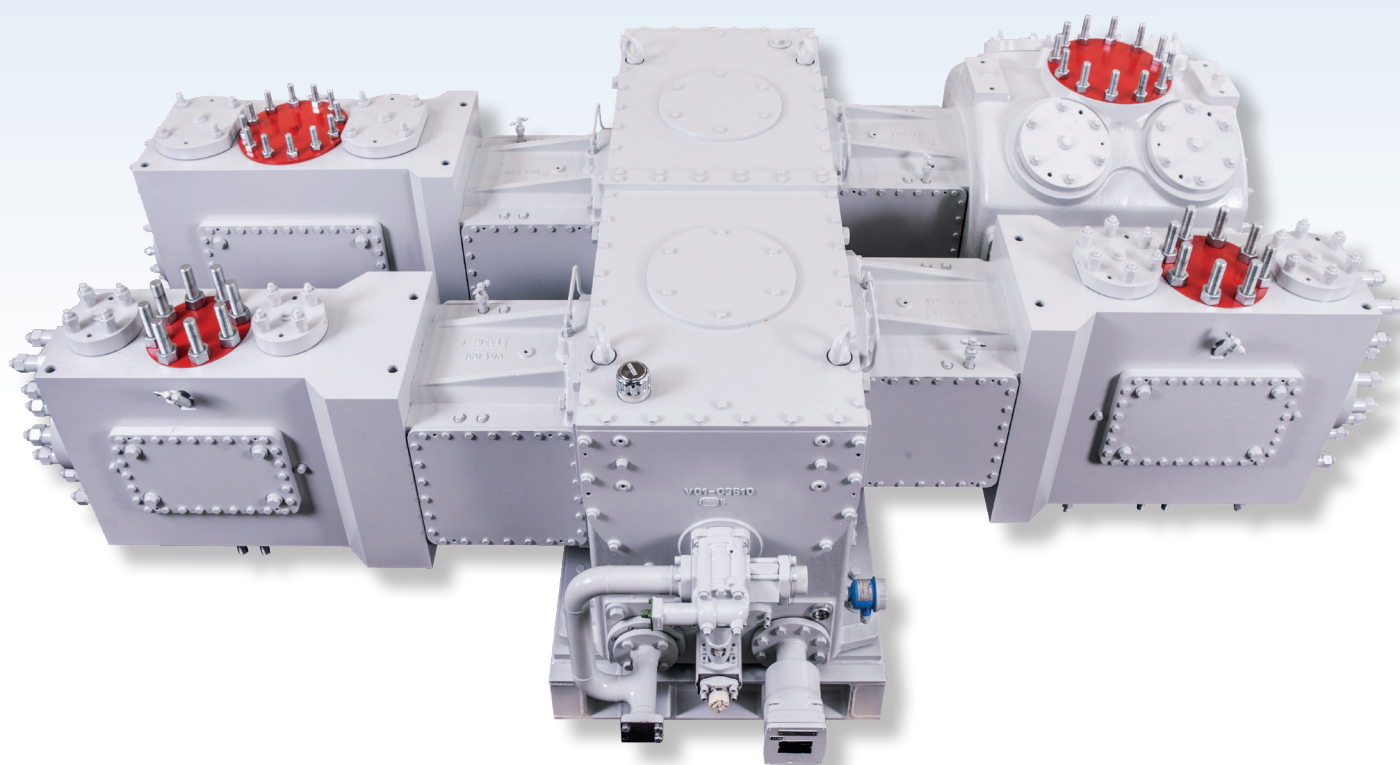




# COMPRESSORS

ISO13631 high-speed  
balanced-opposed



your high pressure solution

# COMPANY PROFILE

## Leobersdorfer Maschinenfabrik (LMF)

is the leading manufacturer of innovative high-pressure compressor solutions.

Located in the south of Vienna, the company boasts a solid tradition spanning over 170 years. As LMF employees, leading engineers of their time, Rudolf Diesel, who developed diesel engines for LMF, and Viktor Kaplan, the inventor of the Kaplan water-turbine, laid the foundations of the company's future technological excellence.

Production of reciprocating machines started at the turn of the 20th century and over the years the company stayed at the forefront of innovation, with many groundbreaking products launched, and benchmarks set for numerous sectors of industry.

## We keep our Promise

With over 170 years of experience, we guarantee our customers individual tailor-made solutions of highest quality. From consulting to engineering to production and service, we offer products exactly according to the needs of our customers.

LMF offers reliable solutions for today's challenging demand for energy – whether it is hydrogen, biomethane or other alternative fuels. Moreover, solutions are provided for the oil and gas sector, as well as for the chemical and petrochemical industry.

## Applications and Business Areas

- ⦿ Alternative Energy
- ⦿ Industrial Applications
- ⦿ Midstream Tailor-Made
- ⦿ Oil & Gas
- ⦿ PET
- ⦿ Pipeline Evacuation
- ⦿ Seismic Research

## Headquarters

Leobersdorf, Austria



### Reliable

We keep our promises.  
Since 1850.



### Innovative

Our innovative solutions  
set standards for future  
compressor technology.



### Sustainable

With our solutions,  
we care about the  
environment.



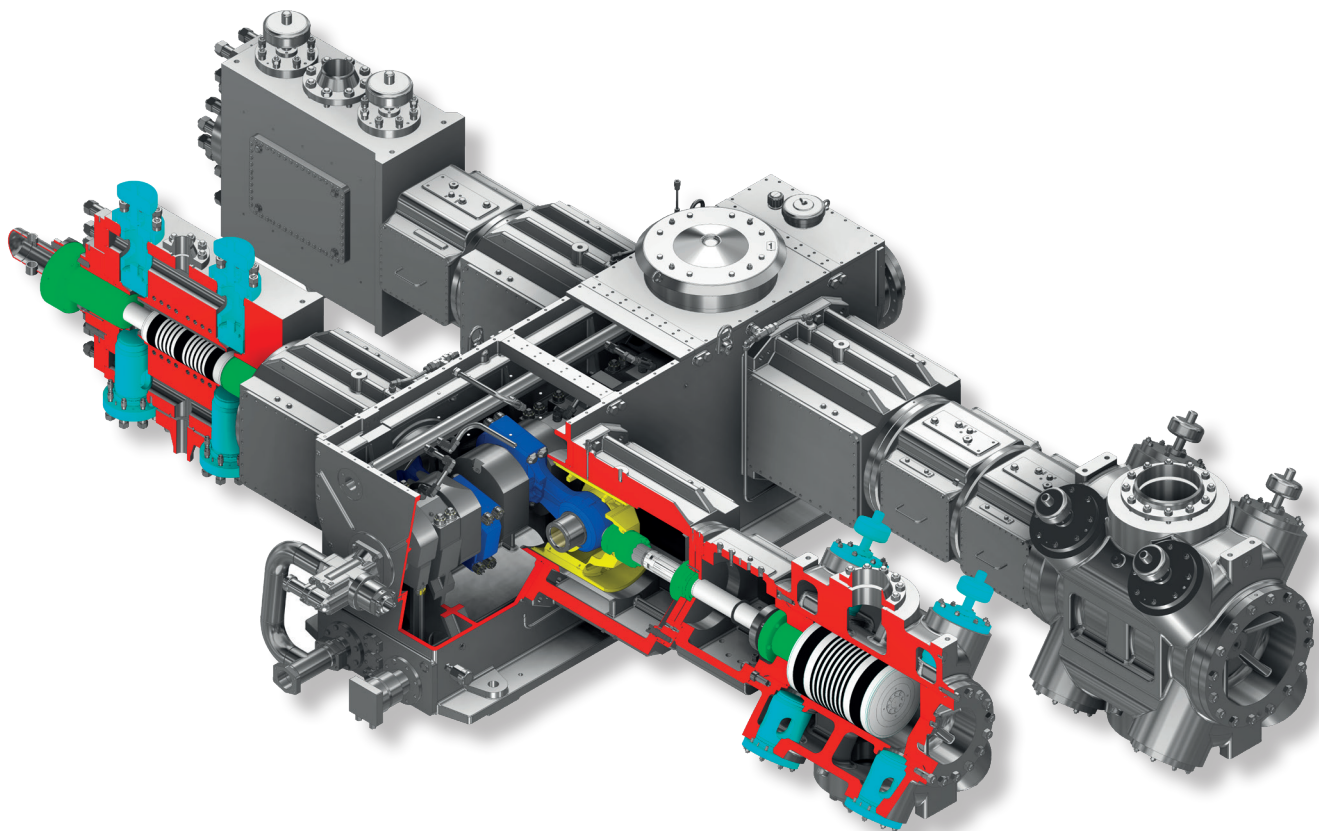
## RELIABLE DESIGN SOLUTIONS

LMF's large medium-speed separable reciprocating compressors are designed to pair with electric motors and natural gas engines. These compressors are engineered for applications requiring large horsepower drivers and high-compression capacity.

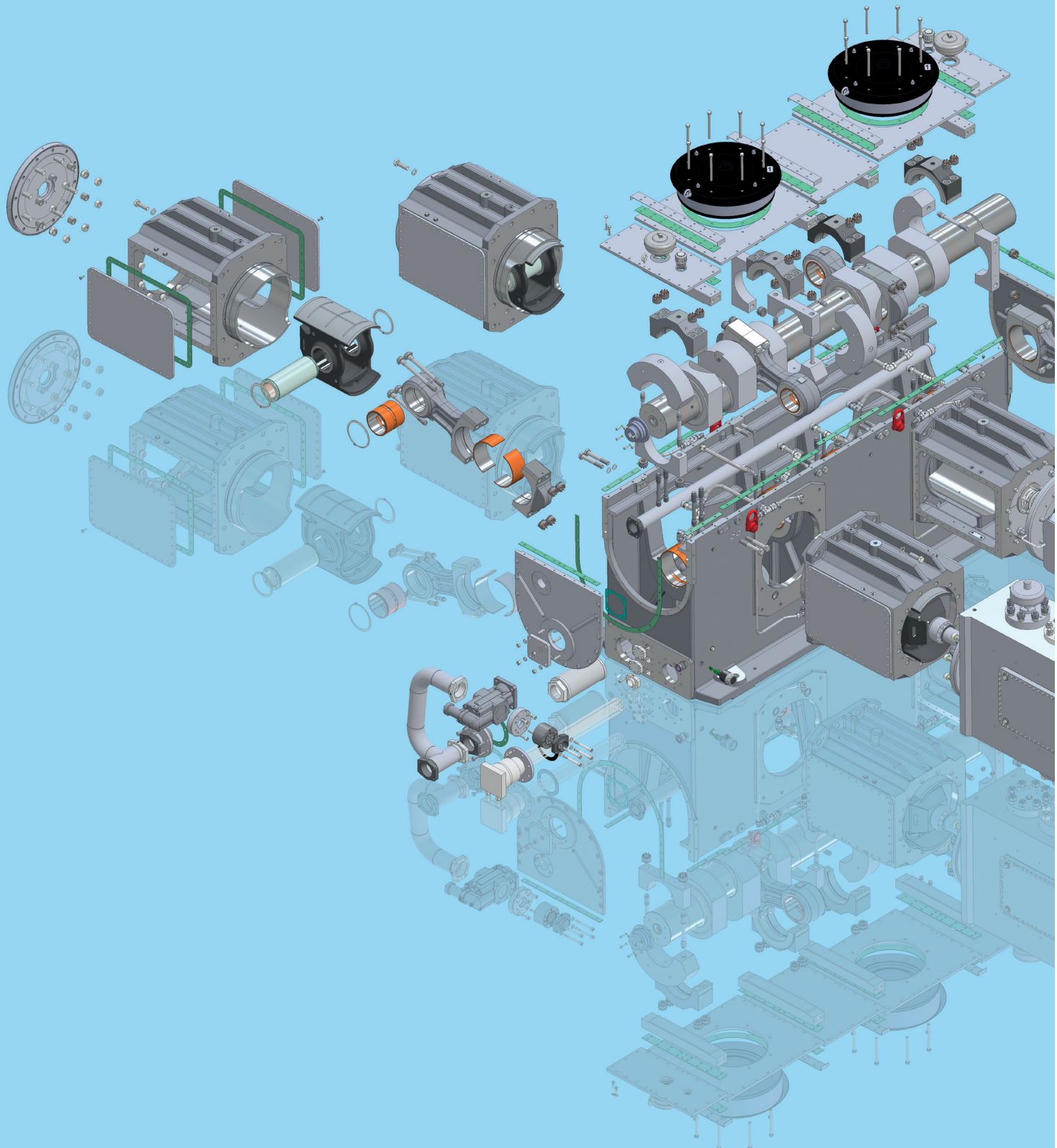
LMF high-speed compressors meet the ISO 13631 requirements and are designed for gas compositions of various applications. Five proven frame sizes and a large number of predesigned cylinders enable LMF to offer the right solution for any application.



CompXpert App for easy configuration is available at:  
<https://www.lmf.at/compX>



# SPECIAL FEATURES AT A GLANCE





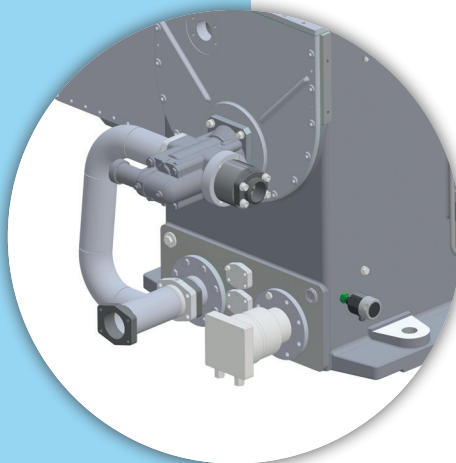
## Innovative Cylinders

LMF's wide range of cylinders allow customers to select the configuration that meets their exact requirements. Cylinders are available air-cooled or water-cooled, lubricated or non-lubricated, with liners, etc. subject to the specific needs of the compression duty.



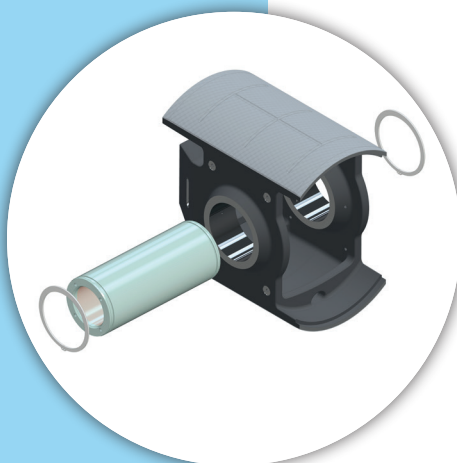
## Rigid Connecting Rods

The HS compressors feature durable connecting rods manufactured from steel with multiple jackbolts and a heavy-duty I-section. Main and connecting rod bearings are identical for lower service cost. Special pin bearing design for better durability and protection in case of upset condition.



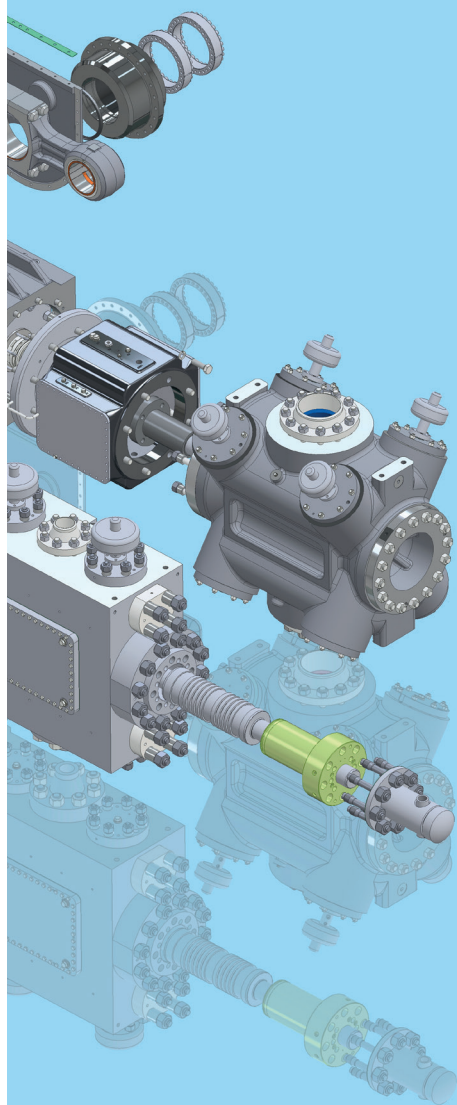
## Full Pressure Lubrication

A shaft-driven lube oil pump provides cooled oil through a full-flow oil filter to all moving parts in the frame.



## Crossheads

Rigid one-piece design, finite element optimized for low oscillating mass. Soft iron coated with case hardened steel crosshead pins.



# TECHNICAL DETAILS

## HS Series

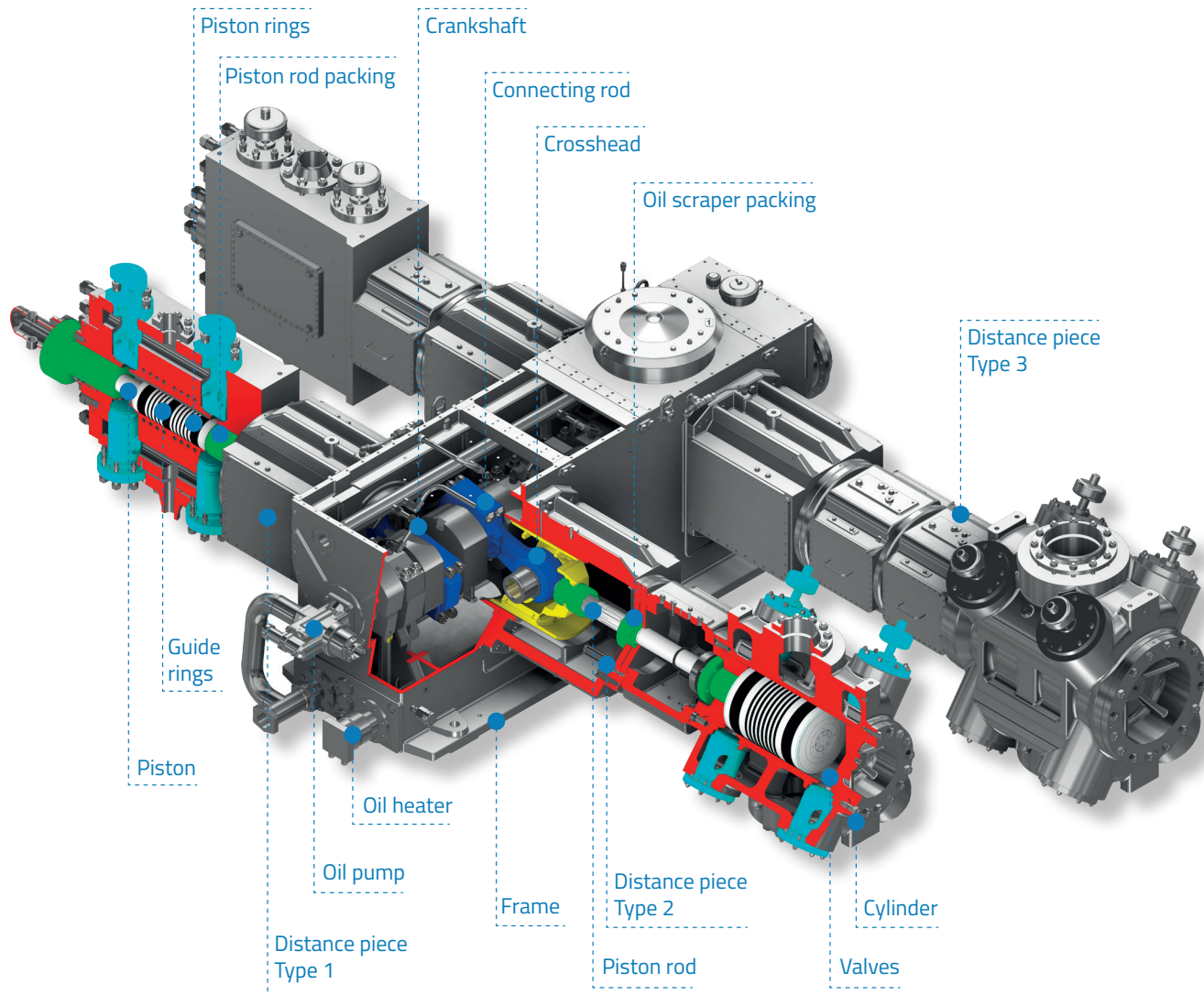
Balanced-opposed two, four or six throw reciprocating compressor, crosshead design, with up to six stages.

## Options

- ⊙ Non-lubricated
- ⊙ Water-cooled
- ⊙ Replaceable liners
- ⊙ Gas tight up to 20 bar
- ⊙ Cylinders and liner in Ni-Resist

## Features

- ⊙ Direct coupling to electric motor, diesel or gas engine
- ⊙ High-speed up to 1800 rpm
- ⊙ Compact design
- ⊙ Easy access for maintenance and service

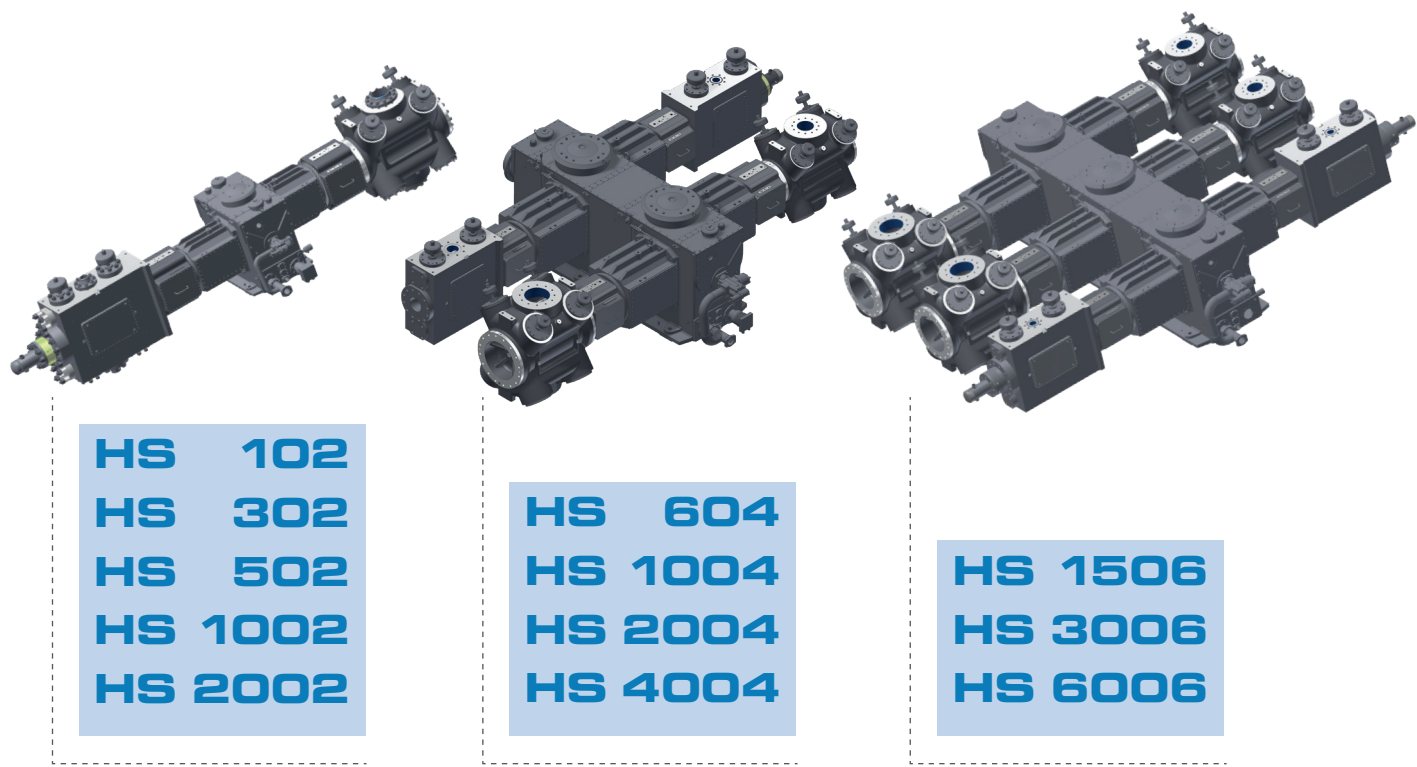


| FRAME                            | 100          | 300          |              | 500          |               |               | 1000          |               |               | 2000          |               |               |
|----------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                  | LMF<br>HS102 | LMF<br>HS302 | LMF<br>HS604 | LMF<br>HS502 | LMF<br>HS1004 | LMF<br>HS1506 | LMF<br>HS1002 | LMF<br>HS2004 | LMF<br>HS3006 | LMF<br>HS2002 | LMF<br>HS4004 | LMF<br>HS6006 |
| Number of Throws                 | 2            | 2            | 4            | 2            | 4             | 6             | 2             | 4             | 6             | 2             | 4             | 6             |
| Rated Power [kW] @ max. speed    | 100          | 300          | 600          | 500          | 1000          | 1500          | 1000          | 2000          | 3000          | 2000          | 4000          | 6000          |
| Rated Power [BHP]                | 136          | 408          | 816          | 680          | 1360          | 2039          | 1360          | 2719          | 4078          | 2719          | 5438          | 8158          |
| Stroke [mm]                      | 100          | 100          |              | 150          |               |               | 150           |               |               | 180           |               |               |
| Stroke [in]                      | 3,9          | 3,9          |              | 5,9          |               |               | 5,9           |               |               | 7,1           |               |               |
| Maximum Rod/Pin Load Total [kN]  | 35           | 75           |              | 110          |               |               | 220           |               |               | 440           |               |               |
| Maximum Rod/Pin Load Total [lbf] | 7860         | 16860        |              | 24728        |               |               | 49457         |               |               | 98915         |               |               |
| Maximum RPM                      | 1800         | 1800         |              | 1200         |               |               | 1200          |               |               | 1000          |               |               |
| Max Piston Speed [m/s]           | 6            | 6            |              | 6            |               |               | 6             |               |               | 6             |               |               |
| Max Piston Speed [ft/min]        | 1181         | 1181         |              | 1181         |               |               | 1181          |               |               | 1181          |               |               |
| Crankshaft Centerline [mm]       | 355          | 400          |              | 500          |               |               | 550           |               |               | 600           |               |               |
| Crankshaft Centerline [in]       | 14           | 15,7         |              | 19,7         |               |               | 21,6          |               |               | 23,6          |               |               |

COMPRESSOR MODEL  
IDENTIFICATION CODE

HS1002

- number of throws
- kW (for example 1000 kW)
- high-speed balanced-opposed



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### CompXpert App

CompXpert App for easy configuration

is available at: <https://www.lmf.at/compX>



[www.lmf.at](http://www.lmf.at)



your high pressure solution