







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

www.annealsys.com





**OANNEALSYS** 

Annealsys manufactures Rapid Thermal Processing (RTP) and Chemical Vapor Deposition (CVD/ALD) systems. Our customers are Research and Development laboratories and companies for small scale production applications. The company Annealsys was established in 2004 in Montpellier, France. Annealsys provides outstanding technical and process customer support through a worldwide sales and service organization.





### **High Temperature RTP system**

- Substrates up to 100 mm diameter
- Process temperature from 450°C up to 2000°C
- Low inertia tungsten heating elements
- High vacuum system with turbo pump
- Graphene and silicon carbide applications

Annealsys provides machines for processing substrates in the fields of silicon, compound semiconductors, nanotechnologies, MEMS, solar cells, glass, etc. Our process engineers have experience in processing a wide range of substrates: silicon, gallium arsenide, silicon carbide, sapphire, metal, glass and polymers. The unique features of our machines allows development of new materials.

# **DLI-CVD / DLI-ALD** systems

### **APPLICATIONS:**

## Oxides, nitrides, metals and alloys, 2D and 3D materials, etc

Our DLI-CVD / DLI-ALD machines are equipped with direct liquid injection vaporizers for the utilization of the widest range of chemicals including low vapor pressure and thermally unstable precursors. These machines offer multi process capability inside the same process chamber: CVD, ALD, MOCVD, pulse pressure CVD, RTP, RTCVD. These unique features offer unlimited capabilities for the development of new materials.



### 2-inch DLI-CVD / DLI-ALD system Multi process: CVD, ALD, RTP...

- Up to 6 direct liquid injection vaporizers
- From room temperature up to 1100°C
- In situ annealing capability (RTP)
- Multi process system: CVD, ALD, RTP... • Up to 8 process gas lines with MFC
- Optional turbo pump
- Optional glove box interface



### 100 mm DLI-CVD / DLI-ALD system Low cost of ownership

- Up to 4 direct liquid injection vaporizers
- From room temperature up to 800 • Multi process system: CVD, ALD...
- · Rotating and heating substrate holder
- Up to 8 process gas lines with MFC
- Optional turbo pump
- Optional motorized loadlock



### 200 mm DLI-CVD / DLI-ALD system Optional capacitance plasma

- Up to 4 direct liquid injection vaporizers
- From room temperature up to 800° Multi process system: CVD. ALD...
- · Rotating and heating substrate holder
- Up to 8 process gas lines with MFC
- Optional turbo pump Optional motorized loadlock

# RTP / RTCVD systems

Rapid Thermal Annealing (RTA), Rapid Thermal Oxidation (RTO) Ohmic contact annealing, Implant annealing RTCVD of graphene and hBN, selenization Silicon carbonization, crystallization, densification RTCVD of poly silicon, SiO2, SiNx,...



## **AS-Micro**

### **3-inch RTP system for laboratories**

- From room temperature up to 1250°C
- Fast ramp rates up to 250°C/s
- Standard vacuum and gas mixing capabilities
- Twin chamber version to avoid cross contamination



#### Versatile RTP systems 100 mm (4") and 150 mm (6")

- · Floor standing system, reduced footprint
- From room temperature up to 1450 Cold wall chamber technology
- · High vacuum capability
- Up to 5 process gas lines with MFC
- Optional turbo pump
- Optional fast cooling system



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

- Top or both side heating
- Multi zone lamp furnace
- From room temperature up to 1300°C
- Manual or loadlock loadi

· Optional fast cooling system

- · Cold wall chamber technology
- · High vacuum capability
- Up to 8 process gas lines with MFC Optional turbo pump



### 200 mm RTP system from R&D to production

- Multi zone lamp furnace
- From room temperature up to 1450°
- Manual or cassette to cassette loading
- Cold wall chamber technology
- High vacuum capability • Up to 8 process gas lines with MFC
- Optional turbo pump
- Optional fast cooling system