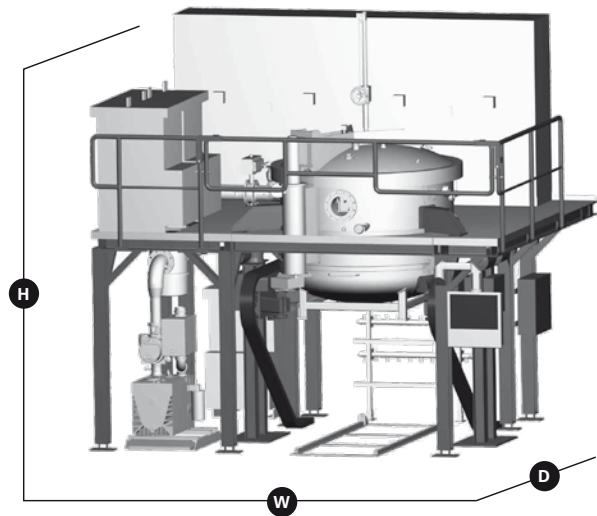




MultiCrystallizer VGF 732 Si

MultiCrystallizer VGF 732 Si

The MultiCrystallizer is a vacuum furnace designed for the directional solidification (based on the Vertical-Gradient-Freeze Process) of multi-crystalline solar silicon ingots for photovoltaic wafer production.



Performance Features

Vessel design	stainless or mild steel, vertical design, bottom loader by electro-mechanical lowering and lifting device	
Heating System	three independent adjustable heating zones (top, bottom and sides) including surrounding thermal insulation and heat sink in the bottom structure of the frame.	
Max. temperature	> 1,500 °C	
Pump station	for vacuum pressure better 1×10^{-1} mbar in the clean, cold and empty furnace: <ul style="list-style-type: none"> • roots pump (approx. 500 m³/h) and • mechanical fore vacuum pump (approx. 200 m³/h) 	
Voltage Supply	3 x 400 V at 50 Hz or optional at 60 Hz, +/- 5%	
Power supply	max. 300 kVA (connected power)	
Cooling water	min. 2 bar - max. 4 bar	approx. 150 l/min
Compressed air	min. 6 bar - max. 8 bar	for valve operation
Argon supply	min. 2 bar - max. 3 bar	up to max. 50 slm

Dimensions (approx.)

H Height	4,500 mm
W Width	4,500 mm
D Depth	4,000 mm

Specific features

- MultiCrystallizer VGF 732 Si:**
- Crucible dimensions of approx. 890 mm x 890 mm x 420 mm (Jumbo size/G5),
 - Achievable ingot dimensions of approx. 834 mm x 834 mm x >230 mm*
 - Ingot weight without feeding approx. 350 – 450 kg*

*depending on density of feedstock material

Options

- Granular Feeding System
- Production Control System
- G4 Hot Zone