



Modutemp Spindle XRF Bead-makers

Product Specifications



For high volume bead-making requirements, XRF Technology's six-place, electric fusion machine offers solid reliability with ease of installation and operation. These machines are capable of producing up to 30 fused beads per hour, per machine, with all functions accurately controlled and timed. Many laboratories have found that one operator can easily run two of these units simultaneously. The crucibles and moulds suitable for these machines are manufactured by our platinum labware division.



For those applications where the process requires 'mouldibles' in preference to crucibles and moulds, a five-place mouldible version is available.

The Modutemp Rotary-Fusion furnace represents a significant development for the rapid and high-volume production of quality XRF beads.

Electric heating with all solid state controls provides a clean, safe unit with low operating costs.

Automated fusion control ensures that the fusion process is precisely repeatable. With hand-pouring completed, the beads are rapidly cooled to ensure perfect beads every time.

"The only factor which varies is your sample"

Technical Specifications

Model No.	SC142BMP (All Models)
Temperature - Max continuous	1250°C / 2280°F Continuous operation
Crucible spindle	Fabricated from high-temperature alloy to suit crucibles or mouldibles. Quick-release for easy change without dismantling furnace.
Mould Heating/Cooling unit	Mounted to the front of the furnace. Fans individually adjustable to ensure even cooling. Compressed air cooling available on request.
Function Control	PLC automation enables up to seven (7) complete processes to be pre-programmed with 'one button' program selection. (e.g. Nickel, Iron, Manganese, Chromium etc) 'Operator Alerts' where required.
Lining	JM23 (1260°C / 2300°F) refractory brick hot-face insulation with ceramic fibre back-up insulation.
Elements	Three (3) x Silicon Carbide single-ended
Thermocouple	Type 'R' (Pt v. Pt/13%Rh)
Power Control	Solid State, phase angle control applied by the output of temperature control system.
Construction	Twin-skin construction with sturdy, extruded aluminium frame, clad in aluminium, steel and stainless-steel panels. The frame, aluminium and steel panels are all powder coated for protection and ease of cleaning. The steel cased heating module is separated from the outer skin by an air gap. A cooling fan draws air continuously between the inner and outer skins.
Lid	Twin skin, Stainless steel over steel,, counterbalanced top-opening.
Temperature Controller	Integrated control system with PLC directed PID controller functions
Over temperature Protection	Integrated monitory control with PLC directed PID limit control function and discrete thermocouple. Provides three levels of over temperature control for complete safety
Power Requirement	380-415Volt, 50/60Hz, three phase (208/220Volt 60Hz available on request) Requirement to be specified at time of ordering.
Options (Available on request at time of ordering)	Ai kit, for the addition of Ai tablets RH operating handle 2-stage pneumatic mould cooling 5 place for mouldibles
Power	6.0kW
External H x W x D	475 x 1100 x 500mm 18¾ x 43¼ x 19¾"
Weight	95kg 210lbs
Shipping Weight	150kg 330lbs

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