

LPE

LIQUID
PHASE
EPITAXY



The **Cyberstar Liquid Phase Epitaxy** Furnace from **ECM Lab Solutions** is a liquid phase epitaxy installation for II-VI crystals. It is mainly used for the deposition of device quality Cadmium Telluride, other II-VI binary and ternary compounds, or other III-V compounds. The process involves the popular graphite boat slider technique. The furnace is optimized for high stability, low thermal inertia, and is able to homogeneously heat up the large graphite boat necessary for handling a 40 x 60 mm² sample.



EFFECTIVE DIMENSIONS

20 x 25 mm²
36 x 38 mm²
40 x 60 mm²

- Medical Imagery
- LED
- PV
- Metallurgy
- Telecommunications
- Defense

AN ECM GROUP OFFER

ECM Lab Solutions helps laboratories to develop innovative products and processes by offering advanced furnace technologies under one ECM Group brand. This offer gathers all laboratory furnaces from the ECM Group. Its expertise includes the heat treatment of steels, ceramics and silicon. As well as crystal growth applications, coatings and melting processes for a wide range of research fields.



OPTIONS

- Standards AMS 2750, ATEX
- Primary vacuum, Dry pump, Roots pump
- Secondary vacuum configuration , Diffusion pump, Turbo pump, Cryogenic pump
- Wet or Dry Hydrogen
- Accelerated/ forced cooling
- Gas panel : Nitrogen, Argon, Hydrogen...
- Pressure regulation

FEATURES

Thermal

- Graphite (operation up to 3,000 °C)
- Tungsten (operation up to 2,350 °C)
- Molybdenum (operation up to 1,600 °C)

Atmosphere management

Mass flow, Pressure regulation, Humidity, Dryer, Purifier

Cooling

- Forced convection Quenching: < 1.45 bar
- Speed variation

Supervision

Process piloting: Production tracking, Process data backup

Ergonomics

Loading platform, Handling tool

APPLICATIONS

Annealing
Brazing & Sintering
Magnetic annealing
Glass-to-metal sealing

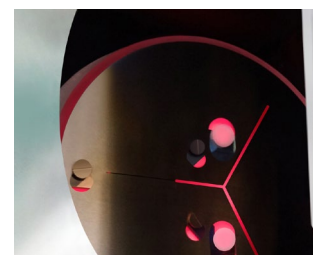
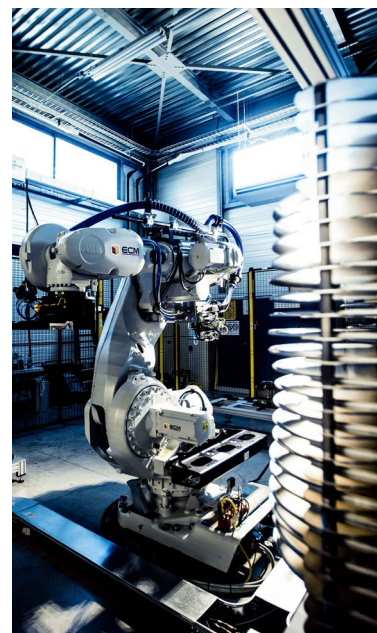
MATERIAL

- Semiconductors



INTEGRATION

Possibility of Robotization and
Compatibility with Automation



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