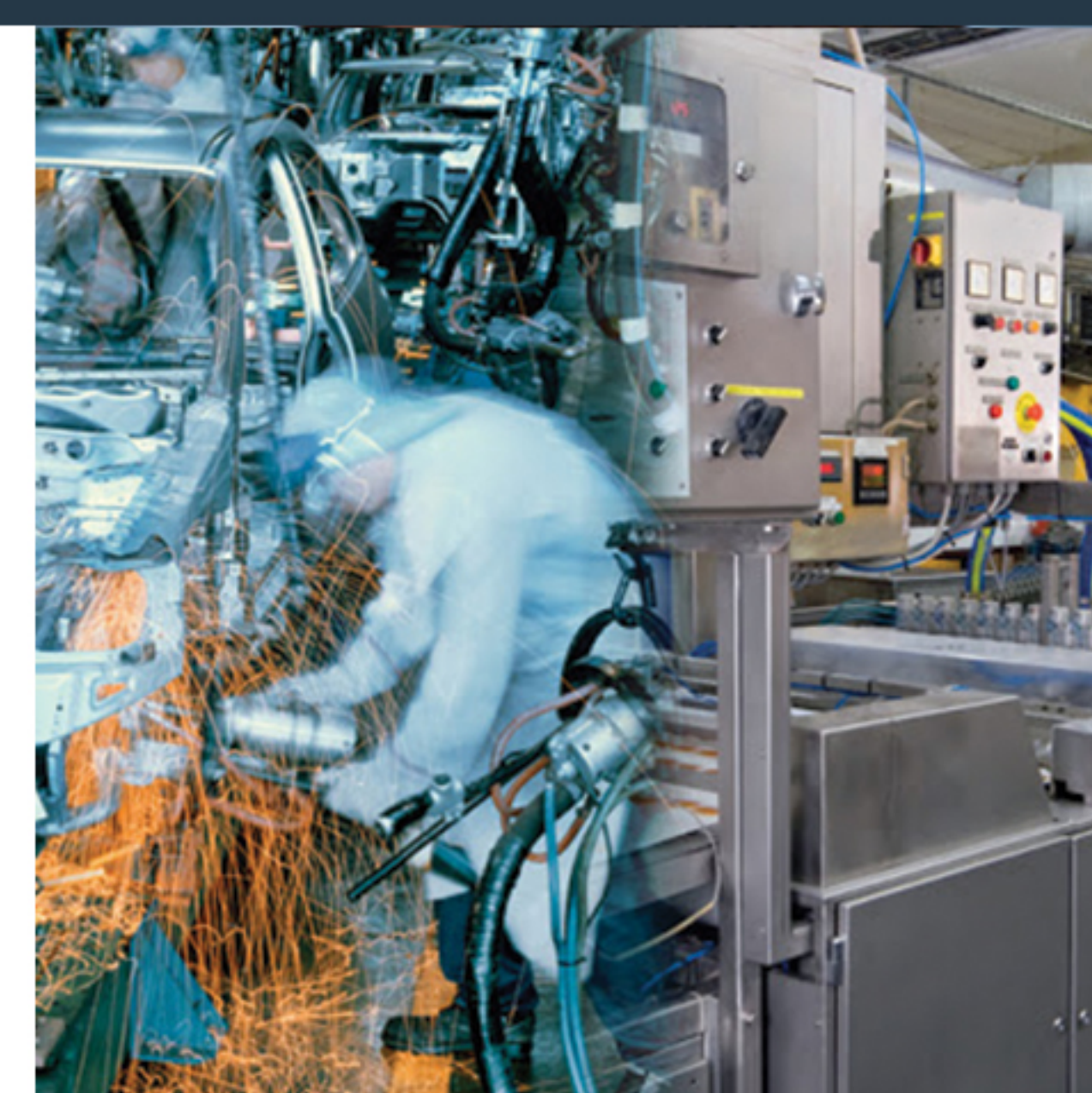


# Reciprocating Air Compressor 7.5-30 kW





## Welcome to HATCO!

HATCO is a company specialized in the planning, engineering, design and realization of turnkey, customized solutions for the air and gas compression and separation plants including all exclusive project's services. Since founded in 1997, quality and reliability have always been the foundation of all our products and services. Thousands of compression packages operating across the country prove our reliability of products for special environments and heavy duty industries and air separation plants.



### High-Pressure Booster Compressors

There are many industries and processes where compressed air and nitrogen are used at higher pressure. HATCO offers high-pressure systems for nearly any industrial application across commercial sectors such as PET blowing, laser cutting, pressure tests and abrasive cutting. They are among some of the widespread processes in which air or nitrogen boosters can be an integral part of the installation via connected to the plant's low-pressure network.

For special requirements, we can modify a standard package or design a custom package to your specific needs.

### Oil-Free Piston Compressor Series

#### 1 stage Type

The 1-stage type is used in particular for high delivery rates. Suction pressure is selectable up to a maximum of 16 bar g. The pressure ratio depends on the gas compressed and ranges from 3:1 to 8:1.

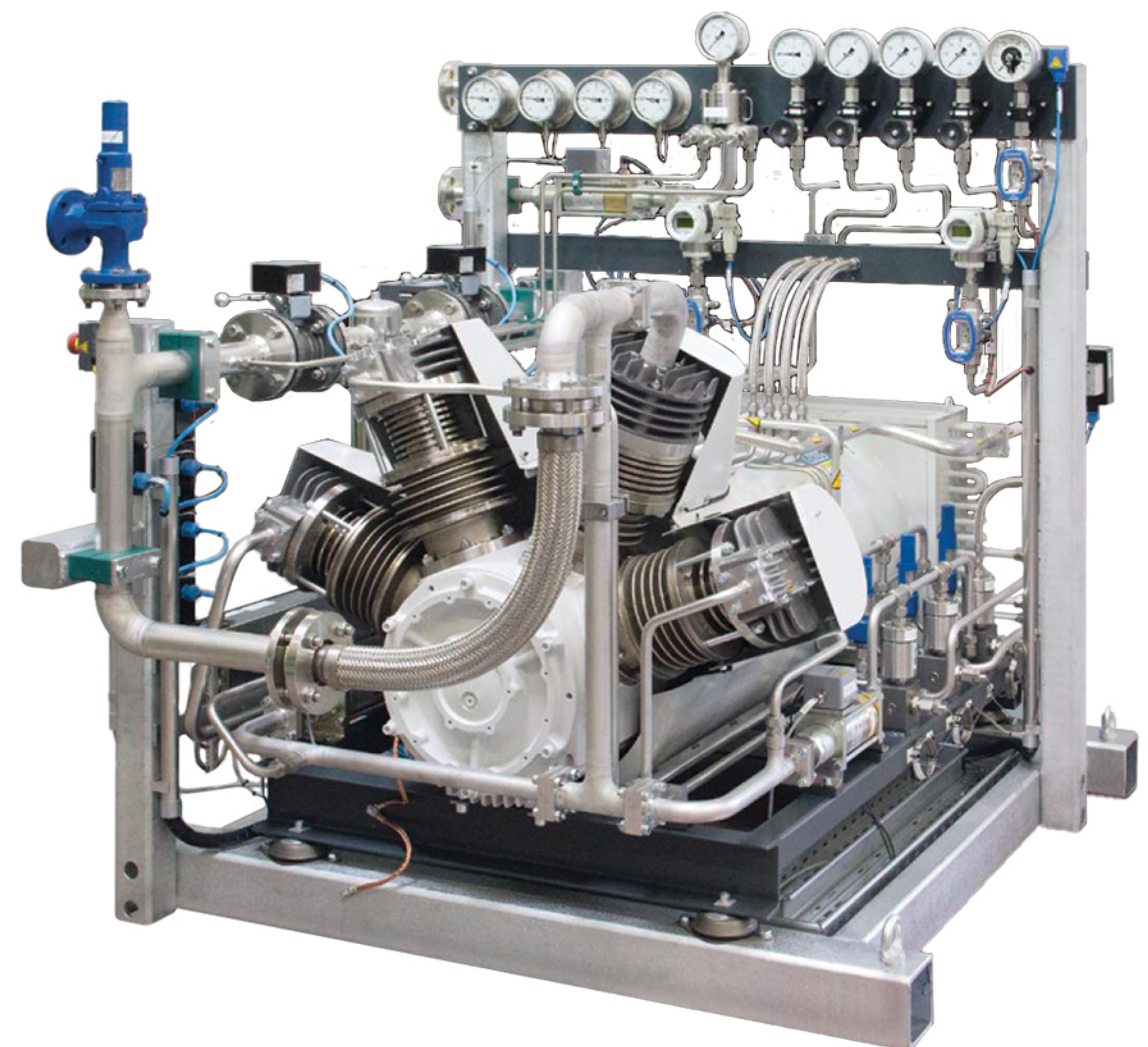
The types used are always dependent on the gases to be compressed. The flow rate increases in proportion to the suction pressure. The maximum final pressure is about 60 bar g for 1-stage design.

#### 2 stage Type

The 2-stage type allows pressure ratios of 9:1 to 30:1, depending on the gas compressed. Suction pressure can be selected up to a maximum of 16 bar g. The 2-stage compression arrangement with intercooling improves efficiency and lowers compression temperatures.

#### 3 & 4 stage Type

The 3-stage type allows pressure ratios of 27:1 to 90:1, depending on the gas compressed. This type is used in particular for storage of gases, such as natural gas, helium, hydrogen and air. For gases with high compression temperatures such as helium or for high delivery pressures a 4-stages compressor is being used.





# Oil-free booster compression of nitrogen and CDA (Clean Dry Air)

Nitrogen compressors are used as boosters for an on-site gas production plant or for a pressure increase from an existing pressurized nitrogen network. As a result of the oil-free and gas-tight construction, contamination of the gas by oil or ambient air is prevented.

The central compressed air supply is operated at a lower pressure and air booster compressors are used for a local pressure increase at the workplace. Only a partial compressed air flow is compressed to the higher final discharge pressure by the booster compressor.

| HAUG Series for nitrogen & air compression |                          |                             |                          |                                  |                                                                         |                  |
|--------------------------------------------|--------------------------|-----------------------------|--------------------------|----------------------------------|-------------------------------------------------------------------------|------------------|
| Item                                       | Min. suction press.(abs) | Average suction press.(abs) | Max. suction press.(abs) | Max. final discharge press.(abs) | Flow rate in Nm3/h @ Average suction pressure & motor speed of 1450 rpm | Motor power (Kw) |
| 21G 120 LM-L                               | 6.0                      | 7.5                         | 9.0                      | 12                               | 590                                                                     | 18.5             |
| 31G 120 LM-L                               | 6.0                      | 7.5                         | 9.0                      | 12                               | 877                                                                     | 30.0             |
| 21G 100 LM-L                               | 6.0                      | 8.0                         | 10.0                     | 15                               | 428                                                                     | 18.5             |
| 31G 100 LM-L                               | 6.0                      | 8.0                         | 10.0                     | 15                               | 635                                                                     | 30.0             |
| 22G 80-50 LM-L                             | 6.0                      | 7.5                         | 9.0                      | 36                               | 120                                                                     | 15.0             |
| 42G 80-50 LM-L                             | 6.0                      | 7.5                         | 9.0                      | 36                               | 235                                                                     | 30.0             |

# Oil-free booster compression of oxygen

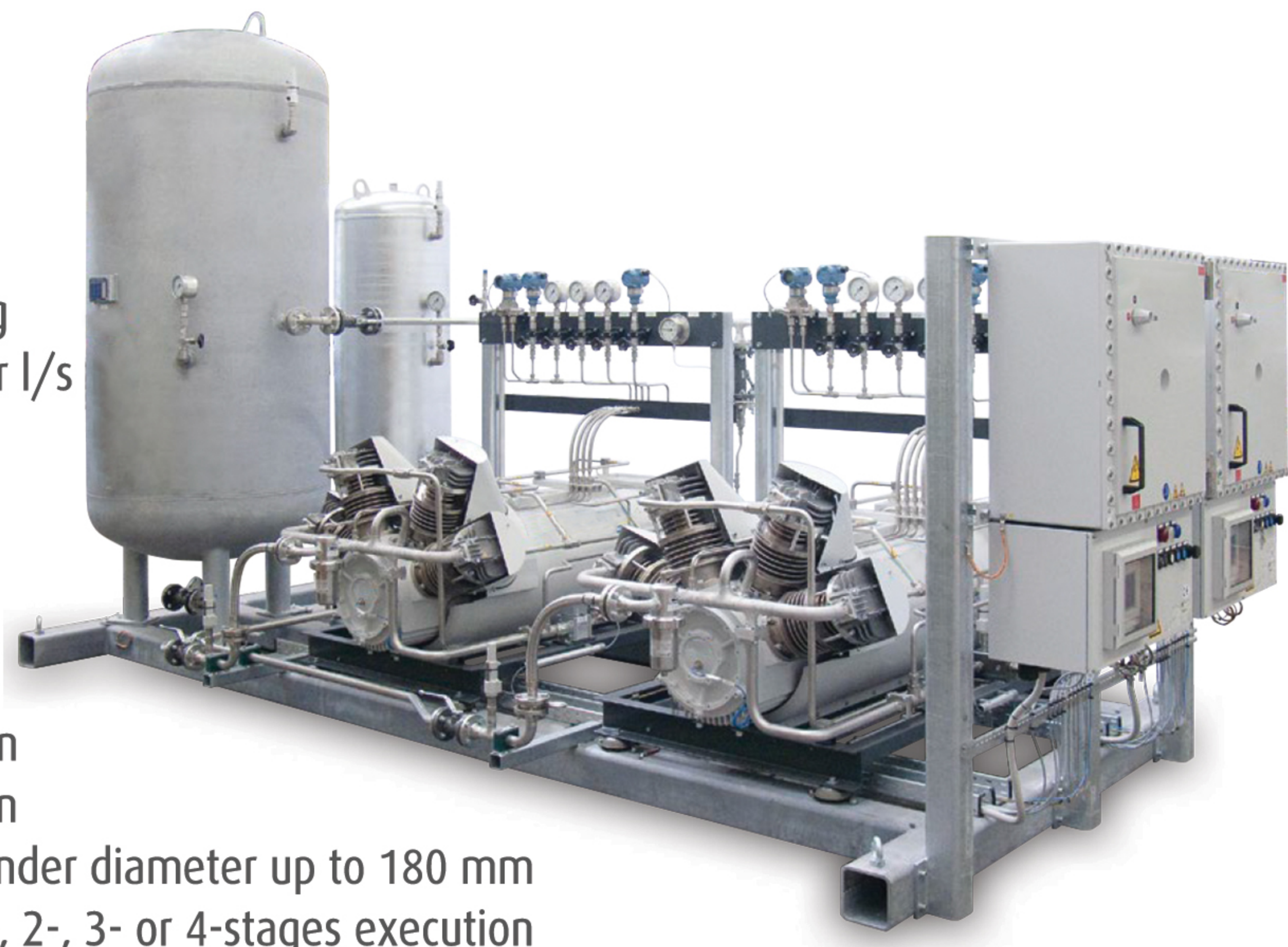
Oxygen compressors are used as boosters for an on-site gas production plant. Oxygen is usually generated using a PSA, VPSA or membrane system that pressure at the gas generation plant output is around 4-6 bar. Depending on the application for which the oxygen is being used, the pressure has to be increased. This is achieved using a booster compressor.

The oxygen compatibility is ensured by high quality materials and a completely oil-free compression. The compressor components that come into contact with the medium are specially selected and cleaned for operation with oxygen.

| HAUG Series for oxygen compression |                          |                             |                          |                                  |                                                                         |                  |
|------------------------------------|--------------------------|-----------------------------|--------------------------|----------------------------------|-------------------------------------------------------------------------|------------------|
| Item                               | Min. suction press.(abs) | Average suction press.(abs) | Max. suction press.(abs) | Max. final discharge press.(abs) | Flow rate in Nm3/h @ Average suction pressure & motor speed of 1450 rpm | Motor power (Kw) |
| 21G 100 LM-L                       | 4.0                      | 5.0                         | 6.0                      | 11                               | 266                                                                     | 15.0             |
| 21G 120 LM-L                       | 4.5                      | 5.3                         | 6.0                      | 11                               | 386                                                                     | 18.0             |
| 31G 120 LM-L                       | 4.5                      | 5.3                         | 6.0                      | 11                               | 573                                                                     | 30.0             |
| 22G 90-60 LM-L                     | 4.0                      | 5.0                         | 6.0                      | 26                               | 104                                                                     | 11.0             |
| 42G 90-60 LM-L                     | 4.0                      | 5.0                         | 6.0                      | 26                               | 203                                                                     | 22.0             |
| 22G 160-90 LM-L                    | 1.0                      | 1.2                         | 1.4                      | 11                               | 76                                                                      | 5.01             |
| 42G 160-90 LM-L                    | 1.0                      | 1.2                         | 1.4                      | 11                               | 148                                                                     | 30.0             |

## Features:

- Completely oil-free piston compressor
- Gas-tight design with magnetic coupling
- compressor block leak rate < 0.001 mbar l/s
- Air-cooled or water-cooled versions
- Motor power from 7.5 to 30 kW
- Rotary speed range 970 to 1450 1/min
- Suction pressure max. 16 bar
- Final discharge pressure max. 100 bar
- Very robust and long-lasting construction
- Compact and foundation-free installation
- Modular cylinder configuration with cylinder diameter up to 180 mm
- Versions with 2, 3 or 4 cylinders with 1-, 2-, 3- or 4-stages execution
- Maximum flow rate at atmospheric intake pressure approx. 400 m3/h
- Booster compressor version flow rate max. approx. 1000 m3/h
- Explosion-proof compressor version as option (conform with ATEX zone 1 or zone 2)





**HATCO**

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