xrf
fusion equipment

GOOD REASONS FOR

XrFuse 2 & 6
ELECTRIC FUSION MACHINE

A DIVERSE RANGE OF APPLICATIONS

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. Cold-to-cold operation means it is an ideal solution where the health and safety requirements of a production environment need to be strictly adhered to.
If on the other hand, method development is the critical requirement, the instrument can be configured in a custom manner to meet specific experimental needs.

High Accuracy and Purity

For applications such as mineral sands where high accuracy and purity is required across a broad range of elements, the absence of contamination is a significant benefit.

Programmable Fusion Parameters

- Preheating temperature and duration
- Main heating temperature and duration
- Rocking duration, speed and amplitude
- Stand duration
- Pouring angle
- Cooling (2 stages)
- Pause at any time
- Fusion complete-alarm
- XRF or ICP Mode

Established Technology

The XrFuse range of electric fusion machines has been developped based on more than 25 years of experience of fusion technology and applications. Now available in both a 6 place high volume solution and a 2 place compact model to cater for the needs of broad range of customers. The XrFuse range represents the best elements of XRFS established electrical fusion range with significant advances in safety and design. Designed with the latest thermal imaging technology, consumer tested in the biggest laboratories in the world, XrFuse is designed with the customer in mind.

KEY FEATURES

Zero Contamination

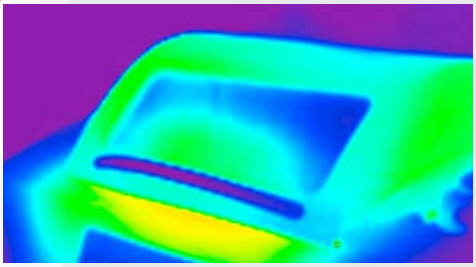
The ceramic cradle and holders ensure that the environment for creating beads has zero contamination in comparison with that typically found with Inconel based solutions.

Simple User Interface

Simple touch screen interface. The User Interface is simple to use and provides the flexibility to cope with the simplest operation on a repeatable basis or the most complex one off experiments.

Process Visibility

The glass viewing panel allows the customer to view the key elements of the fusion process in action. This is particularly important for method development.



Safe Operation

The external surfaces of the instrument have been modelled and developed with the latest IR technology to ensure all contact surfaces are safe to touch.

Process Flexibility – XRF or ICP mode

The machine is designed to allow for both XRF or ICP processes. Simple access, control and monitor, at the touch of a button.

Built to Last

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 component lifetimes of up to 3 times of that of our major competitors. When you buy an XrFuse, it's built to last!

ONGOING SUPPORT

The purchase of an XrFuse is the beginning of an ongoing relationship where we provide a range of services to our customers.

Whether you are new to fusion or a seasoned professional, we have a range of services to increase the accuracy and throughput of your application.

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

Please see our website for more details of our representatives in your area: www.xrfscientific.com

THE COMPLETE SOLUTION

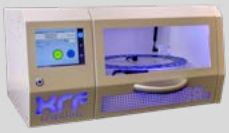
xrf flux and chemicals

Flux
We are the world's pre-eminent manufacturer of flux. We can provide standard borate fluxes or custom solutions to meet your specific needs.

xrf platinum labware

Labware
We manufacture labware for all our fusion instruments in house. We can also provide a remake service for the transfer from other labware designs.

xrf lab equipment



Weighing
The XrWeigh allows the rapid and accurate measurement of flux. Increasing laboratory throughput and process repeatability.

TECHNICAL SPECIFICATIONS
XRF, ICP AND ALKALI FUSIONS

Technical specification	2 place	6 place
Construction	Single external aluminium case	
Lid	Cool touch glass viewing window Safety-interlocked during fusion and standby mode	
Size (H x W x D)	580 x 780 x 800mm H 800mm with lid open	580 x 1110 x 800mm H 800mm with lid open
Weight	80kg	100kg
User interface	Touch screen user interface password protected engineer levels	
Programmable recipes	Up to 12 user-defined recipes with naming flexibility	
Insulation	Ceramic fibre board	
Maximum temperature	1250°C, real time temperature reading	
Heating elements	Silicon carbide	
Thermocouples	Type R	
Over temperature protection	2nd thermocouple and insulation case thermostat	
Power requirement	50/60Hz, 1/3-phase, 208–220 Volt	50/60Hz, 3-phase, 380–415 or 208–220 Volt
Power consumption	4kW	6kW
Cradle / mould holders	Hi-purity ceramic, contamination proof	
Crucible	30–40g	
Mould	32/40mm, 40–100g	
Throughput	Up to 10 samples per hour	Up to 30 samples per hour
Safety	Emergency stop button Cold-to-cold operation Maximum external temperature of 50°C CE certified independently tested by Pilz Cat 4 rated dual safety circuit	
Noise	<70db	

xrf flux and chemicals

xrf platinum labware

xrf precision platinum

xrf lab equipment

xrf fusion equipment

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