# LILLIPUT

VACUUM
HEART LIFT
FURNACE





The ECM Lab Solutions Lilliput furnace is the only hearth-lift vacuum furnace from ECM Technologies available in this laboratory range. It addresses high added value applications. This furnace is compact and offers the possibility to load and conveniently instrument the load directly on the lift. It is equipped with touch panels (supervision) to control and access all of the furnace features and to collect data linked to the process. For increased flexibility, it is also possible to choose heating elements according to usage, performance, and materials to be treated. The specific design of the furnace makes it ideal for laboratory use, as well as, for universities and R&D centers.



# EFFECTIVE DIMENSIONS

20\*220 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 cooling
- Quenching: < 1.45 bar
- Speed variation

#### Supervision

Process piloting: Production tracking, Process data

backup

#### **Ergonomics**

Loading platform, Handling tool

# **OPTIONS**

- Standards AMS 2750, ATEX
- Rotary pump, Primary vacuum, Dry pump, Roots pump
- Secondary vacuum, Diffusion pump, Turbo pump, Cryogenic pump
- Accelerated, forced cooling, accelerated cooling via forced convection
- Gas panel: Use of special gas: hydrogen and other reactive gas and Partial pressure of neutral gas or reductive gas

# INTEGRATION

Possibility of Robotization





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