



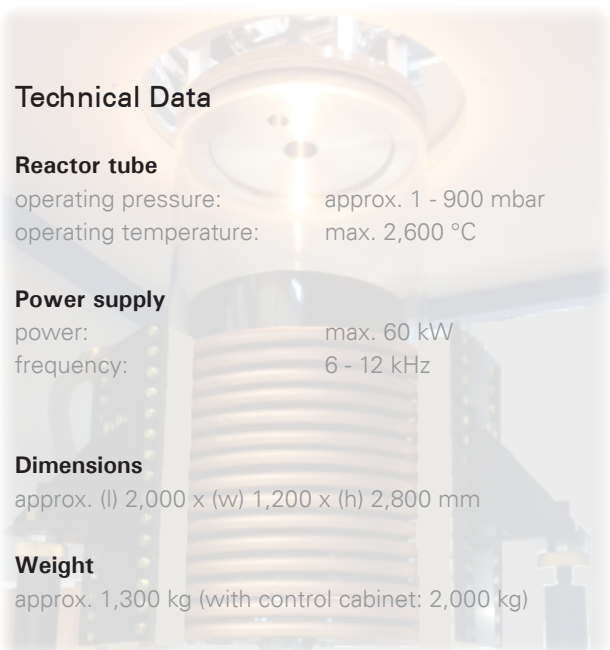
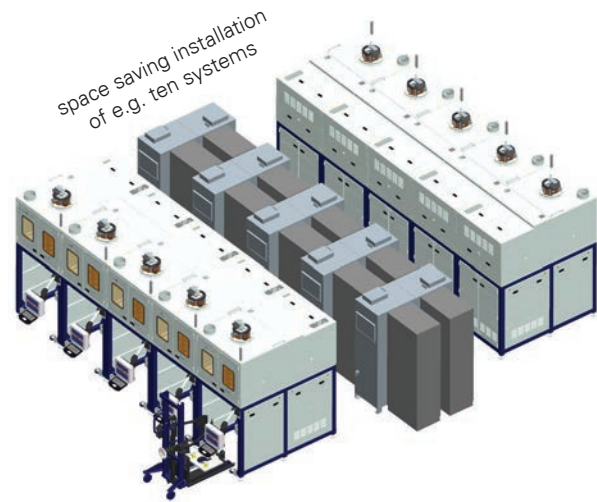
baSiC-T

New Generation Silicon Carbide Crystal Growth Furnace

baSiC-T - New Generation Silicon Carbide Crystal Growth Furnace

The PVA TePla physical vapor transport (pvt) system baSiC-T has been especially designed for Silicon Carbide (SiC) crystal growth by sublimation of a source powder at high temperatures. The baSiC-T system design is based on a modular concept and allows the use of substrates (seeds) up to 6" diameter.

- **Designed for Power Electronic Applications**
 - ◇ high automation level for massproduction
 - ◇ Fab Management Software Solution available
 - ◇ small footprint, compact placement
- **Available for 4" and 6"**
- **Inductive heating using field-proven coil-designs**
 - ◇ Low power consumption
(approx. 10KW at 2,200 °C stable control)
- **Mobile loading/unloading concept for hot zone**
- **Superior Control System with**
 - ◇ intuitive operation at a high level of automation
 - ◇ process visualisation with enhanced trending features
 - ◇ offline recipe setup solution with lots of recipe options by sets of parameter
 - ◇ long term process data logging, long term data retrieval
 - ◇ control system and visualisation works independently (safety concept)
 - ◇ system control loops configurable by sets of parameter
- **Excellent Safety Concept**
 - ◇ CE conformity
 - ◇ different level of system safety components ensures safe operation
 - ◇ quality measurements and extended quality documentation
- **Close cooperation with customers, institutes and component suppliers**
- **Applications**
 - ◇ Power Electronic
 - ◇ High Frequency Electronics
 - ◇ Opto-electronic



Technical Data

Reactor tube

operating pressure: approx. 1 - 900 mbar
operating temperature: max. 2,600 °C

Power supply

power: max. 60 kW
frequency: 6 - 12 kHz

Dimensions

approx. (l) 2,000 x (w) 1,200 x (h) 2,800 mm

Weight

approx. 1,300 kg (with control cabinet: 2,000 kg)

PVA TePla in Power Electronic industries

PVA TePla's equipment solutions for the Power Electronic industry include also the SiCube as another system to produce SiC-crystals (PVT and HTCVD), the Floatzone System FZ35 and various CZ-systems for growing Si-crystals with highest purity as well as a vacuum furnace for graphite cleaning and recycling of susceptors after GaN-epitaxy. Different innovative metrology technologies of PVA TePla are available for non-destructive quality inspection.

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