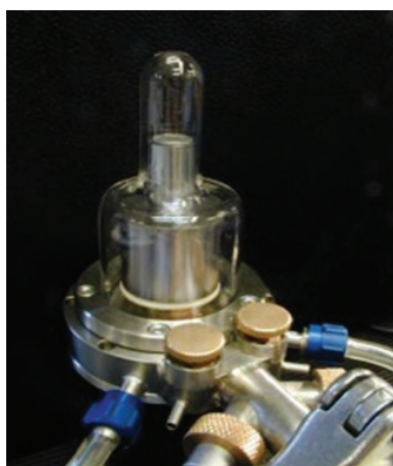


High-temperature X-ray *in situ* furnaces

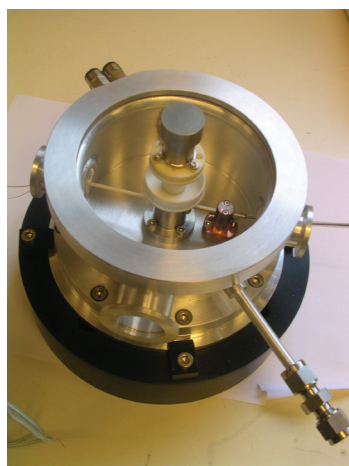
ESRF has developed a family of high-temperature X-ray furnaces, working up to 1000°C. These furnaces are well adapted for *in situ* sample conditioning. They are vacuum- and gas-compatible and cover a large range of X-ray techniques. Two designs are described here.

ESRF can also provide a safety temperature regulator box to control the furnace.

- ◆ Well-adapted to various *in situ* X-ray techniques: diffraction and fluorescence
- ◆ Works in transmission or reflection geometry
- ◆ Vacuum-and gas-compatible



Micro-Tomo Furnace 1000°C closed with a 0.5mm thick quartz chamber. K-type thermocouple and Thermocoax heater with a nickel sample holder.



Sample heating base 1100°C for phase transition or thin film growth studies. K-type thermocouple. Aluminium, quartz or kapton windows.



Temperature regulators and power control units.

Characteristics of the safety temperature regulator box

	Type	Input	Interlocked	Conditioning
Power supply	Delta Electronika 75V/22A	0.5 Volt	water safety	19" rack (L510 xP700 x H810mm)
	Type	Input	output	Temp. Ramp
Controller	Eurotherm 2408	RS232	0 to 5 Volt	5°C/mn maximum