Phone: +49 89 7446 0, info@linde-gas.com, www.linde-gas.com