JETLIGHT SERIES

BATCH TYPE RTP / RTA FURNACE

The **ECM Jetlight 50** system is a **compact and robust heat treatment system** suitable for the **Rapid Thermal Annealig** (RTA) of a wide range of material substrates and structures *(Electronic Grade Si, steel glass, SoG c-Si, III-V, II-VI, Germanium, superconductors, ceramics etc.)* with a maximum size of 2-inch diameter (50 mm).

The furnace is equipped with a **tubular quartz reaction chambe**r and is therefore compatible with the processing of 3D samples with a maximum length of 100mm.

KEY FEATURES

- Software-controlled stand-alone single chamber reactor
- Hot wall chamber design
- Microprocessor-based thyristor technology
- Up to 2 MFC-controlled gas introduction lines
- Substrate size up to 50 mm diameter
- Atmospheric and vacuum process capabilities
- PID temperature control through thermocouples
- Ideal for research labs & academic applications

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

POSSIBLE PROCESSES

- Rapid thermal annealing (RTA)
- Rapid thermal oxidation (RTO)
- Rapid thermal nitridation (RTN)
- Rapid thermal diffusion (RTD)
- Printed contact firing
- Crystallization
- Densification
- Structural stress relaxation

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**