fusion equipment



GOOD REASONS FOR

XrFuse 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 a 6 place high volume solution. 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.

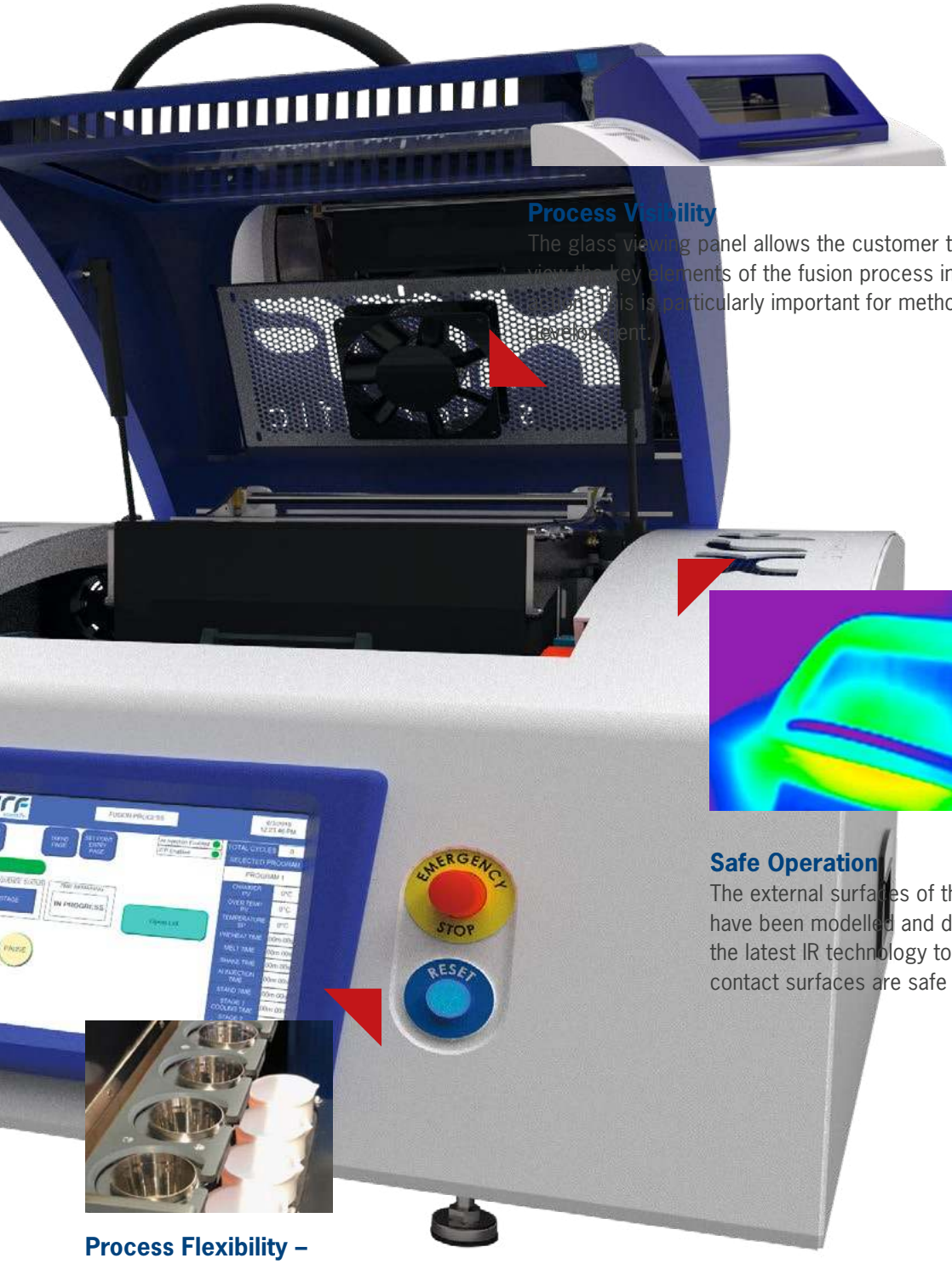


Zero Contamination

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 operation. 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!

TECHNICAL SPECIFICATIONS
XRF, ICP AND ALKALI FUSIONS

Technical specification	6 place
Construction	Single external aluminium case
Lid	Glass viewing window Safety-interlocked during fusion
Size (H x W x D)	580 x 1110 x 800mm H 800mm with lid open
Weight	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	1200°C for continuous use (1250°C for intermittent use)
Heating elements	Silicon carbide
Thermocouples	Type R
Over temperature protection	2nd thermocouple and insulation case thermostat
Power requirement	50/60Hz, 3-phase, 380–415 or 208–220 Volt
Power consumption	6kW
Cradle/mould holders	Hi-purity ceramic, contamination proof
Crucible	30–40g
Mould	30/32/40mm, 40–100g
Throughput	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

We reserve the right to change the design or specification of our products without notice. Some of the information contained in this brochure is general in nature and customers should check that it is applicable to their individual circumstances.

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



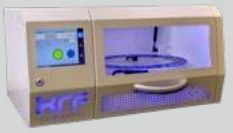
Flux
We are the world's pre-eminent manufacturer of flux. We can provide standard borate fluxes or custom solutions to meet your specific needs.

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.



xrf flux and chemicals



xrf platinum labware



xrf precision platinum



xrf lab equipment





xrf fusion equipment

SALES AUSTRALIA
XRF Technology (WA) Pty Ltd
67 Boulder Rd. Malaga
Western Australia, 6090 Australia
P: +61 (0) 8 6240 3000
F: +61 (0) 8 6240 3099
E: sales@xrfscientific.com

part of xrf scientific

SALES EUROPE
XRF Scientific Europe SPRL
XRFS Training Center
103 rue de la Consolation
1030 Schaerbeek, Belgium
P: +32 (0) 2 762 77 12
E: info.eu@xrfscientific.com

CORPORATE OFFICE
XRF Scientific LTD
86 Guthrie Street
Osborne Park WA 6017, Australia
P: +61 (0) 8 9244 0600
F: +61 (0) 8 9244 9611
E: info@xrfscientific.com
www.xrfscientific.com

XRF Scientific Europe GmbH
Seligenstädter Str. 100
63791 Karlstein, Germany
P: +49 (0) 6188 954 2761
F: +49 (0) 6188 954 2799
E: stefan.lang@xrfscientific.com

SALES NORTH AMERICA AND LATIN AMERICA
XRF Scientific Americas Inc
620 Cathcart Suite 259
Montreal, QC H3B 1M1, Canada
Canada & USA: +1 (866) 834 0179
P: +1 (514) 871 4997
F: +1 (514) 908 1386
E: info.americas@xrfscientific.com

03/2024/XrFuse 6/EN/A4/V1.0