

Optical Floating zone furnace

Model : FZ-T-4000-H-VIII-VPO-PC



Optical floating zone furnace



Crystal Systems Corporation

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Specification

Model		FZ-T-4000-H-VIII-VPO-PC
Type of lamp		Halogen lamp
Number of lamp & mirror		Mirror: 4 pieces
		Lamp : 4 pieces
Atmospheric pressure	Pressure	0.95 MPa
	Vacuum	6.7×10^{-3} Pa (5×10^{-5} Torr)
Sealing		Shafts and Quartz tube are sealed by O-ring
Growing method		Mirror stage moves
Max. temperature		2,200°C
Temperature in normal use		1,850°C
Lamp power		1,200W (300W x 4 lamps)
		4,000W (1,000W x 4 lamps)
Temperature difference		<30°C (along circumference of crystal)
Lamp cooling		Air
Mirror cooling		Air
Quartz tube sealing part		Water
Max. growth length		150 mm
Upper shaft moving distance		150 mm
Max. feed rod length		200 mm
Mirror stage: slow moving		0.01~300mm/hr
Mirror stage: fast moving		6~150 mm/min
Upper shaft slow moving		0.01~300 mm/hr
Upper shaft fast moving		6~150 mm/min
Upper/lower shaft rotation speed		5~100 rpm
Monitoring		CCD camera & LCD
Control system	Computer	LabVIEW / Windows 10 (with remote control function)
	Manual	Hand-Control-Box
Output voltage stability		Less than +/-0.2 % against +/-10% of source
Atmosphere gas flow rate (flow meter)		a. 5L/min Ar (*1) b. 500cc/min O ₂ (*1) c. 10L/min Air with compressor
Utility	Electricity	3-phase 200V, 30A
	Water	3~5L/min
Size of furnace		Main body 700W×760D×1950H (mm)
		Control box 605W×760D×1700H (mm)

Remarks:

1. Alternative lamp power (option): 150W / 500W / 750W
2. (*1) It is possible to change another type of gas and flow rate.
3. Warranty;

Crystal Systems Corporation warrants for one (1) year from the date of installation, except for abnormal use. Glassware such as (1) lamp (2) mirror and (3) quartz tube are out of warranty.

4. Specifications may be changed without any notification.