



Perfect Soldering/RTA

- Rapid Thermal Annealing/Soldering up to 50K/s, 450°C, max. 1100°C
- under: non active/active gases, plasma, positive pressure, vacuum $<5 \times 10^{-6}$ mbar
- with electrical signal feed through, mechanical pressure applied, optical analyze
- void free with and without flux, with solder paste
- for laser modules, high frequency and power electronics
- package sealing, BCB curing/baking, AuGe/SiAu alloying
- wafer bump reflow, flip chip die attachment

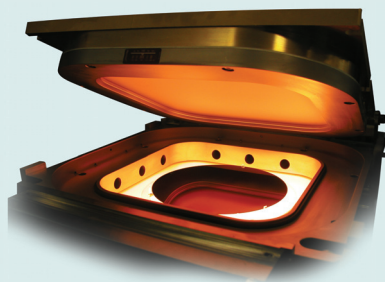
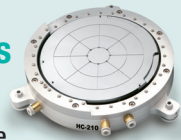


Micro-Manipulator System

microscope based manual die bonder/repair and test station for Hybrids/micro electronics and micro mechanics

High Precision Hot Plates/Chucks

max. 360°C/450°C, solid, uniform, robust and reliable



Atomic Layer Deposition

- IR lamp based ALD
- with temperature/pressure modulation capability
- for alternated layer deposition e.g. $\text{Al}_2\text{O}_3/\text{Si}_3\text{N}_4$
- with easy to replace quartz in liner
- with in situ rapid annealing up to 1050°C

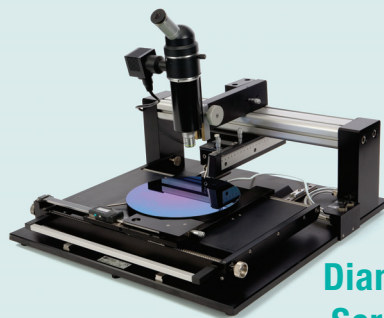


Multi Purpose Fast Ramping Process Furnace

- floor space, energy and gas saving: no energy/gas consumption during stand by
- loading at room temperature – ramp up – processing – controlled active cool down
- LPCVD: Poly Si, Si_3N_4 , epitaxy, LTO, TEOS, MOCVD, Carbon Nano Tubes, APCVD
- annealing, LTCC sintering, Polyimide-baking, alloying, thick film paste firing
- diffusion, thermal oxide/VECSEL
- max. 1150°C, under non active/active/inflammable and poisoned gases, plasma, vacuum $<5 \times 10^{-6}$ mbar

LTCC Sintering Press

- for zero X/Y shrinkage, 50000 N, 1100°C



Diamond Scribes

For ceramic/glass substrates and Silicon wafers



Vacuum Soldering/Annealing/Curing Oven

- 3 plates, 486 x 486 mm
- individually temperature controlled, water cooled
- up to 500°C under controlled atmosphere