

High Vacuum Brazing

Joining Process of Highest Quality



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Our vacuum furnaces are specially designed for high vacuum brazing applications in a wide variety of industries such as aerospace, energy technology, electromobility, etc..

Nowadays the modern technologies require high vacuum level as well as high-purity process atmospheres. The systems are made for robust high volume brazing applications, but also for extremely reaction-sensitive materials.

Advantages for the customer:

- Fully automatic furnace operation
- Short cycles due to fast cooling
- Long lifetime
- Large-area brazed joints
- Complicated geometries can be joined
- Graphite or metal heater

Process:

- Max. temperature: 1700°C
- Temperature homogeneity up to ± 5 K
- High vacuum level up to: 1×10^{-7} mbar
- No oxidation due to vacuum atmosphere



Metal heated system type MOV



Graphite heated system type COV



Multi chamber brazing system

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

Wide range of applications, for example:

- High volume brazing applications
- Brazing of highly reactive metals
- Vacuum interruptors
- Plate heat exchangers, e.g. PCHE
- Heat exchangers for heat pumps
- 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:

Vacuum	High temperature	Plasma
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