

# JETFIRST

## BENCH - TOP RAPID THERMAL PROCESS FURNACE

100, 200, 300 mm diameter



ECM Technologies' JetFirst system is the most popular bench-top lamp furnace in the ECM Lab Solutions range. This RTP (rapid thermal processing) system is versatile, software controlled, and cost-effective. It consists of a compact and robust halogen lamp with a metallic water cooled reactor chamber to maintain an ultra-low memory effect. The user-friendly operating interface is clearly structured and ensures for a quick system start-up in just a few hours. The temperature measurement control system provides accurate and repeatable thermal control across the temperature range. The lamp array, upper flange, and quartz window are mounted in a rotating top lid giving full access to the chamber for easy loading and unloading of the wafer.

Silicon carbide coated graphite susceptors are also available for the processing of various small samples and compound semi materials. A PID system provides accurate and repeatable thermal control across the temperature range, and running PIMS via a computer-dedicated supervisor enables recipe programming and monitoring of the entire RTP system. The high reliability and performance of the JetFirst adheres to small-scale production requirements, and the bench-top design allows for a quick and easy installation in lab facilities.

- SEMI
- Optoelectronic
- Microelectronics
- MEMS
- PV

## AN ECM GROUP OFFER

ECM Lab Solutions helps laboratories to develop innovative products and processes by offering advanced furnace technologies under one ECM Group brand. This offer gathers all laboratory furnaces from the ECM Group. Its expertise includes the heat treatment of steels, ceramics and silicon. As well as crystal growth applications, coatings and melting processes for a wide range of research fields.



## FEATURES

### 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

### Process

Atmospheric pressure or under vacuum



## OPTIONS

- Primary vacuum pump,
- Secondary vacuum pump
- Susceptor
- Secondary vacuum configuration , Diffusion pump, Turbo pump, Cryogenic pump
- Spare chamber
- Hydrogen configuration
- Software-controlled, and stand-alone single chamber reactor
- Cold wall design for process reproducibility
- Multizone halogen lamp heater
- Gas introduction lines Up to 4 MFC-controlled
- Atmospheric and high vacuum process capabilities
- Solar Applications : Square chamber available for solar applications
- Qualification : Single-wafer RTP furnace for process engineering and qualification
- Lamp Technology : High-performance crossed lamp technology
- Gas introduction capability

## RTP FURNACES RANGE



**JETSTAR**

Standalone RTP Furnace



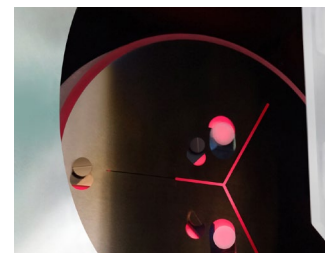
**JETCLIP**

SEMI - MESC RTP Module



**JETLIGHT**

Batch Type RTP Furnace



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