



FZ-30

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Floatzone silicon single crystal grower

Technical Data

Max. Crystal Pulling length:	2,700 mm
Maximum poly length:	2,000 mm
Crystal diameter:	Up to 200 mm
Pulling speed:	0 – 30 mm/min (mechanical set point)
Fast travel:	600 mm/min
Rotation speed:	0 - 30 rpm

RF-Generator

RF output power:	120 kW
RF frequency:	2.5 MHz nominal
Power control:	SCR-power thyristor triggered by pulse transformers
Oscillator valve:	water-cooled ceramic type ITK 60

The floor area required for the complete set-up including vacuum/gas system, control panel, operator's platform and computer station is approx. 5 x 6 meters (excluding the generator).

Weight: approx. 14,000 kg (net)
The weight includes the high frequency generator and control panel.

Cooling water

- Mechanically clean (mesh width 0.38 mm)
- Carbonate hardness max. 8° DH
- Chemically neutral
- Electrical conductivity max 300 µS
- max. outlet pressure 0,5 bar

FZ-system

Quantity:	approx. 100 l/min
Pressure:	4 - 6 bar
Temp. Inlet:	12- 25 °C
Temp. Outlet:	max. 35 °C



Generator and tank circuit

Quantity:	approx. 100 l/min
Pressure:	4 - 6 bar
Temp. Inlet:	12 - 20 °C
Temp. Outlet:	max. 35 °C

Argon supply

Quantity:	20 l/min during growth
Quantity quick fill:	250 l/min for purging
Pressure:	5 - 12 bar, recommended 10 bar
Quality:	according to Semi standard C57-0305, grade 4.8

Rev. - Stand: 010