## CRISTAL

VACUUM BELL

**FURNACE** 





The ECM Lab Solutions Cristal furnace is a vacuum heat treatment system from ECM Technologies. It is the ideal furnace for high temperature and clean treatments. Its resistor design ensures exceptional precision and temperature uniformity. The furnace chamber is fully metallic, and several options of heating element are possible. This range allows for treating pieces under vacuum with a wide range of working temperatures and a precise positioning of the parts. These features make it ideal for research & development, prototyping, pilot lines and even industrial production.



# EFFECTIVE DIMENSIONS

400\*600 MM (Diameter \* Height)

- Additive manufacturing
- Aeronautic
- Automobile
- Medical

### 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.



#### **APPLICATIONS**

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

#### **MATERIAL**

Titanium Steel Ceramics Iron



#### **FEATURES**

#### **Thermal**

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

#### Athmosphere 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

#### **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

#### INTEGRATION

Possibility of Robotization and Compatibility with Automation





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