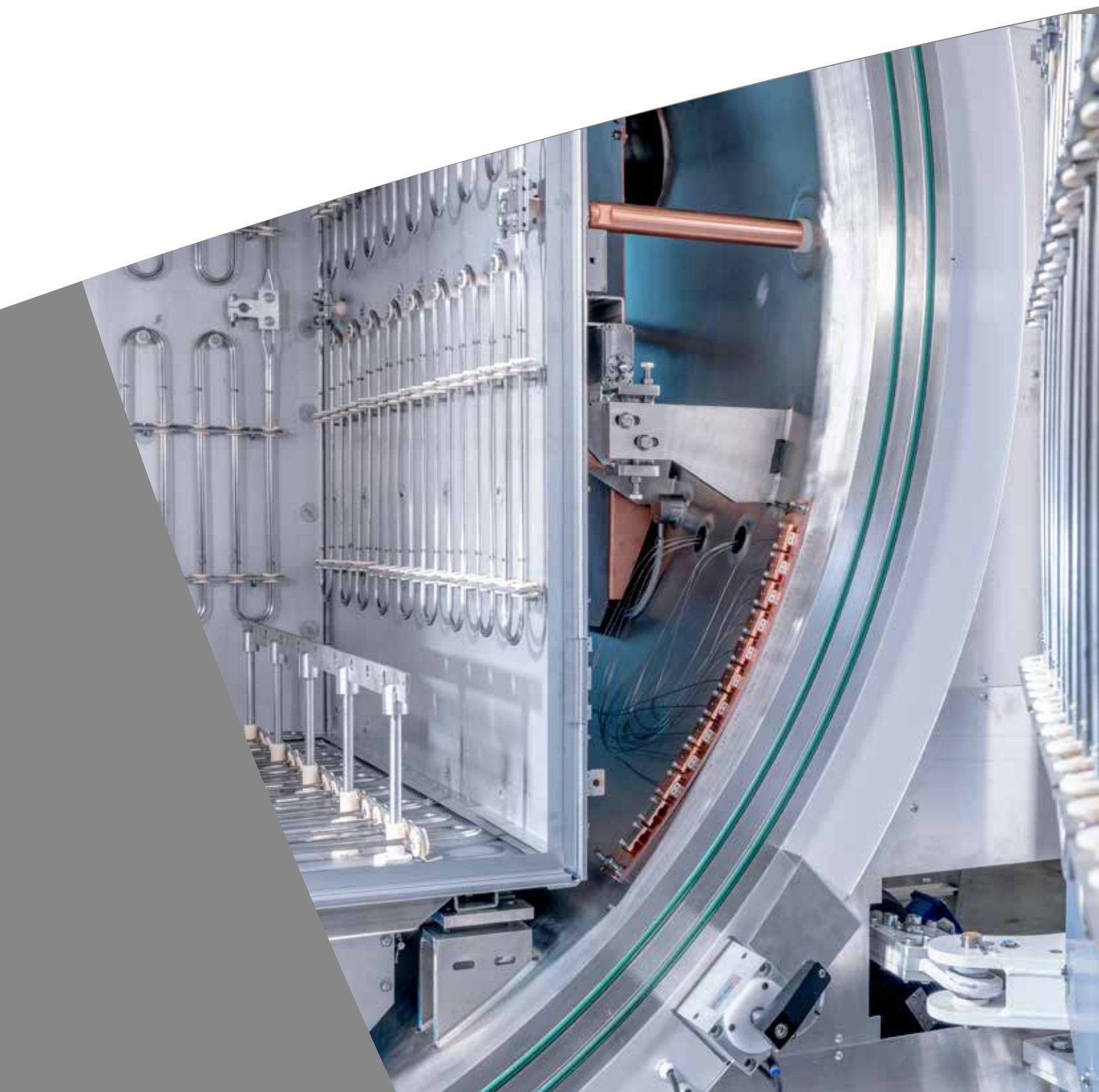


# Heat Treatment in Carbon-Free Atmosphere

Refinement of Materials and Sintering of Components



# Heat Treatment in Carbon-Free Atmosphere

## Refinement of Materials and Sintering of Components

MOV furnaces are metal-heated systems, designed for heat treatment in vacuum. They cover a wide range of industrial applications that require high vacuum, temperature and a particularly clean, carbon-free atmosphere.



### Advantages:

- Operating temperature up to 2400°C
- Ultimate vacuum up to  $1 \times 10^{-6}$  mbar
- Fast cooling for short cycle time
- Excellent temperature homogeneity
- Well elaborated safety concept
- Environment friendly technology



### Heater material:

- Niobium
- Molybdenum
- Tantalum
- Tungsten

**The systems are flexibly configurable :**

- Design and usable dimensions
- Process temperature and heater material
- Vacuum level and pumping type
- Loading: Horizontal, Top- or Bottom
- Middle heater
- Internal/external fast cooling

**Applications...**

- Bright- and stress-free annealing
- Degassing and cleaning
- Sintering and infiltration
- Annealing

**...for**

- Refractory metals
- Super alloys
- Precious metal alloys
- Stainless steel
- etc.



PVA Industrial Vacuum Systems GmbH is a subsidiary of PVA TePla AG. The Wetzlar-based company is a leading manufacturer of highly innovative vacuum systems. With more than 1,000 plants on the market and 50 years of experience in the high-temperature field, PVA Industrial Vacuum Systems GmbH builds and markets thermal process plants and systems for the development, manufacture and treatment of high-quality materials at high temperatures. In conjunction with its own Application & Innovation Lab, PVA Industrial Vacuum Systems GmbH also supports its customers with individual system and application developments - right up to series production.



PVA Industrial Vacuum Systems GmbH is an internationally established supplier of systems and facilities for developing, producing, treating and refining sophisticated industrial materials using:

<b>Vacuum</b>	<b>High temperature</b>	<b>Plasma</b>
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