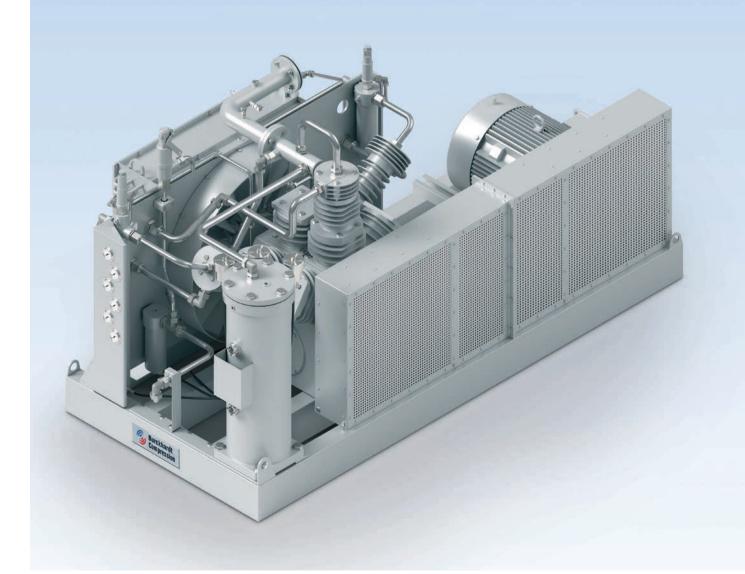


# STANDARD HIGH PRESSURE COMPRESSORS

COMPACT PACKAGE FOR DEMANDING APPLICATIONS



### **BURCKHARDT COMPRESSION**

## GLOBAL TECHNOLOGY LEADER IN THE RECIPROCATING COMPRESSOR WORLD

Burckhardt Compression is one of the worldwide market leaders in the field of reciprocating compressors and the only manufacturer that covers a complete range of reciprocating compressor technologies. Its customized compressor systems are used in the upstream oil & gas, gas transport and storage, refinery, chemical, petrochemical and industrial gas sectors. Burckhardt Compression's leading technology, high-quality compressor components and the full range of services help customers to minimize life cycle costs of their reciprocating compressor systems around the world. Since 1844 its highly skilled workforce has crafted superior solutions and set the benchmark in the gas compression industry.

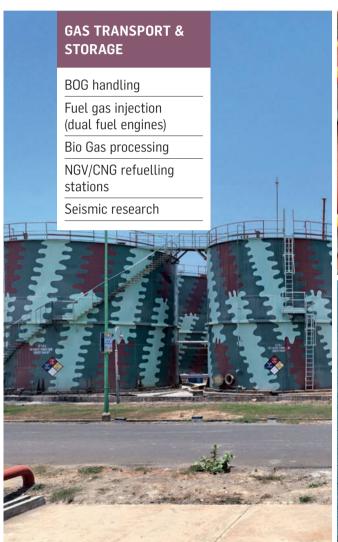
#### **IN-HOUSE EXPERTISE**

With hundreds of references, Burckhardt Compression has continuously improved the technology and components of Standard High Pressure Compressors. Thanks to in-house engineering and manufacturing the high quality equipment and components guarantee longest MTBO (mean time between overhaul).

#### **WORLDWIDE PRESENCE**

- Worldwide 24/7 service network
- Whenever you need support, you get it







### INDUSTRIAL GASES

Air compression & separation

Bottling plants for industry gases

Hydrogen

Nitrogen

Helium recovery systems

Argon

Natural Gas

Electrolysis plants



 $H_2$ 

He

Ar

CH<sub>4</sub>

 $N_2$ 

### **HUNDREDS OF INSTALLATIONS**

### IN A WIDE RANGE OF APPLICATIONS



CU compressor meeting high safety standards in a hydrogen bottling plant

### STANDARD HIGH PRESSURE COMPRESSOR

### COMPACT PACKAGE FOR DEMANDING APPLICATIONS

Standard High Pressure Compressors from Burckhardt Compression guarantee highest operational efficiency. Thanks to leading technology and in-house manufactured components, our customers can put their full trust in our highly reliable compressor systems. The variety of gases handled by our Standard High Pressure Compressor. which includes critical and extremely light gases, makes it a powerful and unique solution.

#### NO GAS LOSS FOR SAFE AND ECONOMIC OPERATION

- No gas loss to the atmosphere, gas tight even for very light gases

#### **HIGHER EFFICIENCY**

- Low pressure ratio per stage
- Compression up to six stages for high pressure

#### IN-HOUSE COMPONENT MANUFACTURING

- High quality of components, developed and manufactured in-house, ensures longest MTBO and highest availability

#### MANIFOLD BENEFITS

- Trunk piston design for low spare part consumption
- Selection of materials, technology
- Handling of critical gases, many installations
- Reliable self-standing, small footprint

#### **CERTIFICATIONS**

Standard High Pressure Compressors can be supplied with the following certifications:

- MD, PED, ATEX and CE
- KHK for Japanese market
- Gost and RTN
- Marine standard (DNV/GL, LR or equivalent)
- Others

### **DESIGN FEATURES**

## DEPENDABLE COMPRESSOR FOR DEMANDING APPLICATIONS

#### **KEY COMPRESSOR COMPONENTS -**

FOR BEST PERFORMANCE AND LONGEST LIFETIME

#### **PISTON RINGS** -

- Specially designed for high pressure
- Metallic for optimum cylinder lubrication and to limit the oil content in discharge gas
- Non metallic for special cases

#### **CONCENTRIC VALVES -**

- Combined suction and discharge
- Compact in size
- Easy to assemble and dismantle
- Metallic/non metallic internals

#### **SMALL END BEARINGS -**

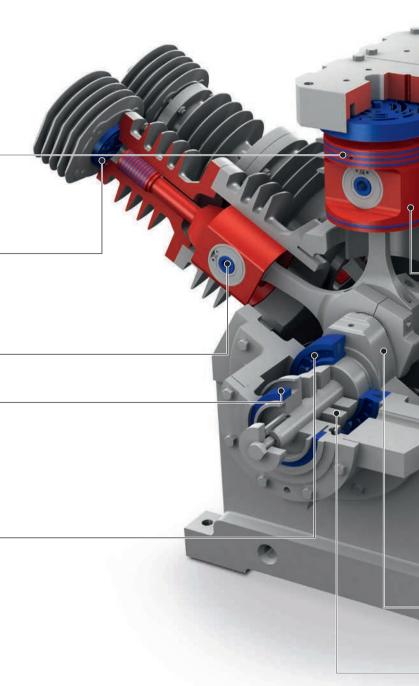
- Cylindrical roller bearings/sleeve bearings with high reliability

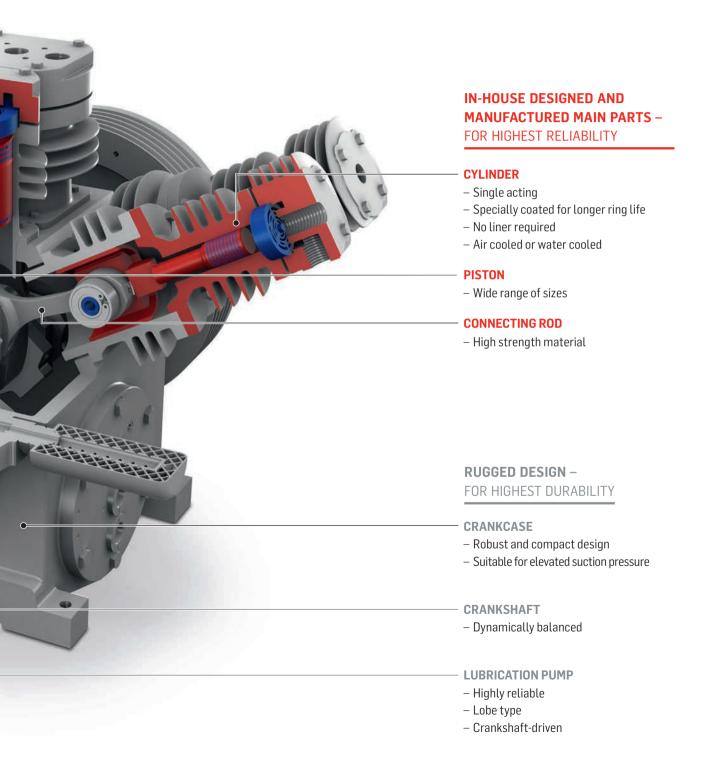
#### SEALS -

- Pressure-tight and pressure-relieved
- Oil seal for low suction pressure application
- Mechanical seal for high suction pressure application
- Available in two versions
- No gas loss

#### **MAIN BEARINGS**

- Specially designed journal type for  $\rm H_2$  application with high suction pressure
- Angular contact double roller bearings for other applications

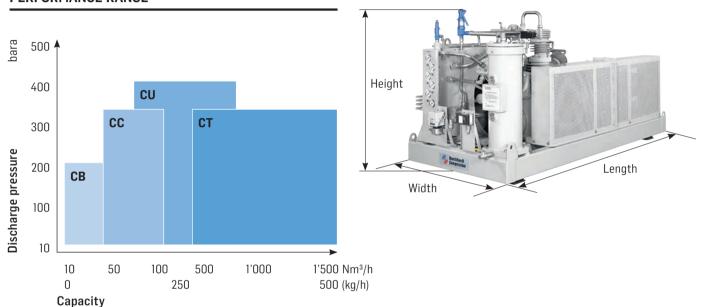




### **PERFORMANCE RANGE**

### A BROAD PORTFOLIO FOR ALL YOUR APPLICATIONS

#### **PERFORMANCE RANGE**



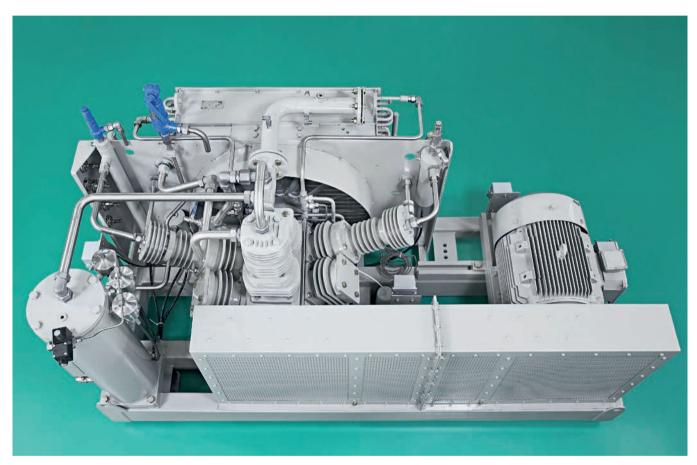
#### **TECHNICAL DATA AND DIMENSIONS**

Туре	Stroke mm	Max. Speed rpm	Rated Power kW	Width mm	<b>Height</b> mm	<b>Length</b> mm	<b>Weight</b> kg	
AIR-COOLED								
CC	100	1'365	45	1'250	1'415	1'900	1'350	
CU	100	1'230	110	1'200	1'430	2'600	1'800	
СТ	125	1'045	200	1'950	2'000	3'800	4'800	
WATER-COOLED								
СВ	80	1'500	18	800	800	1'700	500	
СТ	125	1'045	200	2'000	2'000	4'000	4'800	

The above mentioned models are available from 2 to 6 stage compression, as per application suction parameters and according to compressor sizing.

### **COMPACT PACKAGE**

### AIR COOLED OR WATER COOLED



CU compressor package



CT compressor package

CU compressor package

### **EASE OF INSTALLATION**



CT compressor package ready to be connected

The compressors are supplied as skid-mounted, factory assembled packages. The compressor can be started just by connecting it to the inlet connection, outlet connection and power supply through a control panel.

Inlet connection



Outlet connection



Anti-vibration foot mounts

#### **COMPLETE SOLUTION PACKAGE**

Standard High Pressure Compressors are standardized packages with a fixed configuration within four frames (CB, CC, CU and CT). With these four frames with standardized operating speeds and standardized scope of supply we meet every customer's enquiries.

### **SERVICES**

### ENHANCE YOUR MAINTENANCE

PREDICTIVE MAINTENANCE	<ul> <li>Comprehensive customized service from diagnostic service to predictive maintenance</li> <li>Full service agreements for maximum availability</li> </ul>	<ul> <li>Vast experience thanks to compressor installations across a wide range of applications</li> </ul>	
SPARE PARTS LOGISTICS	<ul><li>Original spare parts with</li><li>OEM guarantee</li><li>Spare parts frame agreements</li><li>Stock recommendations</li></ul>	<ul><li>Express service for emergencies</li><li>Over 16'000 parts in stock</li></ul>	
FIELD SERVICE	<ul><li>Highly experienced service people</li><li>Erection/commissioning</li><li>Service contracts/preventive maintenance</li></ul>	<ul><li>Start-up support</li><li>Turn-key installations</li></ul>	
TECHNICAL SUPPORT	<ul> <li>Performance analysis</li> <li>for optimized and efficient</li> <li>compressor operation</li> <li>Troubleshooting</li> </ul>	<ul><li>Root cause analysis</li><li>Emergency availability 24/7</li><li>On-site failure analysis</li><li>Consulting</li></ul>	
REVAMPS	<ul><li>Modernizing/upgrades/retrofits</li><li>Relocation of machines</li><li>Debottlenecking</li></ul>	<ul> <li>Operation mode studies for own as well as for other brand compressor systems</li> </ul>	
COMPONENT REPAIR	<ul> <li>Condition analysis</li> <li>Recommendations concerning which parts can be repaired or need to be replaced</li> </ul>	<ul> <li>Incorporation of the latest technology where possible</li> </ul>	
SERVICE CENTERS WORLDWIDE	Full range of services and top performing components through global organization and local service centers.	24 hours emergency: +41 52 262 53 53	



#### **RECIPROCATING COMPRESSORS**

LEADING TECHNOLOGY FOR LOWEST LIFE CYCLE COSTS

#### Laby® Compressors Contactless and oil-free



Laby®-GI Compressors Fully balanced



Process Gas Compressors API 618 – lowest life cycle costs



Hyper Compressors Safe and reliable up to 3'500 bara / 51'000 psia



Standard
High Pressure
Compressors
Compact package for
demanding applications

#### **COMPRESSOR COMPONENTS**

BEST PERFORMANCE
AND LONGEST LIFETIME

Compressor valves

Redura® rings & packings

Capacity control systems

Capital parts

Labyrinth piston compressor components

Hyper/secondary compressor components

#### **SERVICES**

THE FULL RANGE

Burckhardt Valve Service

Spare parts logistics

Field service

Technical support

Revamps & upgrades

Component repair

Condition monitoring & diagnostics

Training

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