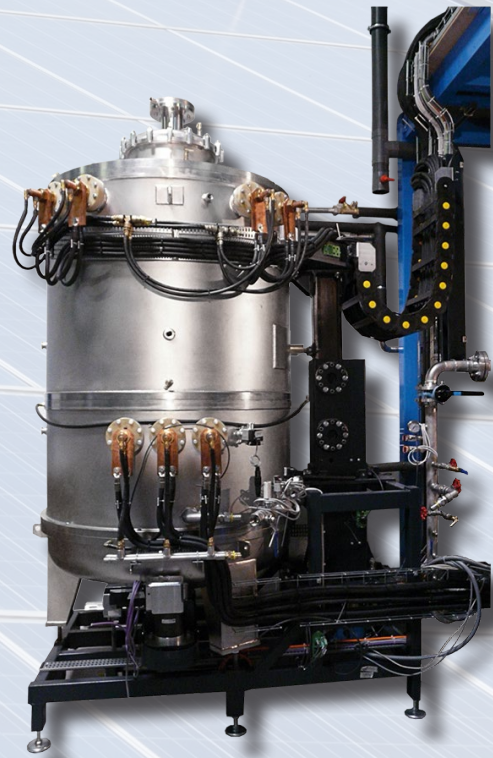


# PV 80

## DIRECTIONAL SOLIDIFICATION FURNACE G2

550mm\*550mm\*750mm



The **PV80** furnace is a directional solidification furnace from **ECM Lab Solutions**. It is ideal for G2 silicon ingot crystallization, up to 80 kg, and adheres to directional solidification process engineering requirements at laboratory or pilot scale. The PV80 furnace is available with Crystalmax® cast-mono technology and is designed with a three-zone thermal set-up. This set-up enables high reliability, reproducibility, and flexibility in the process growth of silicon ingots. The furnace is user friendly and designed specifically for research and development.



- PV (Solar) Renewable Energy

### APPLICATION

Silicon ingot crystallization

### INTEGRATION

Turnkey Line

## 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

### Vessel

Water cooled double walls made of stainless steel (Cold wall technology)

### Vacuum

Ultimate vacuum level 1.10<sup>-3</sup>mbar

Working vacuum level: from 1.10<sup>-2</sup> to 1.10<sup>-3</sup>mbar

### Pressure

Partial pressure of Argon neutral gas

Maximal pressure patm+50mbar

### Maximum temperature

1550°C (1575 °C)

### Heaters

120 kW, 3 heating zones

### Safety

Optimised design to limit the consequences of a silica crucible breakage

### Maximum heating rate

500 °C/hour

### Heating elements

Graphite

### Insulation casing

60 mm graphite

### Ingot

Dimensions : G2, suitable to cut 4 bricks (156×156 mm<sup>2</sup>)

Weight : Up to more than 80 kg

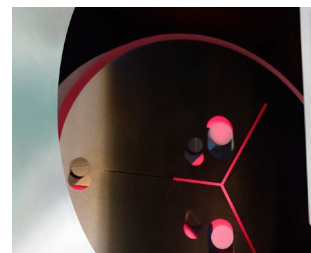
Growing technology : CrystalMax® cast-mono, HP-multi or multicrystalline

### Ergonomics

Loading : Bottom loading /unloading, safe and easy

Supervision : Touchscreen interface

Operation modes : Fully automatic thermal cycle or manual mode



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