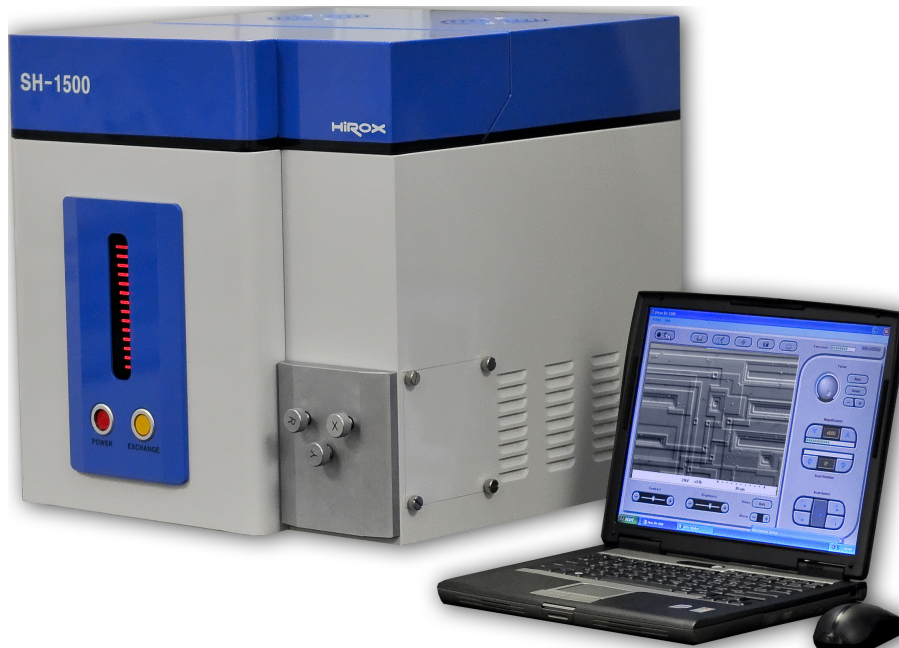
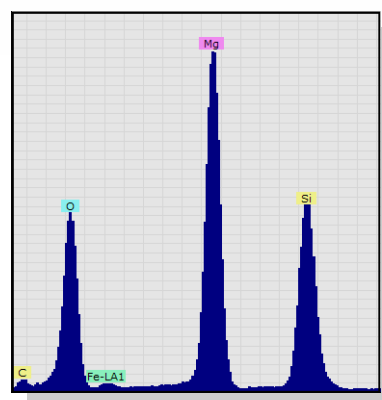


HIROX

NEW Hirox SH-1500 Mini-SEM: Desktop Electron Scanning Microscope with optional integrated EDS BRUKER-AXS



Powerful, Fast, Easy to operate, Low Maintenance!
The Hirox Mini-SEM combines the simplicity of an Optical Microscope
with the strength of a Scanning Electron Microscope !

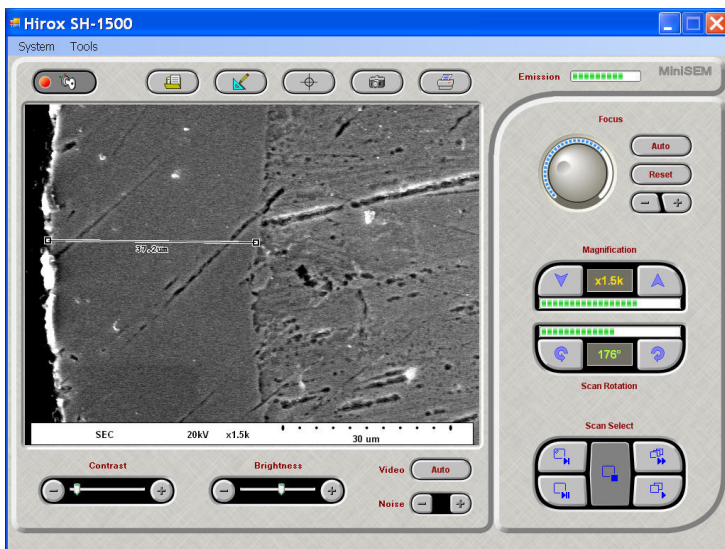


HIROX

EUROPE

Hirox, a leading manufacturer in 3D digital microscopy, sets a new standard in desktop mini-SEM: compact and powerful, the SH-1500 is enabling the complete integration of a EDS system!

- The SH-1500 is a “bridge” between optical microscopy and scanning electron microscopy. As simple as a video camera, the Mini-SEM can be used by anyone with minimum training.
- Fast and accurate investigations can be easily achieved using the Auto Adjustment and the Autofocus features from the user friendly Graphic User Interface (GUI).
- Easy to install and portable, this high-tech and compact system covers a large magnification range, perfect for visualization and control of most samples.



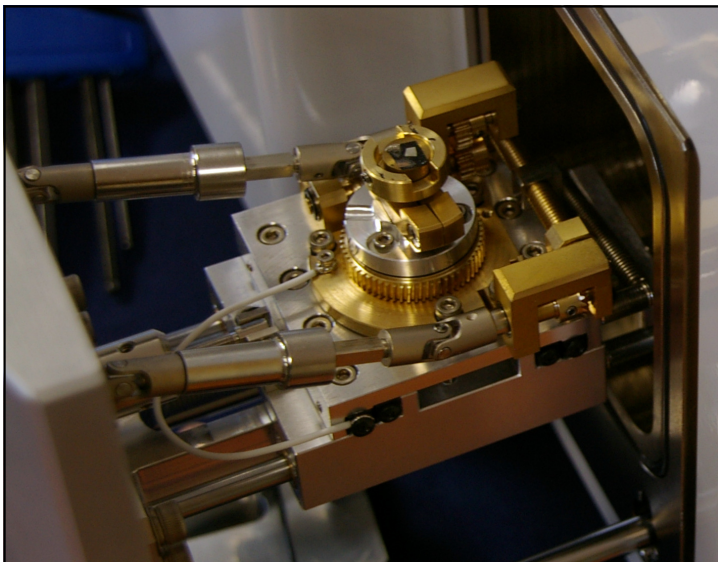
From 20x to 15 000x
(up to 30 000x on the SH-3000):

Visualization
Measurements

Control
Output

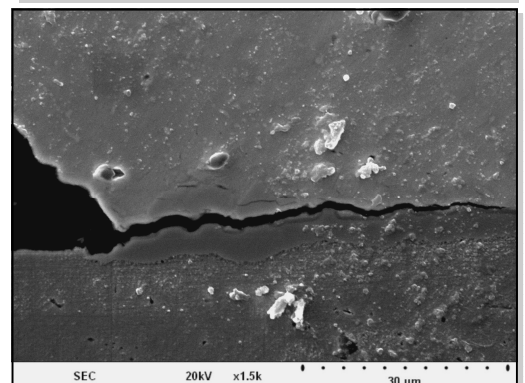
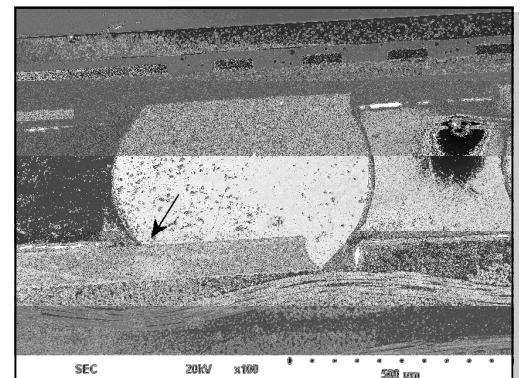
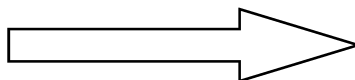
... in just a few seconds !

Graphic User Interface including auto-focus, auto-contrast / brightness, rotation, measurement (size, area, angles)...



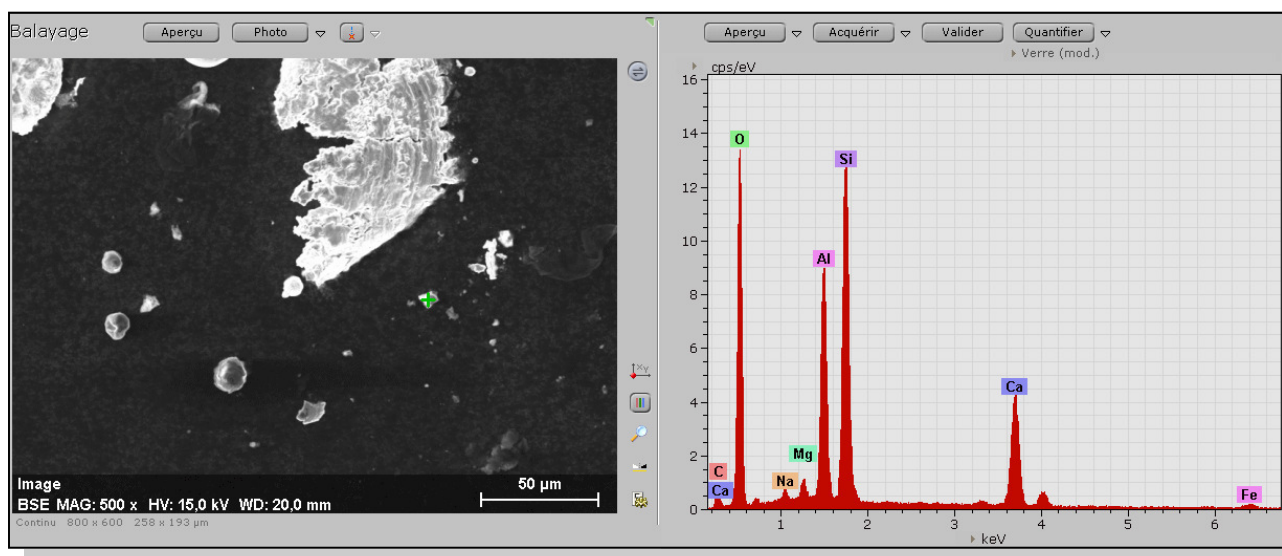
3 axis table: X, Y, R and movement 20 * 20 mm / 360°

See and understand:
the Mini-SEM brings answers
to your problems !



SMT Quality Control: defective BGA joint

Integrated microanalysis from BRUKER and SDD XFlash 410M detector



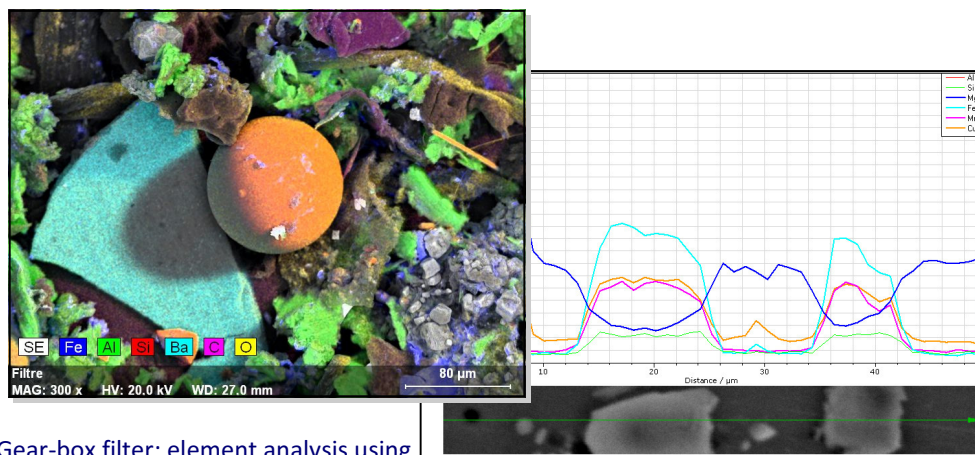
Esprit Software (EDS Bruker XFlash) : selective analysis on micrometric particles.

Additionally to the sample visualization, you can also collect automatic element identification information. Working in a high vacuum environment, the Hirox mini SEM provides very accurate analysis information from any spot without any beam skirting.

Thanks to the SDD technology from Bruker, identify and quantify the chemical composition with a single mouse click!

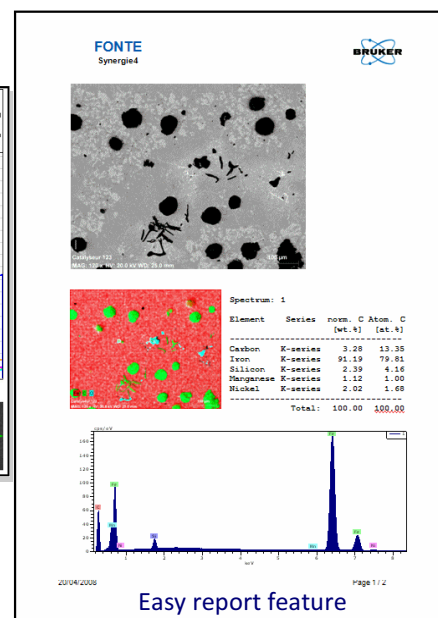
From boron to uranium, the SDD detector is liquid nitrogen free, needs less maintenance and features a stable resolution up to 100 000 cps!

Microanalysis System : simple or spectral mapping and profiling in option



Gear-box filter: element analysis using fast X-ray mapping

Element profiling: diffusion analysis



Easy report feature

Access to all the analysis possibilities from a very powerful EDS system: profiling, mapping, spectral mapping with beam shift correction...

The Hirox mini SEM is perfectly suited for elemental analysis thanks to the variable accelerating voltage: from 1 to 20kV (and up to 30 kV for the SH-3000).

Phase analysis, particles analysis, filter analysis and much more... all those tools are also available! Don't hesitate to contact us for a demonstration!

Hirox SH-1500 Desktop Mini-SEM : compact and powerful

Technical Specifications SH-1500 :

- ✓ Extremely easy to use with user friendly software
- ✓ Very fast sample change: vacuum in 2 minutes and 40 sec!
- ✓ Automatic parameter recording
- ✓ Magnification from 20x to 15 000x (30 000x HR)
- ✓ 3 axis table X,Y,R
- ✓ Working distance from 10 to 15 mm
- ✓ Tungsten Filament (including with 6 pre mounted filaments)
- ✓ Accelerating Voltage from 1 to 20 kV (5 kV steps)
- ✓ Image resolution 1280*960 or 2560*1920
- ✓ Measurement: area, length, angle, etc.
- ✓ Display on screen: scale, accelerating voltage, magnification
- ✓ 4 scanning modes (2 visualization, 2 picture recording)
- ✓ Compact dimensions : 70 kg, 49cm x 52cm x 54 cm

Laptop or desktop specifications:

- ✓ 2.4 GHz processor with 2 GB RAM
- ✓ HDD 160 GB
- ✓ LCD monitor 22" (or 17" laptop)
- ✓ Windows XP

Options :

- ✓ Table/metal cupboard with wheels
- ✓ Backscattered electron detector
- ✓ Two axis stage drive
- ✓ Cooling stage (Peltier)
- ✓ EDS system

BRUKER QUANTAX 410M - Integrated EDS System for Microanalysis (option)

Basic system: X410M1

- ✓ SDD XFlash 410 Detector (133 eV @ Mn Kalpha)
- ✓ Detection from boron (included) to uranium.
- ✓ Automatic element identification
- ✓ Qualitative Analysis in spotlight mode or scanning mode
- ✓ Quantitative standardless Analysis with correction for rough samples.

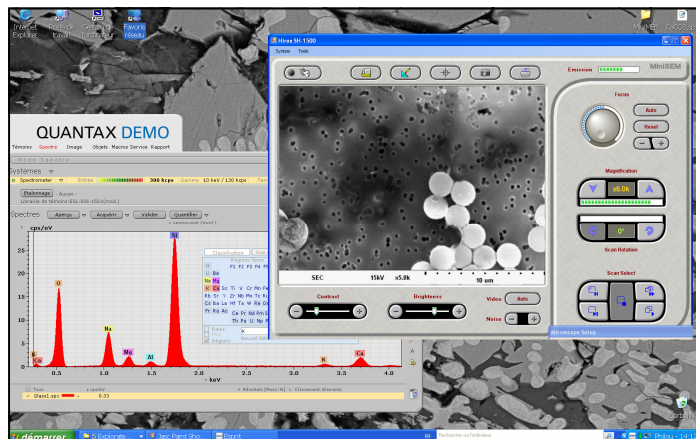
Advanced system: X410M2

- ✓ Vision: digital image processing and enhancement
- ✓ Point and Multipoint (automatic multipoint and object analysis)
- ✓ Ultra fast element line profile
- ✓ Ultra fast digital element mapping

Options :

- ✓ Integrated result presentation and report generation

- ✓ Quantitative analysis with standards HSQuant, PhiRo(Z)...
- ✓ Spectral Mapping
- ✓ Real time correction of beam shift
- ✓ Automatic particle analysis
- ✓ Automatic phase analysis



Some applications

Automobile industry
Cosmetics
Textile
SMT / Electronics QC
Mining Industry

Semiconductor
Education/ University
Forensics
Military
Metallurgy

Geology
Pharmaceutical
Material science
Environment
Ceramics and more...