

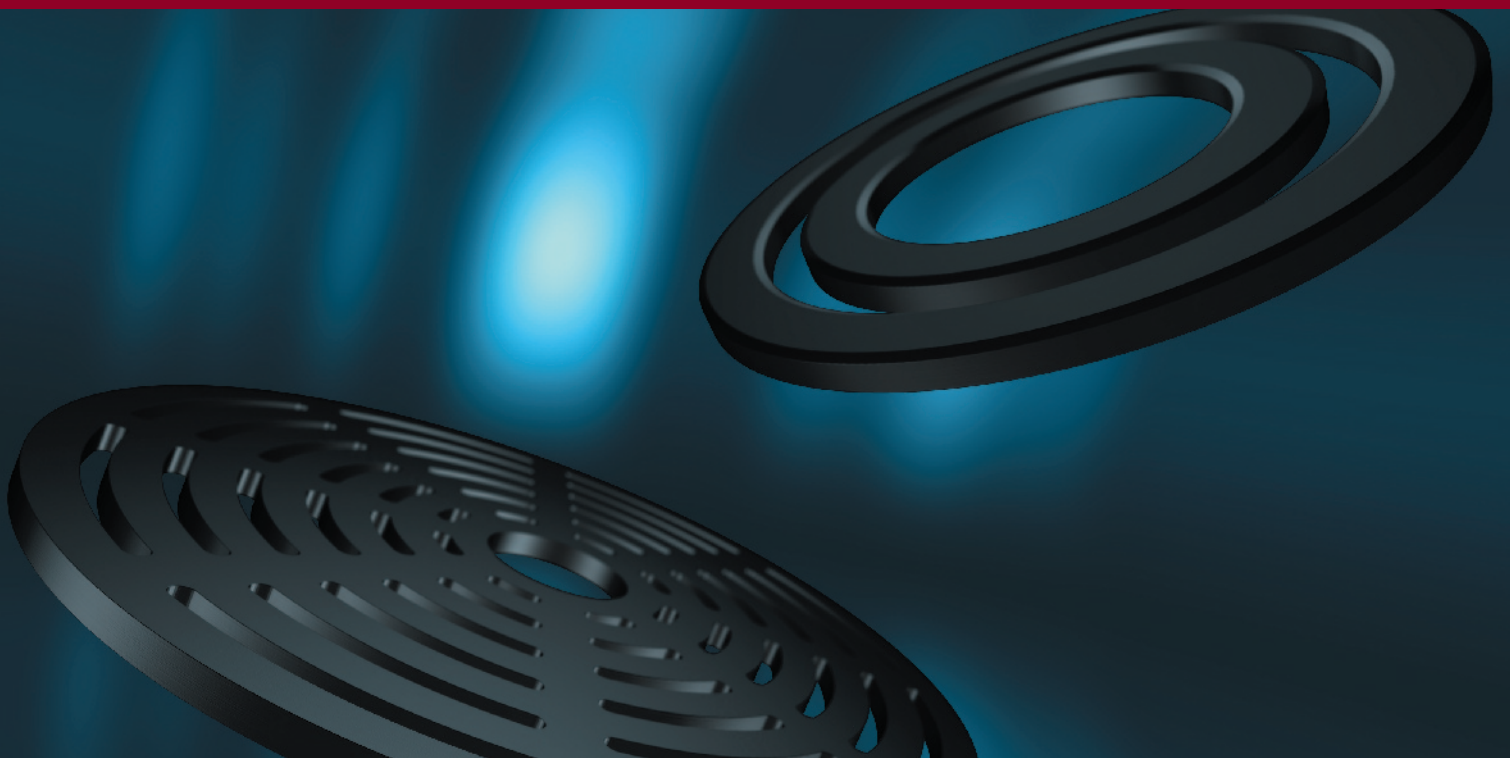
# HOERBIGER HP – THE high-performance material for compressor valves

## **Lasts in even the most demanding applications**

The combination of dynamic impact load, exposure to extreme temperatures and often corrosive gases demands utmost durability of the valve plate and ring materials used in reciprocating compressors.

After intensive fundamental research and several years of comprehensive field tests, HOERBIGER has now launched the high-performance material HP. This is the first material exclusively developed for compressor valves. Made of carbon fibre reinforced fluoropolymer, HOERBIGER'S HP material considerably prolongs the lifespan of compressor valves in even the most demanding applications thanks to its outstanding qualities.

- HOERBIGER HP is both chemical and corrosion resistant.
- HP valve plates are resistant to fatigue and crack propagation.
- Even at large valve diameters and low differential pressure, HP valve plates and rings are incomparably tighter than regular plates and rings thanks to their complete lack of residual stress and the resulting absolute flatness.
- HOERBIGER HP does not absorb moisture and thus assures high dimensional stability of the valve plates and rings.
- HOERBIGER HP is suitable for exposure to all kinds of gases, especially corrosive gases.



# HP Material

## Application among others:

- Corrosive gases
- Chlorine, HCl, vinyl chloride, ammonia
- Low-temperature applications (low suction temperatures)
- LNG boil-off gas (approx.  $-150/-160^{\circ}\text{C}$ )
- Ethylene (approx.  $-80/-100^{\circ}\text{C}$ )
- Propylene (approx.  $-45^{\circ}\text{C}$ )
- Propane (approx.  $-45^{\circ}\text{C}$ )
- Ammonia
- Extraordinary valve sizes
- Valve plates with a valve diameter of more than 317 mm

Chemical/petrochemical industry

LNG

Ethylene storage

Propylene storage

LPG

Industrial cooling

## Application range:

- Differential pressure ranging from 25 to 55 bar depending on valve type as well as ring and plate thickness
- Temperatures ranging from  $-200^{\circ}\text{C}$  to  $230^{\circ}\text{C}$
- Resistant to gases such as  $\text{Cl}_2$ ,  $\text{NH}_3$ , HCl, vinyl chloride, oxygen
- For both lubricated and non-lubricated applications
- Approved for oxygen exposure by the German BAM Institute

## HOERBIGER HP material already proves its superiority in applications at:

Salzgitter Stahl, Germany	Nitrogen	since May 2004	8,000 h
Asahi Glass, Japan	Natural gas	since Jan 2003	12,000 h
Showa Denko, Japan	Ethylene	since April 2003	16,000 h

[www.hoerbiger-compression.com](http://www.hoerbiger-compression.com)



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