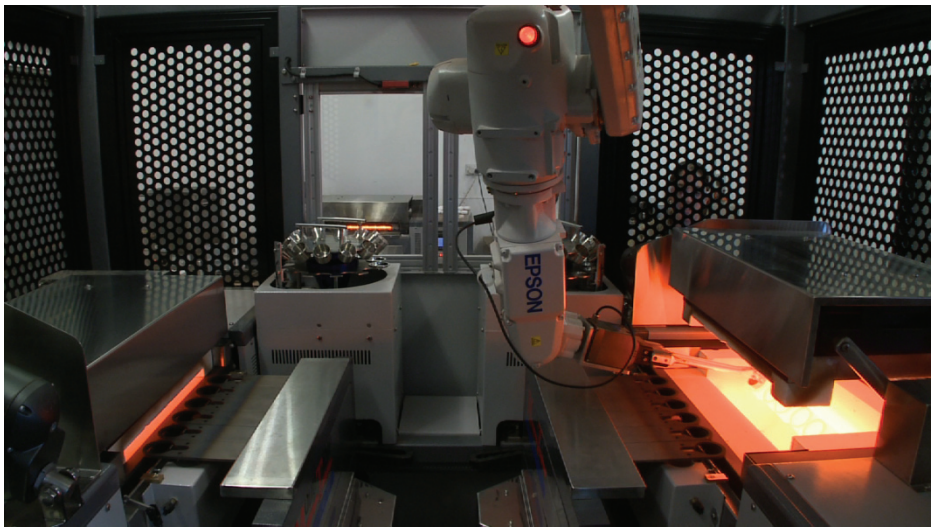
Product Specifications

Robotic Fusion Furnace Systems



- Fully automatic robotic system
- Single or dual furnace configuration
- High throughput glass bead production

The Modutemp system offers an unparalleled opportunity for XRF laboratories to grow seamlessly from a single, manually-operated furnace to a fully-automated robotic system, as required.

Building on its already proven, bead-making furnaces, XRF Technology now offers a Robotic module that can be added to one or two existing furnaces, or supplied as a complete new installation.

Robotic sample handling enables many of the 'human variables' to be removed from the fusion process, while also separating laboratory staff from the heat of the furnaces.

The dual system (pictured above) offers an automated production rate of 50-60 samples per hour, dependant only on the fusion time required for the samples.

The robotic module collects prepared samples and moulds from a load / unload point and supervises the entire fusion process, delivering spent crucibles and fused beads back to the load / unload point. Indexing is maintained throughout to prevent mis-identification.

Technical Specifications

The single furnace system (~30 beads per hour, iron ore, nickel, etc.) comprises:	The dual-furnace system (~60 beads per hour, iron ore, nickel, etc.) comprises:
One Modutemp model SC142BMP-6CRO furnace, fitted with power operation upgrades to lid, cooling slide and mould lifters, one bench top robotic module frame, one robot, fully programmed, fitted with custom gripper assembly and one carousel assembly load / unload station	Two Modutemp model SC142BMP-6CRO furnaces, fitted with power operation upgrades to lid, cooling slide and mould lifters, one floor-standing robotic module frame, one Robot, fully programmed, fitted with custom gripper assembly and two carousel assemblies load / unload station
Optional One steel-framed bench suitable for above system.	**Optional** NA
Dimensions Height (above bench) 1485mm Width 1570mm Depth (installed) 1238mm Depth (for passage through doorways) 620mm	**Dimensions** Height (above floor level) 2290mm Width 1620mm Depth (installed) 2000mm Depth (for passage through doorways) tba
Weight 290kg	**Weight** 420kg
Services required Electricity 380-415v, 50/60Hz, 32amps Compressed Air – If pneumatic mould cooling is fitted to furnace	**Services required** Electricity 380-415v, 50/60Hz, 50amps Compressed Air – If pneumatic mould cooling is fitted to furnace
Load / Unload station One carousel load / unload station complete with 2 half-carousel magazines	**Load / Unload station** Two carousel load / unload station complete with 4 half-carousel magazines
Labware requirements (recommended minimum) 19 x crucibles (6 in preparation, 6 in fusion, 6 in cleaning, 1 spare) 13 moulds (6 in preparation, 6 in fusion, 1 spare)	**Labware requirements (recommended minimum)** 38 x crucibles (12 in preparation, 12 in fusion, 12 in cleaning 2 spares) 26 moulds (12 in preparation, 12 in fusion, 2 spares)

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