Heatpulse 4100 Rapid Thermal Processor

Model: Heatpulse 4100

Application: Rapid Thermal Process

Maker: AG Associates

Type: Automatic Single wafer

Condition: Used. Refurbished

Specifications: Meet AG Associates' new Heatpulse 4100 specifications

Wafer size: 3 to 6 inch capability. Customer will specify the wafer size

Temperature: 400-1100 °C with ERP Pyrometer. Maximum 1250 °C(Not recommend)

Gas lines: 2 gas lines with 2 MFC. N2,O2 or Ar.

Price: Pls email us with your RFQ in detail. Appreciate your time.

Price Term: Exworks. Buyer is responsible for shipping. FOB/CIP is optional at extra cost.

Crating: Included

Payment Term: 50% against PO, 50% before shipping. Other payment terms are optional depending on buyer's credit.

Installation & Training if necessary: Optional at extra cost.

Lead time: 8 to 12 weeks depending on PO time and 1st payment.

Valid Time: Subject to prior sale without notice.

Warranty: 13 months Ex-works non-consumable parts warranty after shipping or 12 months after acceptance. The shortest one.

Facility: Buyer's responsibility.

Sales tax, custom duty and tariff if applicable: Buyer's responsibility.

Options: Buyer will make choice before the PO.

1) TC for 200-400 °C
2) Susceptor load/unload station
3) Pre-Aligner
4) New Al chamber
5) 3/4/5/6 inch susceptors
6) Chiller for ERP Pyrometer
7) TC wafer for ERP Pyrometer calibration
8) Omega Meter for ERP Pyrometer calibration
9) 3rd, 4th MFC
10) Spare Parts: Isolated Quartz Tube, Quartz Tray, Lamps, PCBs, Robot, Controller, O Rings, Fuses etc.

Description and Configuration:

The AG Associates Heatpulse4100 rapid thermal anneal system contains a subsystem for each of the following:

- Electronics (including a dedicated microprocessor)
- Mass-flow-controlled gas handling
- Cooling
- ULPA filtration
- Mechanical assemblies

Software programs, called recipes, specify the details for each process. The 4100 system includes a 3-1/2-inch floppy disk drive for process recipe storage. A three-axis industrial robot (Equipe ATM-105 with ESC-100 or equivalent) automates processing by transporting wafers into and out of the process chamber. It uses closed-loop feedback for precise motion control and accurate positioning.

To provide cold-wall processing, water is circulated through the process-chamber walls. The quartz isolation tube is cooled with nitrogen or compressed air.

Specifications:

Wafer sizes: 3/4/5/6 inch capability(standard).

Ramp-up rate: Programmable, 1 – 180°C per second.

Steady-state duration: 1 – 600 seconds per step.

Ramp-down rate: Programmable, 1 – 180°C per second. Ramp-down rate is temperature and radiation dependent, maximum 150°C per second.

Recommended steady-state temperature range: 400 – 1200°C.

ERP temperature accuracy: +5°C to -9°C, when calibrated against an instrumented thermocouple wafer (ITC).

Temperature repeatability: + 7°C or better at 1150°C wafer to wafer. (Repetition specifications are based on a 100-wafer set.)

Temperature uniformity: + 10°C across an 6-inch wafer at 1150°C. (This is a 1-sigma deviation from 100-angstrom oxide uniformity.) For a titanium silicidation process, no more than 1.5 percent increase to uniformity during the first anneal at 650 – 700°C.

Physical Dimensions:

Width: 40 in. (102 cm)

Depth 42 in. (107 cm)

Height 82 in. (208 cm)

Weight:: 1800 lbs (816 kg)

Shipping weight:: 2000 lbs (907 kg)

Utility Requirements

Power / Water Type Refer to the Heatpulse® 4100 Facilities Manual.

Domestic: 208 VAC, 60 Hz; 125 A maximum;3-phase plus ground and neutral

European: 400 VAC, 50 Hz; 90 A maximum;3-phase plus ground and neutral

Japanese: 200 VAC, 50/60 Hz, 125 A maximum; 3-phase plus ground

The Heatpulse 4100 may be subject to the export control laws of the United States and other countries. Buyer will comply with the restrictions of the laws and might need to sign the "**Customer Statement**" before PO. The trademarks of the equipment and parts contained in this documents belonged to the Original Equipment Manufacturers.