

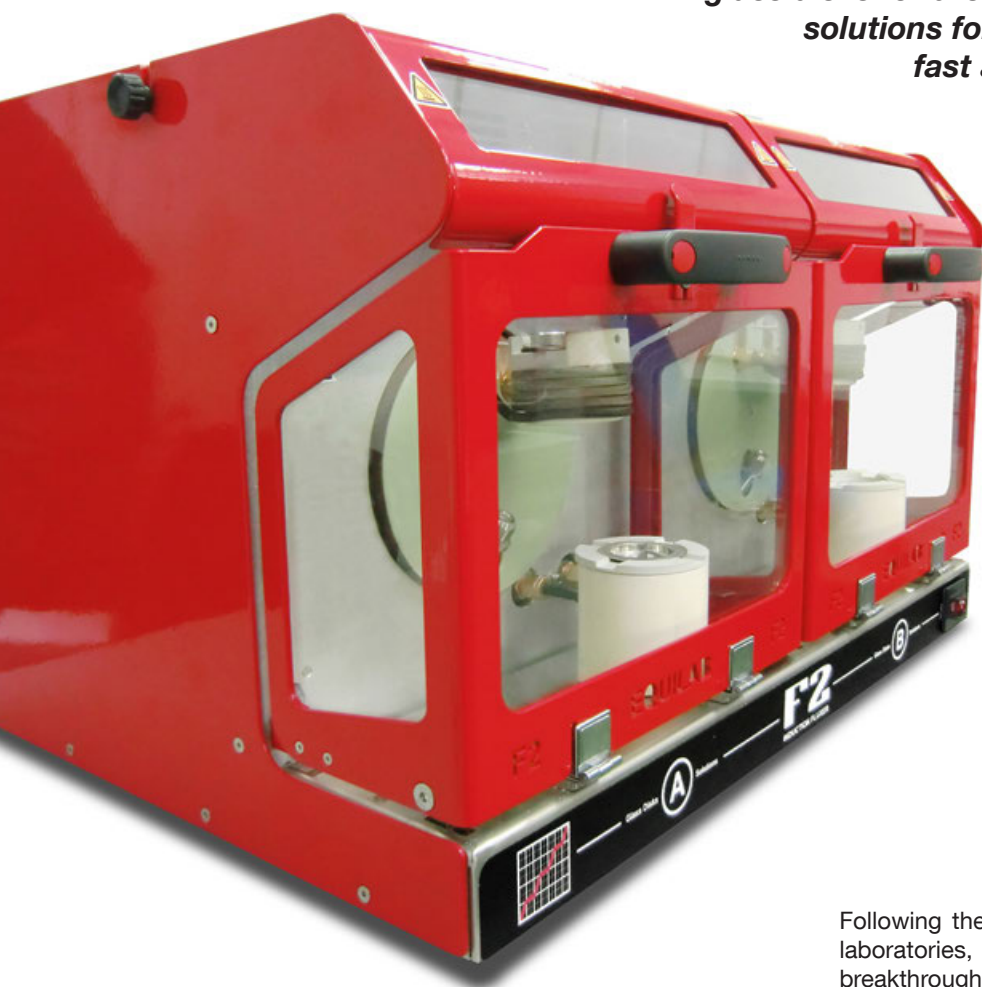
F1
F2



F Series Induction Fluxers

Our Induction Fluxers

The new F1 and F2 induction fusion units have been specially developed to speed up and facilitate the process of preparation of glass disks for their analysis by XR, and AA solutions for ICP. They can produce, fast and accurately, beads and dissolutions with classical fluxes (Borates) as well as to undertake high quality fusions in non oxidized elements using peroxide. They are effective both in high and low temperatures. The F2 model has got two working stations completely independent from one another, it is literally like having two fluxes within a single unit.



Great productivity:

- Glass Beads: up to 12 per hour with each module
 - Dissolutions: up to 16 per hour with each module
 - Fusions/oxidations (peroxide): up to 16 per hour and module
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Following the trend of removing combustion gas from laboratories, the **F Series** represents a technological breakthrough in the fusion units, as it heats up the samples by induction homogeneously, quickly and efficiently. These are highly automated units with capacity to control and monitor in real time the fusion process of one or two samples separately. To this innovative heating system we add a constant temperature check up device and a good work of software. The result is a unit able to exhaustively control and change the fusion process of each of the samples, in real time.

Working System

The F Series induces electrical power through a coil – no flames and no contact –, which, producing an electromagnetic field, can heat up the crucible efficiently and very quickly, causing the fusion of the sample mixed

with the flux in very short time and homogeneously. When the heating time we allocated for this step finishes, the sample is poured automatically to the left, in the solutions beaker, or to the right, in the mould heated previously.

Quicker

The heating process by induction is noticeably a faster operation, cleaner, and more accurate and reliable than any other system. It enables the user to reach high temperatures (1200°C) in just a few seconds and to control them effectively. The changes in the temperature of the sample are applied right away, so you can truly have the control of the fusion process in real time. The only parts of the unit that do actually become hot are the ceramic holders: this allows the unit to reduce the time between fusion cycles, as it does not need cooling of large surfaces.

Better features

- An optical pyrometer focused to the base of the crucible carries out a check up of the fusion temperature all the time.
- The programmable stirring system ensures an excellent homogenization of the samples during the heating up process.
- You can also adjust the refrigeration system for the crucibles and the moulds, thus accelerating noticeably the cooling down of the same.
- Flexible process for stirring solutions.
- Includes an exclusive system to remove gases that enables the unit to be placed anywhere, not needing extractor hoods.
- As a safety measure, the door is locked automatically if the temperature inside supposes a risk for the user.
- The coil is cooled down using a closed water circuit with a small refrigeration device (300W) – no water or coolers needed – able to maintain up to 2 modules / 4 coils working simultaneously.

Flexible

Each of the fusion modules can work synchronized with the rest or independently with different programs, for example, if undertaking samples of varied nature. This freedom lets the user prepare new samples as the others finish their cycle, increasing thus the productivity in the laboratory.

Low consumption

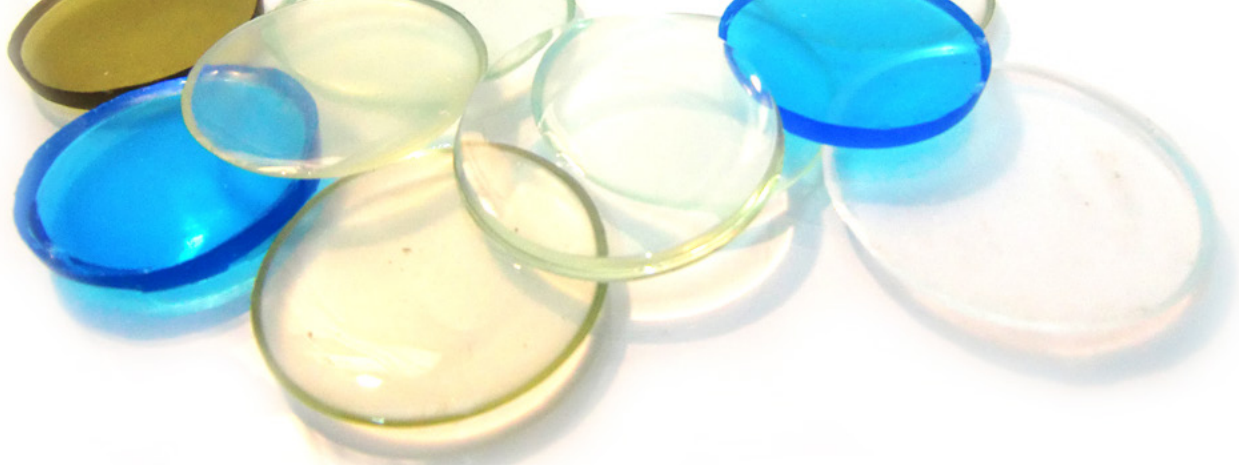
The induction system is a fast heating method with a very moderate electricity consumption.

Maximum consumption 4000W, tested with the simultaneous heating of two crucibles and two moulds.



Avoid the disadvantages derived from the use of gas:

- **Temperature: ineffective control of the temperature**
- **Atmosphere: it is not the right atmosphere for the oxidation of samples.**
- **Pressure: gas pressure problems in high places.**
- **Safety: presence of flames with risk of intoxication or explosion.**
- **Extraction systems: provide your laboratory with more powerful extraction systems.**



Technical specifications:

Method:	Fusion, shaking, blend and homogeneization
Applications:	Geological samples, cements, minerals, slag, ceramics, oxides, glass, metals, ferroalloys, sulphide, fluoride, alloys, etc.
Manufactures:	<ul style="list-style-type: none"> • glass discs for XRF • solutions of peroxide or pyrosulphate • samples for AA and ICP
Programs:	50 independent programs, adjustable
Maximum consumption:	3000W (in heating conditions of two crucibles and two molds)
Power:	230V - 15A
Control:	PC Control or Touch Screen 7,5" Custom Control
Cooling:	a - Closed circuit / minichiller 300W b - Open circuit / external circuit 1,5 LPM
Work frequency:	130..160 KHz
Programable elements:	Crucible shaking system / Degree of the crucible shaking / Solution shaking system / Cooling system by fans
Temperature control:	400 to 1200°C limited by software
Software:	intuitive, with graphics. Diagnosis and parameterization screens
Accessories:	accepts crucibles and molds of platinum, zirconium and nickel alloys
F1	
Dimensions:	42cm (height) x 35,5cm (long) x 50cm (width)
Approx weight:	20kg
F2	
Dimensions:	42cm (height) x 60cm (long) x 51cm (width)
Approx weight:	43kg
Safety systems against overheating and overcharge	

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Equilab, S.A.

Avda. Camino de lo Cortao, 21 - Nave 6
28703 - San Sebastián de los Reyes - Madrid
Tel.: 91 661 00 22 / Fax: 91 661 81 46
www.equilab.es
Atención al cliente: equilab@equilab.es

