XGLAB

X and Gamma Ray Electronics

CRONO

A re-configurable MACRO-XRF scanner

CRONO - Re-configurable Macro-XRF scanner

A powerful tool for XRF macro scanning and spectral analysis

CRONO, the new portable fast macro-XRF scanner, is based on the EDXRF technique and has been designed for in-situ, non-destructive, very high speed and large area mapping.

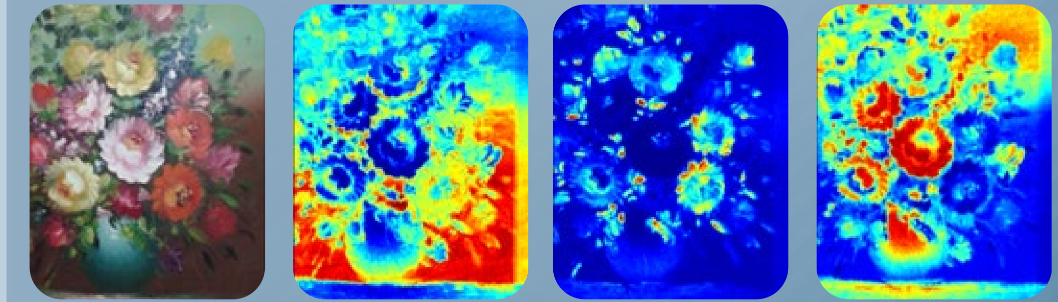
A spectrum is stored per each pixel.

The system works in a complete non contact mode at 1cm distance from the sample. The analysis area is always under the control thanks to several monitoring systems.

The XRF scanner can turn into a portable spot-XRF device installing the measurement head on a light tripod.

CRONO's Software allows complete instrument control and monitoring all in one interface. The software interface shows the XRF spectra and maps, even while acquisition is running.

Automatic report creator: the report of a single measurement or a project is automatically generated in "pdf" format.



Elemental mapping on a 50cm x 40cm painting (about 30 minutes).
Line speed 20mm/s, collimator aperture 2mm, tube settings 50kV and 100uA. From the left: visible picture, Ba-Lα, Pb-Lα, Ca-Kα.

CRONO - Technical Specifications

XGLab's nuclear electronics expertise results in unique instrument features

CRONO benefits from the XGLab's flagship electronic technologies.
CUBE allows for high speed acquisition preserving spectral quality.
DANTE allows for high speed "on-the-fly" scanning of the samples.

Technical highlights

Large area Silicon Drift X-ray Detector (SDD) + CUBE
DANTE Digital Pulse Processor.
X-Ray generator, 5-200µA, 10 - 50 kV.
3 automatically software selectable collimators (typical 0,5mm, 1mm, 2mm).
4 automatically software selectable X-Ray filters.
Head dimensions: 300mm, 160mm, 150mm. Total weight: 3kg.

XYZ Motorized frame: scanning range 600x450mm (XY), 75mm (Z)
Dimension: 950mm x 700mm x 250mm. Total weight: about 15kg. The frame unit can be easily dismounted.
Speed: up to 45mm/sec.

Trolley for the main frame:
Trolley for an easy positioning of the motorized frame: include a tilting system for positioning between -20° and +90°, height regulation (4 steps up to 220cm), wheels, stabilizers.
Dimension: 900mm x 700mm x 1200mm. Total weight: about 50kg.
The support unit can be easily and completely disassembled for transport.

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ISO 9001
BUREAU VERITAS
Certification

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