

RAPID THERMAL PROCESSING (RTP) FACILITY



MODEL: AS-ONE

INSTALLATION PLACE:

Cleanroom of "Nanotechnology and Microsystems Laboratory", Department of Microelectronics

DESCRIPTION: Rapid Thermal Processor

The AS-One rapid thermal processor main features are:

- Stainless steel cold wall chamber
- Infrared halogen lamp furnace
- Thermocouple temperature control
- Optical pyrometer temperature control
- High speed digital temperature controller
- Up to 5 process gas lines with mass flow controllers
- Vacuum valve, vacuum gauge and mechanical pump
- Full PC control

SPECIFICATIONS

1. Temperature Range: 400 - 1250°C
2. Temperature Accuracy= $\pm 2^\circ\text{C}$
3. Temperature reproducibility= $\pm 1^\circ\text{C}$
4. Sample size: from small samples up to 100mm diameter wafers
5. Maximum duration versus time: 1250°C 180sec, 1200°C 5min, 1150°C 6min, 1100°C 7min, 1050°C 10min, 1000°C 12min, 900°C 60min, <800°C 120min

APPLICATIONS

1. Post Implantation Annealing
2. Contact Alloying
3. Rapid Thermal Oxidation (RTO)
4. Rapid Thermal Nitridation (RTN)
5. Densification and Crystallization of thin films
6. Glass Reflow
7. Silicidation

CERTIFICATION/ACCREDITATION

The facility is not certified or accredited.

CONTACT: services@imel.demokritos