



ECM
TECHNOLOGIES

JET FIRST SERIES

RAPID THERMAL PROCESSING FURNACE

Versatile and cost-effective software controlled bench top-type rapid thermal processing (RTP) tool specifically designed to meet the requirements of R&D laboratories and small-scale production units.



POSSIBLE PROCESSES

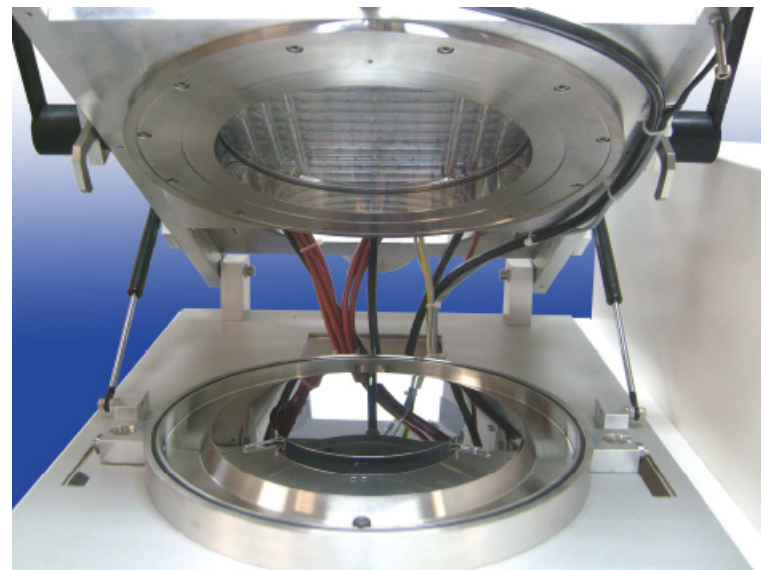
- Rapid thermal annealing (RTA)
- Implant monitoring
- Rapid thermal oxidation (RTO)
- Rapid thermal nitridation (RTN)
- Rapid thermal diffusion (RTD)
- Crystallization, carbonization
- Contact alloying
- Selenization (with optional hardware)

RTP MODULE CHARACTERISTICS

- Reactor technology Water cooled metal chamber
- RTP heating system Crossed-lamp IR Technology
- Temperature range RT to 1200°C
- Temperature uniformity (typical) +/- 1°C
- Ramp rate 1°C/s to 200°C/s
- Temperature control TCs, Pyrometer & digital PID
- Cooling Fan & water-cooled reflector

KEY FEATURES

- Software-controlled stand-alone single chamber reactor
- Cold wall design for process reproducibility
- Multizone halogen lamp heater
- Up to 4 MFC-controlled gas introduction lines
- Substrate size up to 300 mm diameter
- Atmospheric and high vacuum process capabilities
- Square chamber available for solar applications
- Ideal for process development & small scale production



MAIN STRENGTHS

- Easy **control of temperature profiles** to adjust the process: fast ramp up & cooling
- Versatile tool for a large range of applications
- Standard equipment allowing **short delivery times**
- Process at **atmospheric pressure** or **under vacuum**