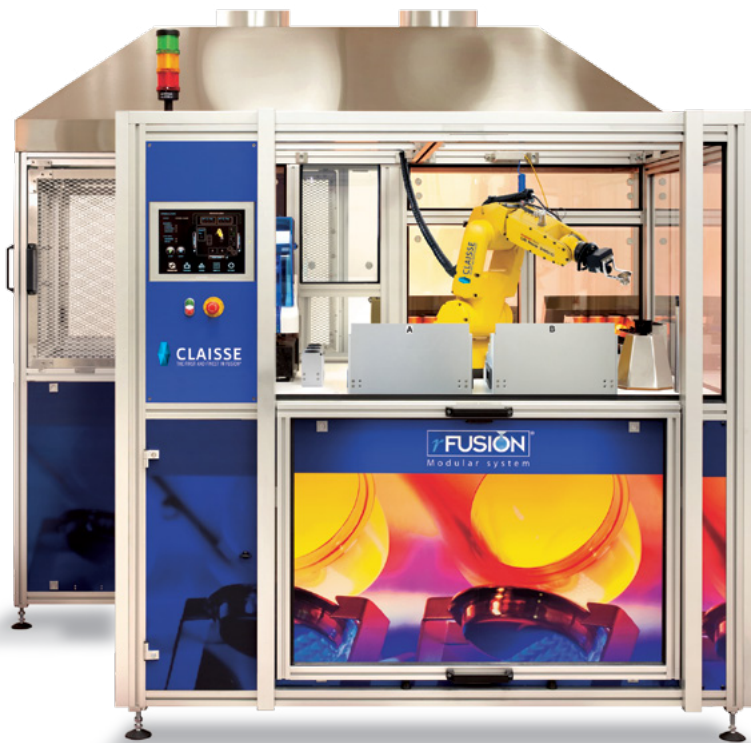




CLAISSE
THE FIRST AND FINEST IN FUSION®

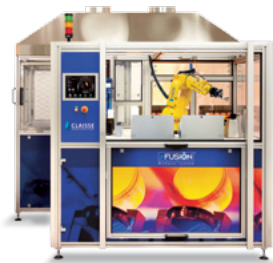
KEEPING AHEAD THROUGH CLAISSE EXPERTISE IN SAMPLE PREPARATION BY FUSION

Let the rFusion system work for you!



rFUSION®
Modular system

HOW TO REACH EFFICIENCY WITH CLAISSE EXPERTISE?



FUSION
Modular system

Claisse offers a global solution in sample preparation by fusion to improve efficiency in the laboratory. Our knowledge and experience combined with the reputation of PANalytical allow us to constantly innovate to fulfill our customers' needs as well as to help them obtain accurate and precise analytical results.



Consumables



Services



Expertise





CLAISSSE

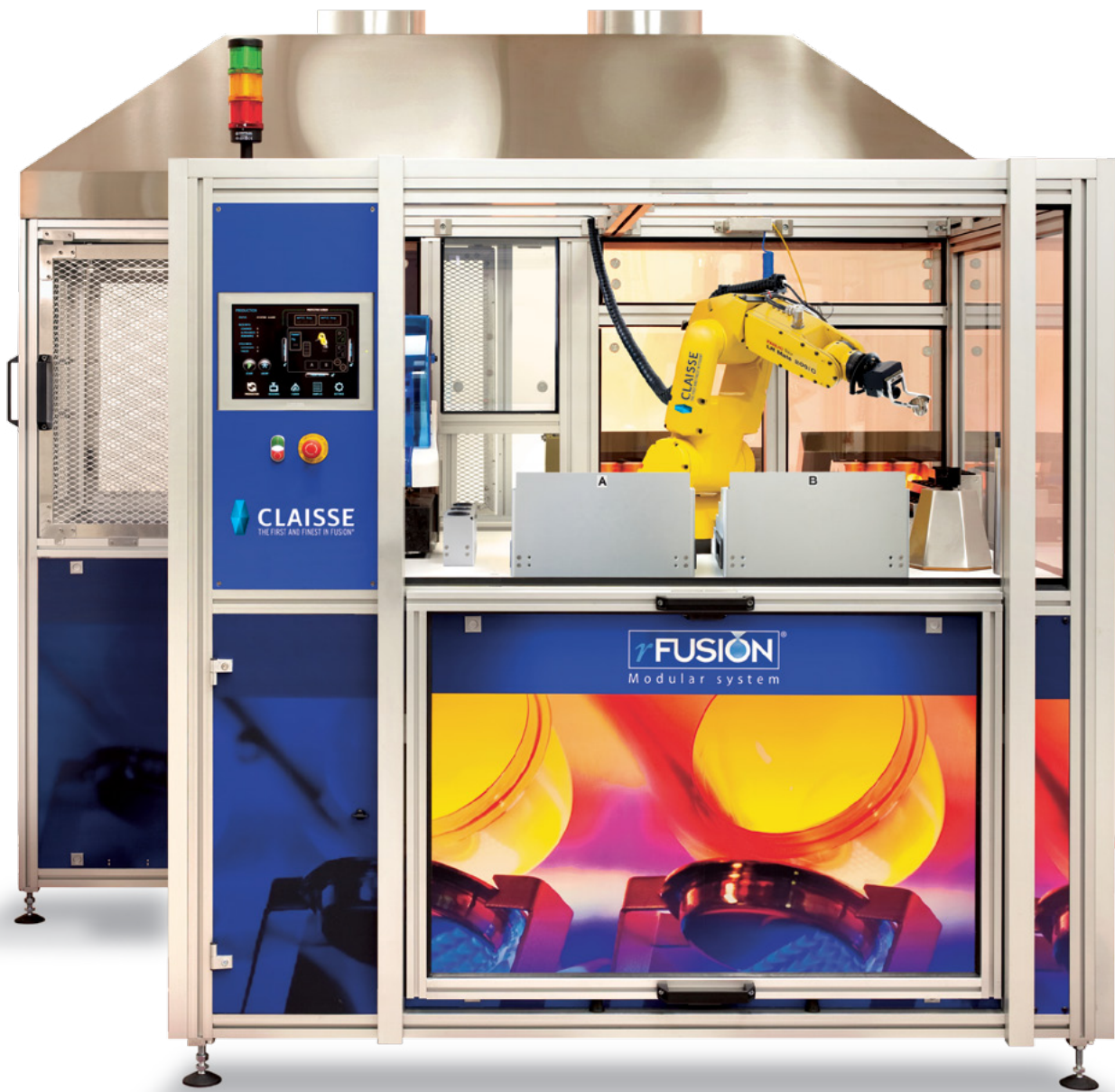
THE FIRST AND FINEST IN FUSION®

The rFusion® station is an automated modular system that doses, mixes and fuses samples to prepare them for XRF analysis. It is divided into two parts: a weighing station including TheAnt™ automatic doser and a fusion station equipped with two M4™ fusion instruments. This automated station provides our customers with a great return on investment by maximizing productivity, by improving analytical results and by having a fast commissioning time.





Let the rFusion system work for you!



WHY INVEST IN THE rFUSION MODULAR SYSTEM?

SUSTAINED HIGH PRODUCTIVITY

- Fuses up to 6 samples simultaneously with different fusion programs
- Prepares various types of samples during a single operation cycle
- The ongoing sample traceability allows the optimal management of priorities
- Each sample can be associated to a different weighing and fusion program
- Operates without supervision, thus reducing labor time

HIGH ANALYTICAL PERFORMANCE

- High precision, accuracy and repeatability
- Eliminates weighing errors
- Consistent temperature and flame control
- Inter-burner repeatability at each fusion cycle
- Minimizes distractions and fatigue due to repeatable tasks

OUTSTANDING FLEXIBILITY

- Manages batches or continuous feedings while processing priority samples
- Weighing and fusion station can be operated separately or together
- Processes a wide range of samples

EASY TO USE

- Fully automatic one-touch operation
- User-friendly bar code scanner
- Pre-set fusion and weighing programs
- Simplified training for new or unskilled users
- HMI touch screen system

QUICK RETURN ON INVESTMENT (ROI)

Fast commissioning time

- Possibility of fusion method development prior to installation and on-site fusion methods validation
- Quick and efficient start-up in less than 3 weeks
- Can be upgraded gradually, requiring a smaller initial investment

Low cost of ownership

- Streamlines the management of the employees who work in the laboratory
- Sturdy and reliable workstations
- Optimized uptime
- Easy maintenance
- Best-in-class industrial robot
- No O₂ or water cooling installations needed



TECHNICAL SPECIFICATIONS



The **rFusion Weighing Station** performs the dosing of the flux according to a pre-set absolute mass or pre-set sample to flux ratio. It contains a robot, a control panel and is the core of each workstation. A mixing module ensures good homogenization of sample and flux before fusion.

COMPONENT MODULES

- **Robotic Arm:** A six-axis electro-servo driven industrial robot, equipped with optic-fiber sensors for crucible detection.
- **Claisse® TheAnt™:** An automatic flux dispenser with a maximum accuracy of 0.1 mg, equipped with a high performance analytical balance providing a maximum precision of 0.1 mg and an overload protection for vertical and horizontal loads. Can be used as a stand-alone module.
- **Claisse® VortexMixer™:** A homing mixer with programmable speed.
- **End-to-end sample traceability:** Traceability solution with mixed automated and manual operations.

ELECTRICAL

- Single phase 208-230 VAC, 50/60 Hz, 20 A
- Power: 2700 W

DIMENSIONS & WEIGHT

- Height: 213 cm (83.9 in.) x Depth: 135 cm (53.1 in.) x Width: 190 cm (74.8 in.), 600 kg (1320 lb.)

The **rFusion M4 Fusion Station** is an add-on to the rFusion Weighing Station. It performs the preparation of glass disks for XRF analysis with two 3-position fusion instruments powered by gas.

COMPONENT MODULES

- **M4™ Claisse Fluxer®:** A 3-position gas fusion instrument with programmable heating and agitation by rotation on an inclined axis. Capability for multi-temperature fusion cycles of up to 15 steps. The instrument does not require using compressed air or oxygen. Two M4 fusion instruments can be installed in the workstation for a total of 6 positions. Capability to shut down fusion positions to save on operating costs.
- **Sample priority management:** Priority management solution with mixed automated and manual operations.

GAS REQUIREMENTS

- Natural gas, propane or other LPG 90 ± 7 kPa (13 ± 1 psi)

ELECTRICAL

- Single phase 208-230 VAC, 50/60 Hz, 20 A
- Power: 3500 W (Weighing Station included)

DIMENSIONS & WEIGHT

- Height: 244 cm (96.1 in.) x Depth: 86 cm (33.9 in.) x Width: 254 cm (100 in.), 575 kg (1250 lb.)

rFusion Weighing Station & rFusion M4 Fusion Station

CONTROL

- HMI touch screen control panel
- Capability to store 10 automated weighing programs and 10 automated fusion programs
- Parameter editing rights management through protected passwords

COMMUNICATION

- Ethernet
- LIMS ready
- Remote troubleshooting via Internet connection

SAFETY

- Auto lock sliding doors
- Protective metallic screens
- Gas detector to prevent and stop leakage
- Differential pressure switch to avoid inadequate gas pressure variations
- 2 emergency pushbuttons



Scan this QR code to obtain more information about the rFusion modular system.



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