

COMPLETE SOLUTIONS FOR

NITROGEN COMPRESSION - MAXIMUM EFFICIENCY

- Nitrogen compressors suitable for pre-compression
- Multiple distribution panels supply
- Purest gas quality thanks to BAUER'S purification system
- Easy operation and control with the help of B-CONTROL
- Electrically operated
- SUPER SILENT version



UBA compressor unit

BAUER complete solutions allow you to work reliably and efficiently with compressed nitrogen and are the 'Total Package', comprising all necessary components. The systems are electrically operated and require no external energy source with the advantage of the integrated BAUER purification system which guarantees gas of the purest quality.

The 'SUPER SILENT' sound proof version reduces the noise emission in the area it is installed to 72 dB (measured at a distance of 1 meter in accordance to ISO 3744).

The nitrogen compressor can be used to supply one or more distribution panels or injection moulding machines. The nitrogen compressor can be delivered as atmospheric air intake compressor unit or as booster compressor unit.

The booster compressors use thereby the primary pressure of a nitrogen generator or nitrogen evaporator. This dramatically reduces the compressor's power absorption and makes a remarkable impact on operational energy costs.

Atmospheric intake compressors can be used for supplying nitrogen by using bundles of bottles.



Complete solution with storage vessels

THE GI TECHNOLOGY ACCESSORY RANGE

Gas injectors

BAUER has developed its own gas injector range. The stainless steel injectors can be utilised for all gas injection procedures. The range includes fixed and movable, self-cleaning injectors.

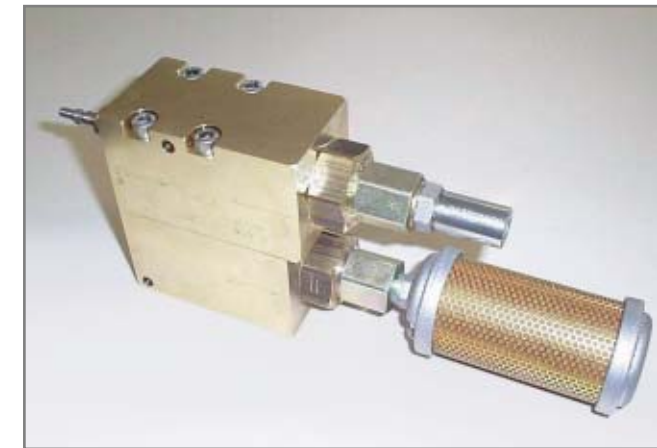


BAUER stainless steel gas injectors

Bypass valve

- Reduces dirt in the proportional regulating valve
- No external energy needed
- Increases the system availability

Placed between the mould and the distribution panels proportional regulating valve, the BAUER bypass valve avoids particle contamination in the pressure regulation by releasing the pressure directly into the atmosphere.



BAUER bypass valve

The bypass valve is proven to increase the lifetime of the proportional regulating valves.

TECHNICAL DATA

Distribution panel:

Number of regulating valves: 1 - 4 (optional 6)
 Regulating range: 5 to 400bar
 Accuracy: +/- 1 bar
 Display: Colour-LCD 5,7"/26 keys or touch screen 10,4"
 Visual display: numerical and graphical in real-time

Interface: EUROMAP 62
 Cleaning cycle: manual or automatic

Compressor units:

Capacity: 85 l/min - 3.500l/min
 Pressure range: 90 - 500 bar



GIT-E 5.06 PR 0094 subject to technical modifications

BAUER KOMPRESSOREN GmbH
 P.O. BOX 710260 · D-81452 MÜNCHEN
 DRYGALSKI-ALLEE 37 · D-81477 MÜNCHEN
 PHONE 0049 89 78049-0
 FAX 0049 89 78049-167
 Internet: www.bauer-kompressoren.de
 e-mail: info@bauer-kompressoren.de

**Gas-
Injection-
N₂-Technology**



Internet: www.bauer-kompressoren.de

STEP-BY-STEP TO SUCCESS WITH BAUER

- Many years of experience in injection technology
- Components assessment for GIT feasibility and advantages
- Assistance with mould design
- System design
- System installation and start-up
- System maintenance



BAUER service vehicle in action

All-round service

- BAUER 24-hour service
- Individual maintenance agreements
- Complete system installation and Start-up
- Spare parts for complete component groups (e.g.: compressor blocks) ex stock
- "Over night" spare parts delivery service
- Hire systems for production peaks

We offer our customers complete system solutions for the plastics industry. BAUER has an extensive product range, that can be individually combined to suit the customer and their needs whether it is a new system, expansion of an already existing system or a hired system for compensation of production shortages.

Our engineers design the optimum GIT solution for your company: A process involving assessment of GIT-feasibility for components, the design of the most appropriate system for your needs, delivery and installation of the new or hired systems inclusive of connection and all necessary high pressure pipe-works, right through start-up and commissioning.

BAUER offers total customer service and our commitment to the forging of a real partnership between BAUER and its customers is the key to a successful integration of gas injection projects into the production process and servicing of the systems. This is why we offer you, the customer, the benefits of our vast knowledge and considerable experience in plastics technology.

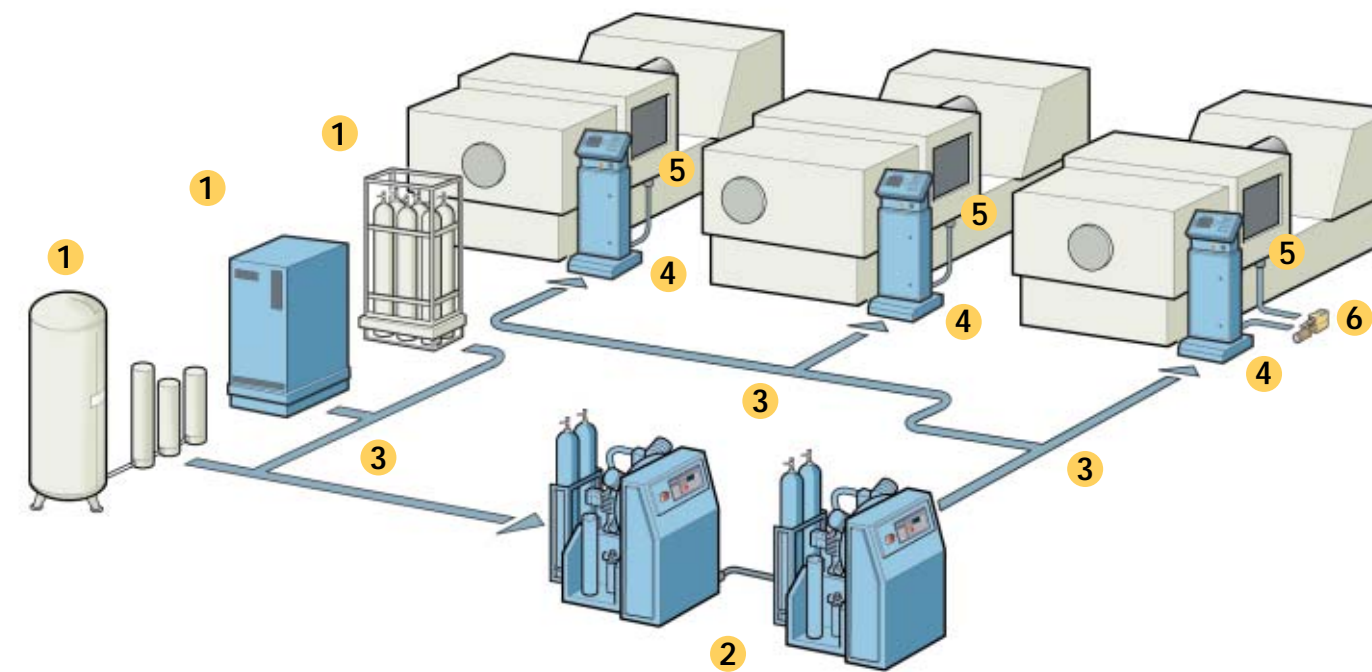


TÜV (Technical surveyance association) acceptance test in BAUER Factory, Munich

BAUER offers a complete maintenance and service programme that fits the user's needs. It ranges from simple 1.000 hour services to complete system installations with annual maintenance agreements, guaranteeing maximum reliability and optimum availability for maximum productivity.

STRUCTURE OF THE SYSTEM

System requirements: the following equipment is required to employ gas injection technology in your process:



- 1 **Source of nitrogen** in the form of nitrogen bottles, fluid tank or nitrogen generator
- 2 **High pressure compressor unit** and suitably sized and rated storage facility for the compression of nitrogen and storing it safely at elevated pressures
- 3 **High pressure lines** to transport the nitrogen
- 4 **Distribution panel** that generates a pressure- / time profile to dispense the nitrogen
- 5 **Gas injectors** to fill nitrogen into the plastic parts for hollowing
- 6 **Bypass valve** to avoid dirt in the proportional regulating valve

INTELLIGENT CONTROL

= SIMPLE OPERATION

Distribution panel for gas injection technology FCC 2000 II and FCC 3000 II

- Programmable time-/pressure profile
- Defined cleaning cycles
- Interface to all injection moulding machines
- Option: EUROMAP 62
- User interface in Windows design
- Regulating module can be mounted separately
- 2 to 6 regulating valves, exchangeable and also available for retrofit
- Simultaneous control of 2 injection moulding machines possible

BAUER distribution panels have been in use all over the world for many years which has resulted in a mature and well proven control system that guarantees the user maximum reliability with down-time a thing of the past.

The new distribution panel generation comprises:

- The enlarged (FCC 2000 II) 5,7" colour screen or 10,4" (FCC 3000 II) touch sensitive colour screen
- The self-explanatory user interface for easy use
- Optional: Ethernet connectivity for exporting production data

Built as a modular construction, the regulating module can be mounted separately from the distribution panel, directly at or near the mould. This shortens the length of the connecting line and reduces the consumption of nitrogen. The programmable SPS-module is integrated into the distribution panel and controls incoming and outgoing signals via pre-defined interfaces to the moulding machines and the regulating module.

Gas starts flowing via the regulating module after having received the start signal from

BAUER
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Distribution panel FCC 2000 II



BAUER regulating module

the moulding machine. A high-accuracy proportional regulating valve takes over the pressure regulation of each gas duct guaranteeing high reproducibility of parts. The pressure- / time profile plus increasing and decreasing ramps are programmable. In each case, the profile data relating to the construction part, can be memorised in the SPS module and exported via ethernet.