Graphite Purification

High Temperature and Reactive Gas Processes

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Our COV-type furnaces are specially designed for purification of graphite- and CFC-parts. Impurities can be removed at high temperatures in vacuum. Treatment with reactive or non-reactive gas is implemented according to the customer's demands to obtain impurity levels of 15ppm and less. Consequently, PVA TePla reactors are known to provide maximum system uptimes.

Advantages for the customer:

- Fully automatic furnace operation
- Highest product quality
- Long lifetime
- High process reproducibility

Unique chamber design:

- Minimizes contamination of the reactor system
- Increases the lifetime of wear units
- Horizontal or vertical designs

Application:

- Graphite purification
- CFC purification

Process:

- Max. temperature: 2.400°C
- Working pressure:
  1x 10^{-3} mbar < p < 950 mbar
- Reactive and non-reactive gasas can be used to obtain very low impurity levels

Typical sizes:

Type	Usable space (mm)	Max.charge load
COV 571 R	Ø600x900	300 kg
COV 972 R	Ø1220x1400	2000 kg
COV 1072 R	Ø1420x1500	2500 kg
COV 1162 R	Ø1420x2000	2500 kg
COV 1263 R	1500x1500x2000	2000 kg
COV 1272 R	Ø1800x2000	4000 kg

PVA Industrial Vacuum Systems GmbH is a subsidiary of PVA TePla AG. The Wettenberg-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