

JETFIRST 300 C

Stand-alone RTP 12" System

Versatile and cost-effective, software controlled stand alone type RTP tool, specifically designed to meet requirements of R&D laboratories and small-scale production units



POSSIBLE PROCESSES :

- _Rapid thermal annealing (RTA), Oxidation (RTO)
- _Nitridation (RTN), Diffusion (RTD)
- _Implant monitoring
- _Crystallization, Carbonization
- _Contact alloying
- _Selenization (with optional hardware)
- _H2 process environment with specific feature

RTP MODULE CHARACTERISTICS :

- _Stainless steel double wall water cooled chamber
- _36 IR lamps heating system with tangential fans cooling
- _Crossed lamps disposition, 6 independently controlled zones
- _100kW heating power and 3x400V+N+Gnd power supply
- _Temperature from Ambient to 1200°C
- _Temperature uniformity better than +/-5°C on 200mm wafer
- _Ramp rate from 1°C/sec to 150°C/sec
- _Control temperature thanks to 5 TCs K type and 1 pyrometer
- _Digital PID temperature controller
- _Dimensions mm (LxWxH) : 1100x1000x1400

KEY FEATURES :

- _Software-controlled (PLC and PC)
- _Cold-wall design for process reproducibility
- _Chamber design for easily changeable
- _Multi-zones IR halogen lamps heater
- _Up to 6 MFC controlled gas introduction lines
- _Substrate size up to 300mm diameter (340mm max Ø susceptor size)
- _Platen designed for multi TC, pyrometer and support quartz pins locations
- _Atmospheric and high vacuum process capabilities (better than 5*10⁻⁶mbar)
- _Microprocessor-based thyristor technology



MAIN STRENGTHS :

- _Large chamber (Ø400mm) for wafer up to 12" size and for multi-wafers on large diameter susceptor
- _Easy control of temperature profiles to adjust the process : fast ramp up and cooling adjustable
- _Versatile tool for a large range of applications, ideal for research labs and academic applications
- _Optionals features : MFC gas lines, primary and secondary vacuum, pressure control, quenching system, ...
- _Process at atmospheric pressure or under vacuum, neutral gas or partial pressure, depending of options
- _Spare chamber optionnaly offered to avoid cross-contamination between processes
- _Standard equipment allowing short delivery time