

4 Mirror IR Image Furnace

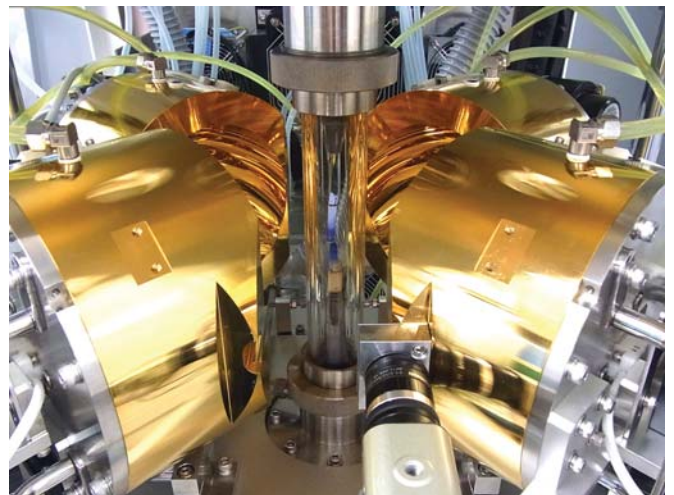


Features:

- Unsurpassed performance in a convenient, stand-alone design
- Efficient deep elliptical 4-mirror design
- Gold-coated mirrors for high reflectivity
- 2100° C in floating zone region
- Excellent IR power stability
- No external cooling required
- Single phase power

Capable of Growing:

- High temperature superconductors
- Dielectrics and magnetic materials
- Metal compounds
- Semiconductors
- Optical crystals
- Precious stones



Crystallized material within 4 mirrors

New: Improved Vacuum Atmosphere

Conveniently placed panel for access to the floating zone region including:

- Ports for inputting external gases
- Regulator for pressure control to 10 bar
- NW25 port for pumping to high pressure



Specifications

Lamp	Number & Type	4 Halogen 800 W Lamps
	Cooling	Integrated air blower
	Lamp power stability	0.01 V (100 V full scale)
Mirror	Type	Four elliptical
	Temperature (floating zone region)	2100° C (4 mm material) (can reach 2150° C, T_m of $MgAl_2O_4$)
Shaft control	Crystal growth speed	0.1 to 1.4 mm/hr & 1 to 14 mm/hr
	Shaft drive	Upper & lower independently controlled
	Maximum crystal length	150 mm
	Maximum speed (coarse mode)	20 mm/min
	Rotation ³	2.5 to 40 RPM
Other	Control	Via integrated touch panel display (optional control by remote PC)
	Crystal growth monitoring	Real time via CCD camera
	Max pressure (floating zone region)	1M Pa (10 bar)
	Vacuum (floating zone region)	5×10^{-4} torr
	Size – All controls packaged into one stand-alone unit	Width: 80 cm Depth: 90 cm Height: 180 cm
	Weight	450 kg
	Input power	200 to 240 V, 20A, 1Φ