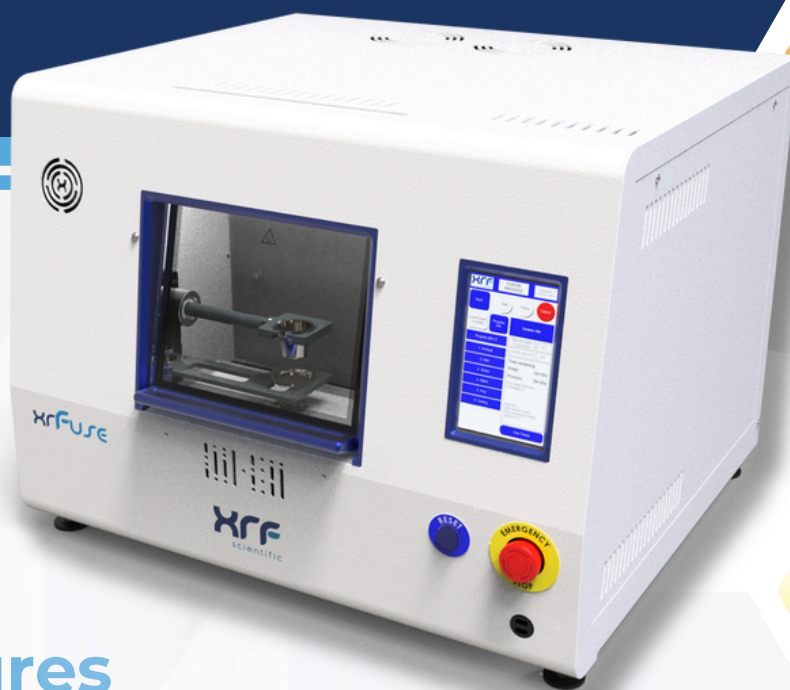


# ELECTRIC FUSION FOR XRF AND ICP ANALYSIS

## XRFUSE 1



## Features



**Upgradable to 2 positions**  
future proof your investment



**1300°C Max Temperature**  
for demanding applications



**Powerful Software**  
flexibility for your customised process



**Applications**  
minerals, materials and more

# NEXT GENERATION FUSION TECHNOLOGY

## XRFUSE 1

### Zero Contamination

The ceramic cradle and holders ensure that the environment for creating beads has zero contamination from these sources

### Reliable and Robust

Designed for max uptime in demanding conditions. Includes very few moving parts for reliable operation

### Safe Operation

All external surfaces are cool to touch. Advanced labware cooling to protect operators. CE certified design



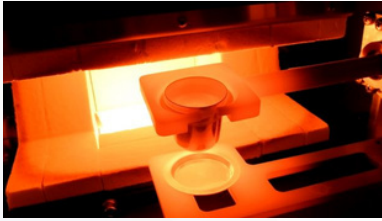
## Overview

Next generation xrFuse fusion technology has arrived. Featuring absolute process flexibility, higher maximum fusion temperatures, advanced labware cooling and streamlined maintenance.

The xrFuse 1 is an instrument that allows for the seamless sample preparation of glass beads for XRF and ICP solutions. The system is a compact machine, ideal for lower throughput users or specialised applications. Through our proprietary quick change-out mechanism, users can alternate between XRF glass bead and ICP solutions preparations in a matter of seconds. The unit is cold-to-cold, fully CE certified, extremely safe and easy to use.

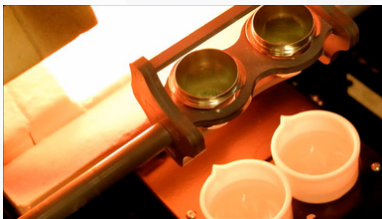
The xrFuse range has evolved from robust and reliable technology developed for high volume, high up time applications in the Iron Ore industry in Australia. This tough environment has driven the development of machines with robust components with significant lifetimes. When you buy an xrFuse, it's built to last!

# FEATURES



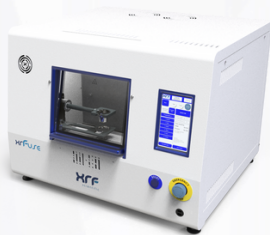
## Fast, Precise Heating and Cooling

xrFuse features a highly efficient furnace chamber to reach your fusion temperature fast. Separate cooling of crucibles and moulds allows you to create the perfect glass bead and to cool crucibles to a safe temperature. Cooling inlets are filtered to ensure no external impurities interfere with your samples. Precise temperature control and programmable heating profiles to handle full spectrum of XRF and ICP fusions.



## Process Flexibility / ICP

The machine is designed for both flexible pre-heating and ICP processes. Simple to access, control and monitor. All at the touch of a button. The user interface is designed in such a way that it can meet the need for consistency of a production laboratory, while at the same time giving the analytical chemist the flexibility to modify parameters as required.



## Fully Upgradable

Purchase a one position machine now and upgrade to a two position system when you need the additional throughput. The upgrade kit can be purchased at any time. The upgrade can be performed at your site, minimising downtime and protecting your initial investment.



## Streamlined Maintenance and Servicing

Simplified maintenance and servicing based on decades of experience in supporting fusion instruments worldwide. Access to global support through our network of international offices and distributors.



## Ongoing Support

We manufacture fusion machines, flux and labware in-house, giving us a unique understanding of lithium borate fusion products and their applications. We can provide ongoing support for:

- Advice on appropriate selection of flux and standards
- Organisation of platinum remake processes
- Technical advice on difficult fusion issues
- On-site support and preventative maintenance programs



# APPLICATIONS

## XRF (Borate Fusions)

Iron ore, copper, nickel, aluminium, bauxite, rare earths, manganese, coal ash, tantalum, zinc, lead, uranium, mineral sands, cement, clinker, ferro alloys, ceramics, catalysts, glass and more.

## ICP (Borate and Alkali Fusions)

Refractories, rocks, chromite, resistant alloys, silicates, aluminates, aluminosilicates, zirconium silicate, barite, titanium oxide, dolomite, limestone, lime and more.

# SPECIFICATIONS

Maximum temperature	1300°C
Number of sample positions	1 (upgradable to 2)
Throughput	Up to 4 beads per hour (expandable with upgrade)
Programmable recipes	Up to 100 user-defined recipes with customisable names, plus pre-set programs for common applications. Controlled heating ramp profiles with multiple temperature stages
User interface	Touchscreen control with password-protected access levels
Adjustable parameters	Temperature, step duration, agitation speed and angle, pouring angle, cooling airflow, or magnetic stirring
Fusion status display	Clear indication of total remaining time and individual step progress
Crucible cradle / mould holders	High purity ceramic
Voltage	2 or 3 Phase 200-220V or Single Phase 230-240V in 15A or 20A
Crucible	30g (95% Pt / 5% Au or Fusion Alloy), Zirconium or Nickel
Moulds	Available in various sizes (95% Pt / 5% Au or Fusion Alloy)
Safety	CE Certified, CSA, 'Cold to Cold', CAT 4 rated safety circuit
Size and weight	540mm (H) x 710mm (W) x 680mm (D) - 80kg
Fume extraction	Integrated extraction system with exhaust adapter
Heating elements	Silicon carbide
Connectivity	USB communication link