

BRIDGMAN

HIGH
TEMPERATURE
CRYSTAL GROWTH
FURNACE



The **Cyberstar Bridgman** Furnace, with high precision control and multiple data process recording and acquisition, is based on mono- or multi-heater configurations. This enables it to obtain a better control of the thermal gradient in the different thermal zones. Both resistive and inductive heating technologies are possible, in accordance to the operating temperature and growth environment. The furnaces can also be equipped with crucible rotation without losing crucible temperature measurement – thanks to the **Cyberstar** rotating thermocouple system. The specific design of the furnace makes it ideal for laboratory use, universities, and R&D centers.

EFFECTIVE DIMENSIONS

Ø 100 mm single crystal setup
250 Kg mass Polycrystalline
solidification setup

- 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.



FEATURES

Precise crucible translation

with a resolution up to 0.01 mm/h

Maximum pulling speed of the crucible

100 mm/min

Ingot size up to 200 kg

Thermocouples system

for temperature measurement in the hot and cold zones

Use of open crucible or a closed Ampoule configuration

Automatic control of the heating process

Resistive or inductive heating system

Maximum temperature

2600°C

Gradient

from 1° to 30° C/cm

Internal effective diameter

up to 500 mm (or equivalent)

OPTIONS

- Possible vacuum chamber for primary and secondary vacuum
- Automatic control of solidification process via Cyberstar software
- Temperature measurement by Pyrometers
- Controlled mass flow of different atmosphere gases

INTEGRATION

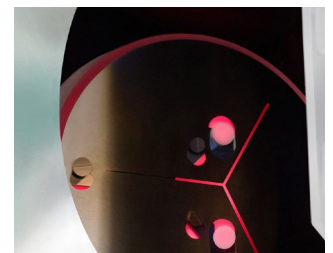
Possibility of Automation and software controlled growth process

MATERIAL

- SoG c-Si
- III – VI compounds
- Silicon
- Ca F₂
- Cadmium Telluride(Cd Te)
- InSb



Cyberstar



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