



## PRESUS® C. Efficient boosting of liquid CO<sub>2</sub> for wide range of industrial applications.



PRESUS® C50

Many different industrial applications require a steady supply of high-pressure liquid carbon dioxide (LIC). Typical examples include plastic foaming, gas injection moulding and cleaning. The challenge lies in ensuring a constant mass flow as bubbles can otherwise occur in the LIC, compromising quality and possibly resulting in equipment failure. To meet these challenges, Linde has developed the PRESUS® C range of pressure boosters. Designed for the highest standards of quality and reliability, they supply bubble-free high-mass-flow LIC at a constant high pressure to a variety of industrial processes.

### Efficient operation

PRESUS compressors are pneumatically driven, which means they are controlled by the downstream pressure. The pistons move only if the pressure drops and remain idle if no LIC is consumed. This minimises energy requirements and extends equipment life. The pneumatic drive and control concept provide high levels of efficiency and are particularly beneficial for users with intermittent operations.

### Standardised units

Redundant pumps and pneumatic operation also make these boosters extremely reliable. During service or maintenance, LIC is supplied by the backup unit to ensure process continuity. Operators can switch between the main and backup units manually or by means of a PLC. PRESUS C comes in three different models to ensure the perfect fit for individual needs.

### Operational benefits

- Reliable and continuous supply of liquid carbon dioxide at high pressure
- Lower energy consumption due to pneumatic drive concept and idle mode
- Higher convenience and flexibility as mass flow adapts automatically to changes in counter-pressure

### Installation benefits

- Lower set-up costs compared to:
- Ring pipe solution due to single piping
  - Low-pressure tank feeding high-pressure tank due to reduced tank complexity

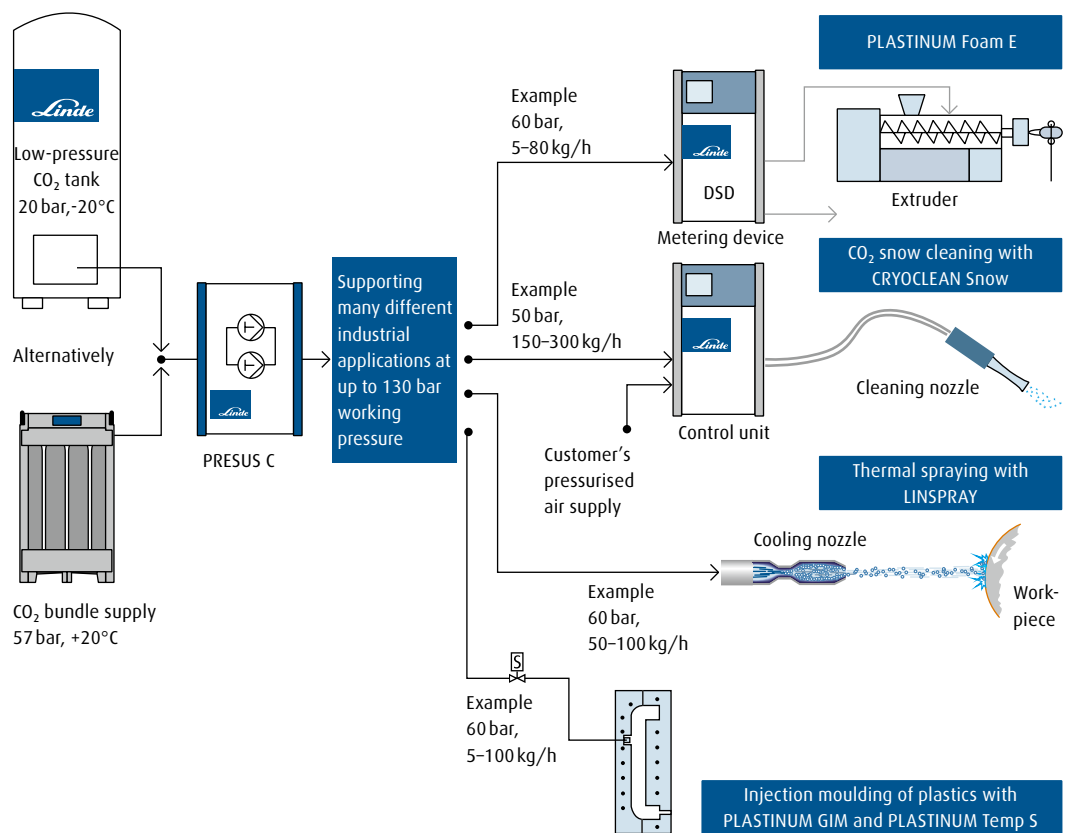
Available units

	PRESUS C8	PRESUS C10	PRESUS C50
CO <sub>2</sub> operation pressure	Up to 90 bar	Up to 130 bar	Up to 70 bar
CO <sub>2</sub> inlet pressure	Standard max. 16 bar Optional max. 80 bar	Standard max. 25 bar Optional max. 80 bar	Standard max. 25 bar Optional max. 80 bar
CO <sub>2</sub> mass flow*	5 to 100 kg/h	5 to 100 kg/h	30 to 500 kg/h
Average consumption of pressurised air *	Approx. 0.1 to 0.2 Nm <sup>3</sup> per kg CO <sub>2</sub> , 6 bar	Approx. 0.1 to 0.2 Nm <sup>3</sup> per kg CO <sub>2</sub> , 6 bar	Approx. 0.05 to 0.1 Nm <sup>3</sup> per kg CO <sub>2</sub> , 6 bar
Weight	Approx. 150 kg	Approx. 150 kg	Approx. 180 kg
Dimensions (W x H x D)	1,330 x 1,460 x 420 mm	1,330 x 1,460 x 420 mm	1,330 x 1,460 x 420 mm

\* Guide value depending on point of use. Quality of pressurised air according to ISO 8573.  
Note: all units come with EU Declaration of Conformity

Options

→ High-pressure PRESUS C up to 400 bar working pressure also available for specific applications, e.g. gas injection moulding with CO<sub>2</sub> (PLASTINUM® GIM C)



Related applications

- PLASTINUM Foam E: Physical foaming of plastics – bubble-free supply of LIC to metering pumps (e.g. DSD 400/500)
- PLASTINUM GIM C: Gas injection moulding with carbon dioxide
- PLASTINUM Temp S: Temperature control of plastic injection moulds – bubble-free LIC supply for high-performance cooling of hot spots
- CRYOCLEAN Snow: Cleaning of surfaces with dry ice particles – high LIC flows at very constant pressures in manual or fully automated cleaning
- LINSPRAY®: Thermal spraying and coating processes – high reliability for optimised cooling

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