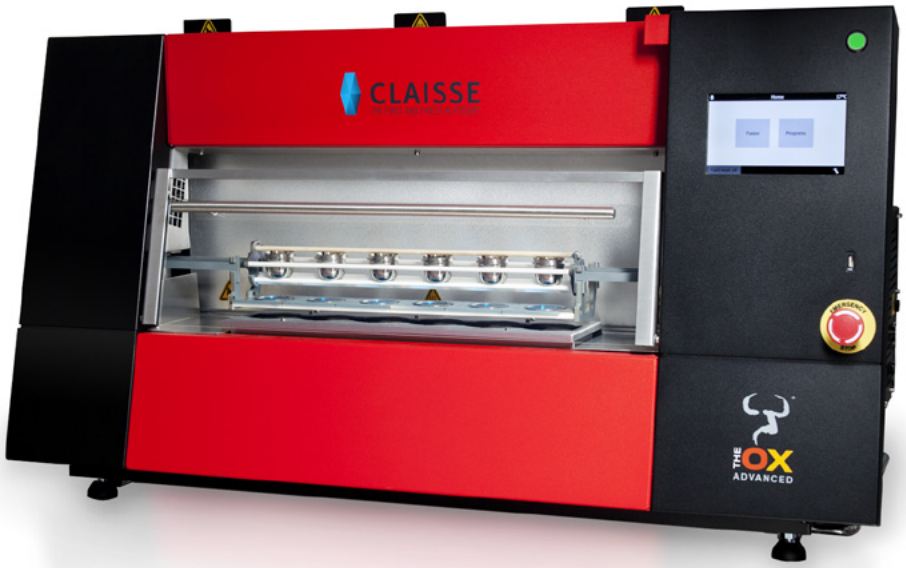
CLAISSE
THE FIRST AND FINEST IN FUSION®

KEEPING AHEAD THROUGH CLAISSE EXPERTISE IN SAMPLE PREPARATION BY FUSION

Get ready for high productivity!



THE OX ADVANCED

HOW TO REACH EFFICIENCY WITH CLAISSE EXPERTISE?

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

CLAISSE

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TheOx® Advanced fusion instrument is the **new version** of the world-renowned TheOx. It has been designed by our experts in fusion to suit our customers' ever-changing needs. This instrument is powered by electricity and has six fusion positions. It is used to prepare glass disks for XRF analysis as well as borate and peroxide solutions for AA and ICP analysis.

TheOx Advanced fusion instrument has been created to withstand heavy workloads and harsh work environments. Its extra features that increase safety and analytical performances benefit all users, regardless of their skills.

PROCESSES

- Mining and geological samples
- Bauxites, alumina
- Chromites, cobaltite, dolomite, ilmenite, rutile, molybdenite
- Rare earth elements
- Potash, phosphates, fertilizers
- Cements, lime, limestone, carbonates, clay
- Catalysts, zeolites
- Cosmetic, pharmaceutical and environmental samples
- Sulfides, fluorides
- Hematite, magnetite, iron ores
- Refractories, silica, silicates, glass, ceramics
- Coal, ashes
- Steel, ferroalloys, slags
- Pure metals, non-ferrous alloys, silicon carbides
- Polymers, pigments, synthetic rubbers

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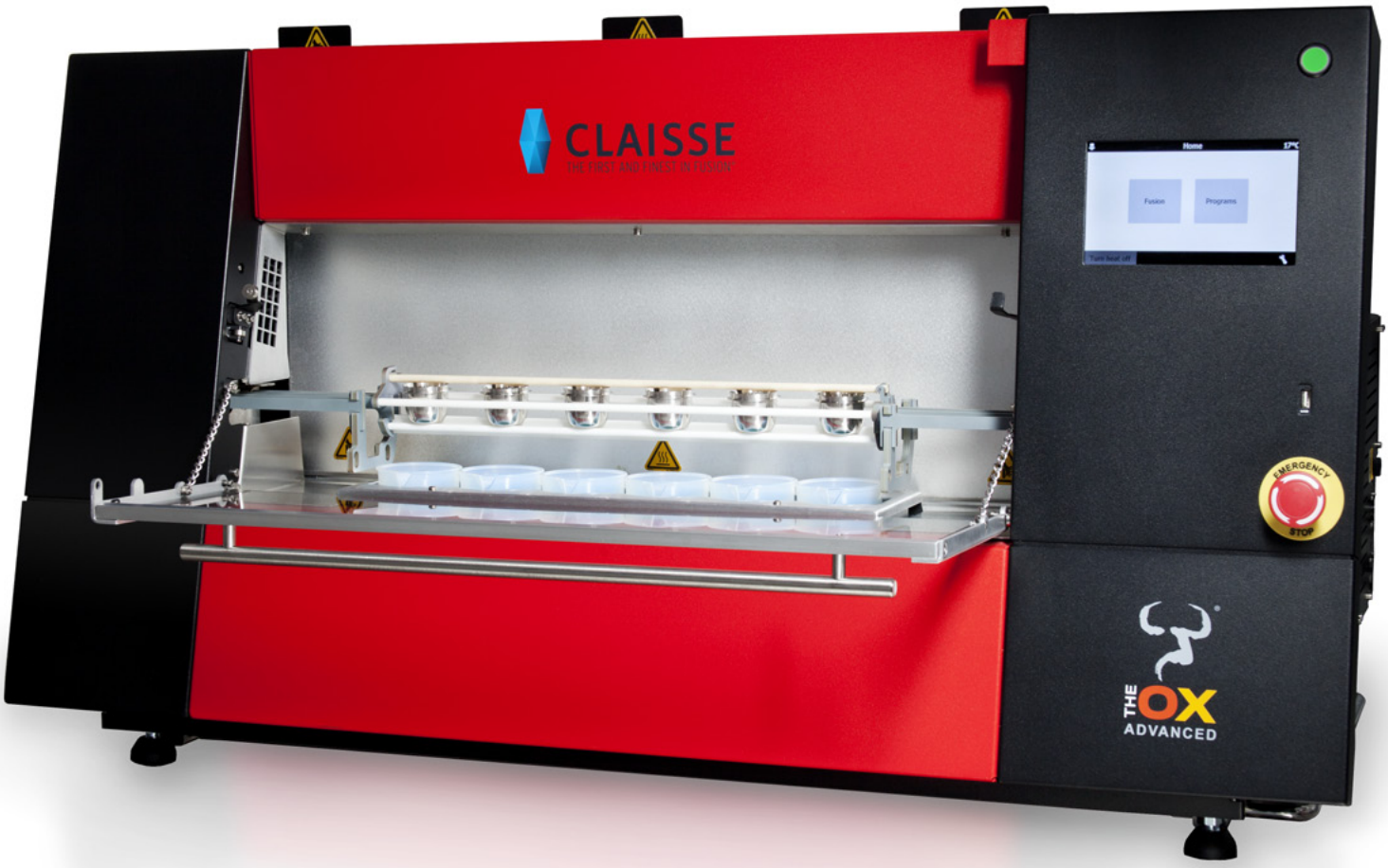

WHY INVEST IN TheOX ADVANCED FUSION INSTRUMENT?

OUTSTANDING ANALYTICAL PERFORMANCE

- Repeatable inter-position results at each fusion cycle
- Absolute control of the fusion temperature
- High accuracy
- Superior homogenization of the melt
- Sturdy single motor system for optimal crucible rocking
- Controlled or maximum heating rate to optimize oxidation and fusion success rate
- Also available with superior quality ceramic holders for crucibles and molds to ensure the lowest contamination

PRODUCTIVE, POWERFUL AND DURABLE

- 6 fusion positions allowing to process from 24 to 30 fusions per hour
- Fast temperature ramp up ensuring shorter fusion cycles
- Powerful heating elements that can be replaced one at a time
- Heating elements located behind the crucibles (absolute protection against flux spill)
- Fumes evacuated through the heating chamber's chimneys increase the durability of the chamber's components
- Sturdy industrial grade motors
- Stainless steel and aluminum frame for a high durability
- Long-lasting components

EASY TO USE

- Fully automatic one-touch operation
- Library of predefined fusion methods
- Touch screen interface
- Easy loading of crucibles, molds and beakers
- Low noise

ULTIMATE SAFETY

- Fully automated pouring
- No manipulation of hot vessels (cold-to-cold operation)
- Integrated safety door that automatically locks during the entire fusion process
- Mold confirmation by the user

PROGRAMMABLE FUSION PARAMETERS

- Temperature
- Duration
- Crucible rocking speed
- Crucible rocking amplitude
- Cooling air flow
- Magnetic stirring speed for solutions
- 4 pouring modes

QUICK RETURN ON INVESTMENT (ROI)

Low cost of ownership

- 3 preparation modes in 1 instrument
- 3 different layers of refractory materials for maximal heat retention and energy saving
- Quick replacement of refractory layers, mold holders and alumina rods

Minimal infrastructure required

- Simple electrical connection (single phase)
- No O_2, compressed air or cooling system needed

TECHNICAL SPECIFICATIONS

THE OX ADVANCED

PRODUCTIVITY

- Produces up to 6 samples simultaneously
- Prepares glass disks for XRF analysis
- Prepares borate and peroxide solutions for AA and ICP analysis

HEATING

- Heating chamber temperature up to 1200°C
- Temperature monitored by a type R thermocouple located inside the heating chamber
- Heating chamber stability monitored by a type N thermocouple located between the refractory layers
- Resistance-based heating system

ELECTRICAL

- Voltage: 208 ~ 240 VAC
- Single phase
- Current: 30 A
- Frequency: 50-60 Hz
- Input power: 5 kVA
- Up to 4.5 kW in the heating chamber

DIMENSIONS

TheOx Advanced

- Height: 63 cm (24.8 in.)
- Depth: 62 cm (24.4 in.)
- Width: 110 cm (43.3 in.)

External Power Supply

- Height: 42 cm (16.5 in.)
- Depth: 53 cm (20.9 in.)
- Width: 22 cm (8.7 in.)

WEIGHT

TheOx Advanced

- 90 kg (198 lb.)

External Power Supply

- 19 kg (42 lb.)

PROGRAMMABLE FUSION PARAMETERS

- Temperature
- Duration
- Crucible rocking speed
- Crucible rocking amplitude
- Cooling air flow
- Magnetic stirring speed for solutions
- 4 pouring modes

CONTROL AND OPERATION

- One-touch operation
- Touch screen user interface
- Precise temperature display (± 1°C)
- Multilingual user interface
- Also available with superior quality ceramic holders for crucibles and molds to ensure the lowest contamination

SOFTWARE AND COMMUNICATION

- Library of 10 predefined methods
- Programmable preheat mode
- Remote troubleshooting
- Limitless program storage: 7G Compact Flash
- Ethernet external communication link
- 1 USB port

SAFETY

- User operation levels are protected by a password
- Safety door that automatically locks during the entire fusion process
- Conformal coated PCB for high corrosion resistance
- Meets UL 94 flammability standard
- Meets RoHS requirements
- Certified CE

CE

Scan this QR code to obtain more information on TheOx Advanced instrument.

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CERTIFIED BNQ ISO 9001:2008 SYSTEM