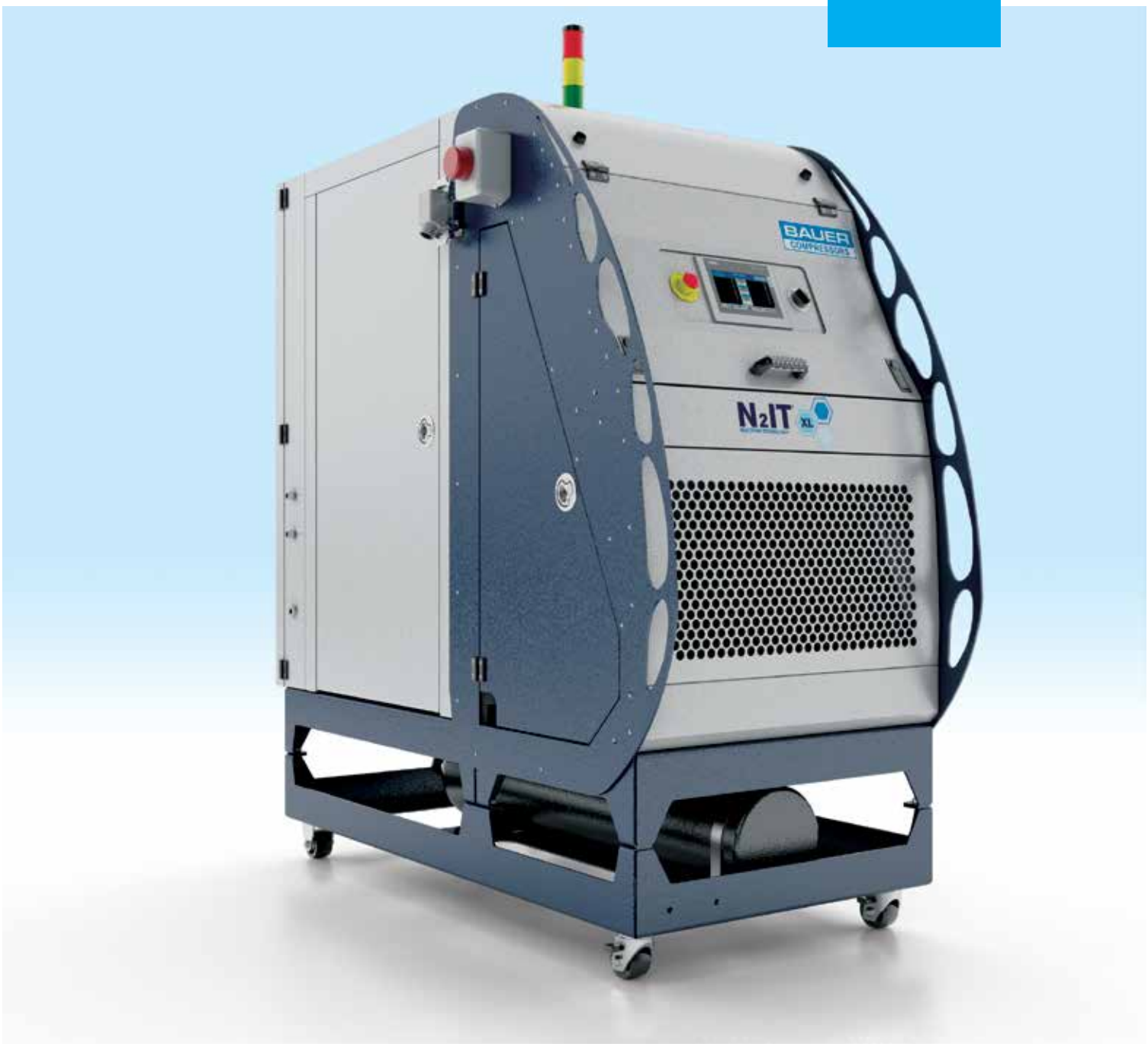
BAUER COMPRESSORS

PLASTICS TECHNOLOGY GROUP

N2IT® XL

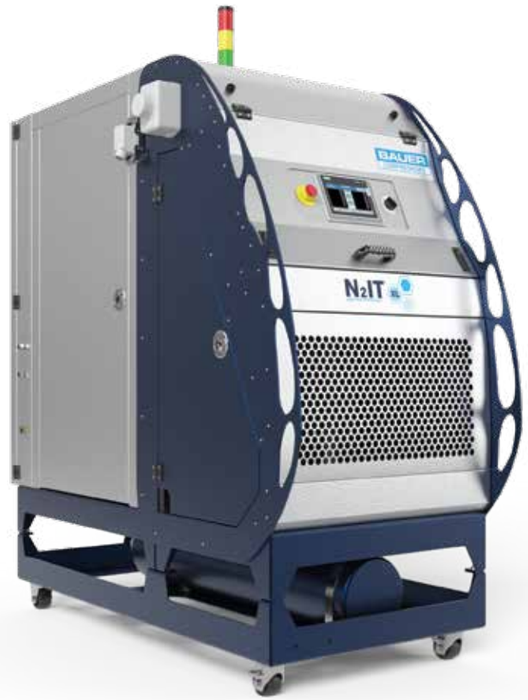
Comprehensive Gas Assist Molding System



WORLDWIDE QUALITY INNOVATION RELIABILITY

N2IT® XL
ALL-IN-ONE NITROGEN GENERATOR AND NITROGEN CONTROLLER SYSTEM

The N2IT® XL is a complete GIT Process control system. The system includes an integrated nitrogen generator, high pressure compressor, gas storage, and process control unit in a single mobile package. With only compressed air and electrical power required, N2IT® XL will control the gas assist process on any injection molding machine, eliminating the need for purchased nitrogen. N2IT® XL is loaded with user-friendly features and maintains accurate & repeatable processing with its precision pressure control system. Get N_2 gas assist with N2IT® XL today!



STANDARD FEATURES

State-of-the-art control system with TRUE TRACK RAMPING® and intuitive interface allows for simple operation.

The N2IT® XL includes EUROMAP 62 interface, and can easily be connected with any injection molding machine in your facility.

- Real-time accurate diagnostics
- Remote interface via smartphone option
- On-screen manual and maintenance instructions
- Three Stage, Air cooled, Reciprocating Compressor
- Lubricated crankcase
- 230v 60hz, Single phase (220v 50hz, 3 phase available)
- High Durability membrane air separators
- Electric motor (ODP) with belt drive
- Pre membrane filters (particulate, moisture, and hydrocarbons)
- On/Off switch
- Automatic condensate collector with high condensate level switch
- Compressor High temp switch
- UL® labeled Control panel with PLC controller. Master central system includes interactive touchscreen interface for operation, maintenance, and trouble shooting
- 7” Siemens touch screen (SD card upgradable)
- Single point power supply connection
- Nitrogen purity monitoring
- Integrated storage vessel
- Multiple pressure sensors including: Supply pressure, Compressor inlet pressure, and process pressure
- Emergency stop push button
- Light tower for alarm annunciation
- 15’ power cord
- Ambient temperature range 40 °F to 113 °F

SYSTEM FOOTPRINT

DIMENSIONS L X W X H inches (mm)

- 69.375” x 37” x 82” (1762.125mm x 939.8mm x 2082.8mm)

WEIGHT pounds (kg)

- 1,700 lb. (771.107 kg)

COST OF OWNERSHIP

Like all BAUER compressors and controllers, the system is designed for long periods between maintenance intervals and has a very low cost of ownership.

- Lifetime BAUER support

GAS INJECTION TECHNOLOGY

Gas injection technology (GIT) is a low-pressure process where a fluid, usually nitrogen gas, is used to create hollow sections in an injection molded part. The gas flows through the part’s thicker sections or via a network of strategically located gas channels designed into the part and evacuates the molten resin from the channels. This evacuated resin is either used to fill the remainder of the cavity or expelled from the part into a spillover.

The pressurized gas is then used to pack out the part during cooling. The gas pressure, usually ranging from 500 psi to 3500 psi, is much lower than the internal cavity pressure that is required in conventional injection molding. This lower pressure is also distributed more equally throughout the part, thus reducing stress and warp. Higher quality parts and reduced scrap can be realized with GIT.

Another benefit of GIT is the reduction of the clamping force necessary from the injection molding machine. The added gas channels act as flow runners and lower pressure is needed to fill the cavity. Also, the pressure spike from fill to pack is greatly reduced because of the relatively low pressure of the gas. With GIT, parts can be molded in smaller tonnage molding machines greatly reducing manufacturing costs.

Tooling costs can also be reduced with GIT. The elimination of lifters and coring can simplify the mold design and lower maintenance costs.

BENEFITS OF GIT:

- **Reduction of part weight**
- **Reduction of cycle time**
- **Reduction of clamping force**
- **Reduced tooling costs**
- **Higher quality parts**
- **Reduced manufacturing costs**

BAUER OFFERS THE COMPLETE SOLUTION.

Bauer is available to assist through every step of the process. Our experienced staff of GIT experts will assist you with:

- GIT tool design
- Part evaluation
- Process training and development
- Equipment selection
- Equipment installation and training
- GIT mold trial service
- Gas injectors and nozzles

BAUER EXCLUSIVE PROCESS CONTROL FEATURES

TRUE TRACK RAMPING®

BAUER's TRUE TRACK RAMPING® technology provides the ability to precisely control the gas injection profile. The processor can program set points to control the rate of gas pressure increase and decease during each step of the gas injection cycle. With TRUE TRACK RAMPING®, you can prevent gas blow through and minimize gas permeation into the thin wall sections of the part.

OXYPURGE™

BAUER's OXYPURGE™ technology purges any oxygen from the mold cavity before resin is injected to prevent burning of the material.

TECHNICAL DATA

Model	Nitrogen Flow at 98.0% Purity		Feed Air Required at: 101.5 PSIG (7 BAR)		Motor	
	SCFM	M³/HR	SCFM	M³/HR	HP	KW
5000 PSIG (414 BAR)						
N2IT XL	5	8.5	25	42.5	5	3.7

1) Capacity (FGD) is referenced to standard conditions. Tolerance +/- 5%. 2) Purity reflects content of 02-free gas produced. Dimensions and weight are approximate. Volume flow rate is according to ISO 1217 with the following standard conditions: Inlet air pressure = sea level, 14.5 psia (1 bar a) Inlet air temperature = 68 °F (20 °C) Relative Water Vapor Pressure = 0 Contact BAUER for site conditions that are other than standard. Correction factors may apply that may derate performance.

N2IT®
INJECTION TECHNOLOGY
XL

LEARN MORE AT: www.BauerPlastics.com

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