



## **Applications**

RTA (Rapid Thermal Annealing)
Selenization and Sulfurization
Diffusion
RTO (Rapid Thermal Oxidation)
Ohmic contact annealing
Crystallization and Densification

# AS-Premium RTP - SYSTEM

RTP system for up to 156x156 mm<sup>2</sup> substrates

From room temperature up to 1300°C

Standard vacuum capability

Multi configurations reactor and lamp furnace

## **Specifications**

The AS-Premium system can process samples up to 156x156 mm<sup>2</sup>.

The reactor platform and the machine have been designed to accommodate a wide range of configurations to meet the process requirements of our customers.

The chamber can receive a single side or a double side lamp heating furnace. The design of the process chamber allows manual loading or the connection to a cluster tool or a glove box (options).

Pyrometer and thermocouple temperature control are standard features. The fast digital PID temperature controller provides high temperature reproducibility. Graphite and silicon carbide coated graphite susceptors are available for processing of samples with encapsulation.

_				c					
12	9	C I		t	ea	П	П	re	36
	I = 1	ю.	19		C G	14	ч.		7

Substrate size	Up to 156x156 mm² wafers Small substrates using susceptors				
Process chamber	Stainless steel cold wall chamber technology				
Temperature range	Standard version: 1100°C High temperature and double side heating versions: 1300°C				
Temperature control	Thermocouple and pyrometer temperature control Fast digital PID / RTP temperature controller				
Vacuum and gas	Up to 8 process gas lines with digital mass flow controllers One purge gas line Vacuum valve and vacuum gauge				
Control	Full PC control, up to 100 steps per recipe Human interface designed in respect of SEMI E95-0200 Full data logging and process historicals				

### **Optional features**

Graphite and silicon carbide coated susceptors Rough vacuum pump and turbo pump, automatic pressure control with throttle valve Fast cooling system, Selenization kits

#### **Customer support**

Outstanding customer support for hardware, software and process Efficient remote support using software diagnostic capabilities High expertise in RTP processes of our process engineers Capability to support customer for process optimization

### **Physical specifications**

**Facilities** 

Voltage: 3x400V+N+Gr / 3x220V+Gr Power: 46 kW, 56 kW or 80 kW

Water: 2 to 4 bars, pressure drop 1 bar, 15 to 30 l/mn

Compressed air: 6 bars (valve actuation)

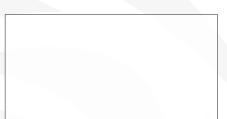
Process gas fittings: double ferrule ¼ or VCR ¼ (option)

 Width
 730 mm
 28,8"

 Dimensions and weight
 Depth
 1,450 mm
 57,1"

 Height
 1,950 mm
 76,8"

Mass 350 to 450 kg 771 to 992 lbs







139 rue des Walkyries 34000 Montpellier - FRANCE

Tel: +33 467 20 23 63 Fax: +33 467 20 26 89 Email : sales@annealsys.com

www.annealsys.com