



FZ-30

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Float zone silicon single crystal grower

Technical Data

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|------------------------------|---|
| 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