

**VERTICUS 5 INDUSTRY**

**COMPRESSOR SYSTEMS FOR NITROGEN**



90 - 500 bar

1300 - 7200 psig



Photos: Ralf Deichelmann

Aircraft Component Filling with N<sub>2</sub>

**The heavy duty system with excellent reliability for compressing nitrogen.**

The new BAUER B-Control combines fully automatic start-stop-operation with maximum user confidence.

The optional Bauer purification systems offer highest gas purity.

**Units available in standard open or Super Silent version.**

## THE MODULAR-SYSTEM

### FIT FOR EVERY APPLICATION

Modern industrial manufacturing requires total safety of production, flexible unit design and effective investments.

The **new modular unit concept** enables every user to choose the **most suitable unit** for his application and to **upgrade** it even **at a later date**.

*Upgrading to Super Silent:*



*Mount backside of housing*



*Add lateral parts*

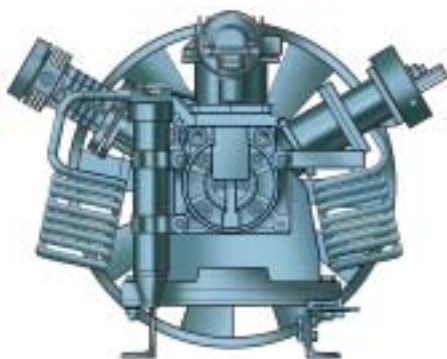


*Ready!*



## THE BLOCK

### THE HEART OF THE COMPRESSOR UNIT



The high quality and availability of the block determine function of the unit and smooth production processes.

**New driving gears** guarantee **reliable** use for **years and years**. Heavy-duty industrial roller bearings with minimum friction are designed for continuous operation.

Piston rings made of hightech polymer in the final stage **minimize wear and tear** of the cylinder surface.

Our advanced valve technology is purpose-made for use with nitrogen.

Intermediate coolers after each stage, **optimized cooling air management** and a perfect compression ratio result in a minimum thermal load.

The **maintenance free** low pressure oil pump with fine strainer guarantees **reliable** lubrication and **least wear** of all moving parts.



### PURIFICATION SYSTEMS - TOTAL SECURITY

**High pressure nitrogen applications require dry and clean gas to protect customer's downstream system from impurities.**

A pressure dew point of  $-20^{\circ}\text{C}$  and a residual oil content of  $\approx 10$  ppm free gas is achieved to guarantee **trouble-free continuous operation**.

The BAUER cartridge filter systems are designed under the aspect of **user-friendliness**. The **economic longlife cartridges** can be easily replaced.

The systems P 61 and P 81 are designed for a space-saving integration in the housing.

Depending on customer's requirements purification systems are available for **maximum pressures of 420 bar (6000 psig)**.

Alternatively to the cartridge systems **Regeneration Dryers** can be used.

### B-CONTROL - TOTAL CONTROL

**Many industrial processes require remote monitoring and fully automatic operation.**

The BAUER B-Control (**PLC control**) allows **free programming** acc. to customer's requirements.

Compressor operation can be regulated via integrated final pressure sensors in the storage cylinders, so that the complete system is operating **fully automatically**.

Operating convenience due to a **big 8-line LCD-display** and free choice of languages (7 languages available).

An optional **CAN-Bus-interface** allows **interconnected operation** of several units, **remote online-monitoring** and **integration** in higher-ranking **control systems**.



### SSC - QUIET COLLECTION - CLEAN DISPOSAL

**The problem of odours and impurities caused by oil and water condensates arising in every stage of compression can be effectively resolved with the SSC condensate collecting system.**

The SSC condensate collecting tank with sound-proofed special filter supplies **odourless exhaust air**, **reduces** the **blow-off noise** during condensate drainage and **prevents pollution** of the compressor unit.

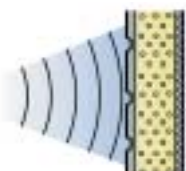
A **serial automatic condensate drain** device is installed in every unit.

### SUPER SILENT HOUSING - SILENCE ON DEMAND

**Depending on siting criteria noise reduction is mandatory.**

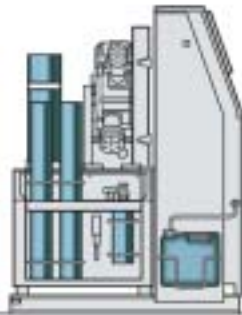
All compressor units of the industrial VERTICUS range are available in standard open or Super Silent version **acc. to customer's requirement**.

Site conditions change? No problem! Thanks to the **modular concept** open units can be **upgraded** to **Super Silent** compressors **in next to no time**.

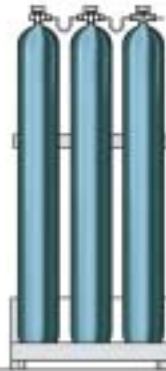


## PROCESS SUPPLY SYSTEM

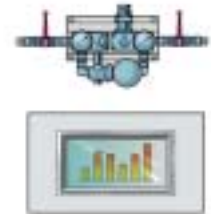
**Compression - Purification**  
Compressor Unit



**Storage**  
HD-Storage Bank



**Distribution**  
Filling panels  
Dosing Units



Dimensions in mm	Length	Width	Height
open version:	1140	830	1515
Super Silent version:	1480	830	1515

## TECHNICAL DATA

model- designation	Free gas delivery*		number of compr. stages	speed  rpm.	motor power  kW	power consumption**  kW	net weight approx.  kg	noise level (super-silent- housing)  dB (A)
	l/min	cfm						
<b>GI - range 90 - 350 bar / 1300 - 5000 psig</b>								
GI 100 - 3 - 5	85	3	3	900	3	2,2	335	ca. 72
GI 100 - 4 - 5	125	4,4	3	1270	4	3,3	340	ca. 72
GI 120 - 4 - 5	170	6	3	1200	4	3,7	345	ca. 72
GI 120 - 5.5 - 5	215	7,6	3	1470	5,5	4,7	355	ca. 72
GI 12.14 - 7.5 - 5	300	10,6	4	1390	7,5	6,5	365	ca. 72
GI 15.1 - 7.5 - 5	340	12	4	1050	7,5	6,9	450	ca. 72
GI 15.1 - 11 - 5	420	14,8	4	1320	11	9,6	450	ca. 72
GI 150 - 11 - 5	500	17,7	4	1230	11	10,2	450	ca. 72
GI 180 - 15 - 5	610	21,6	4	1320	15	12	470	ca. 72
<b>GI - range 350 - 500 bar / 5000 - 7200 psig</b>								
GI 15.11 - 7.5 - 5	310	11	4	960	7,5	7	470	ca. 72
GI 15.11 - 11 - 5	420	14,8	4	1320	11	10,4	470	ca. 72
GI 18.1 - 15 - 5	550	19,4	5	1320	15	12,4	470	ca. 72

### GIB - range 90 - 350 bar / 1300 - 5000 psig

model- designation	intake pressure range bar <sub>abs</sub>	Free gas delivery range*		speed  rpm	power consumption range  kW
		l/min	cfm		
GIB 12.2 - 5,5 - 5	6 - 12	200 - 475	7,1 - 16,8	1230	ca. 3,3 - 5,3
GIB 15.3 - 11 - 5	8 - 11	510 - 750	18 - 26,5	1140	ca. 6,6 - 8,2

\* measured with flow meter at 0,8 factor of final pressure (± 5%)

\*\* power consumption at final pressure 350 bar / 5000 psig



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