SEMCO

BATCH FURNACES

SiC Crystal Growth Furnace & SiC Batch **Wafer Processing Systems**

Dedicated Platforms for SiC Wafer Processing

- Designed for mass production: 4", 6" & 8"
- Pressure control: < +/-0.1torr
- Temperature control: < +/-0.5°C
- Fast heating/cool down capabilities



Mass Production Furnace up to 300mm Wafers

- Batch-type production furnace Up to 4 independant tubes Best in-class uniformity
- Diffusion, LPCVD and oxidation 50-400 wafers per tube
- Automatic loading



MEMSLAB

R&D / Small Production PECVD Platform up to 300mm Wafers

- Batch-type PECVD furnace
- · Direct plasma, low RF
- Pin mark free, uniform color
- Horizontal wafer process
- Up to 25 wafers per batch
- Multiple layer deposition possible
- In-situ cleaning



R&D / Small Production Horizontal

Furnace up to 300mm Wafers

- Batch-type tube furnace
- Diffusion, LPCVD, oxidation
- 1-4 independant tubes
- Up to 100 wafers per tube
- · Ideal for process engineering
- Small footprint
- Manual or automatic loading

Matching Robotic & Wafer Transfer

- Common central robotic for up to 8 tubes (two 4T furnaces front to front)
- · Configurable multi wafer transfers (6in, 8in, back-to-back, etc.)
- Configurable multi-process avoiding cross contamination with dedicated WTS and boat grippers (change tool option)
- Multi-axis robot or SCARA
- Contactless vacuum, venturi or Bernoulli systems
- Monitored by industrial PLC & windows-based supervisor with proprietary automation software



