

# SPECTRO xSORT<sub>XHH03</sub>

HANDHELD EDXRF SPECTROMETER



Compliance screening and elemental analysis  
on-site in seconds

Helping to meet the legislative challenge with

## SPECTRO xSORT

National and international legislation has been introduced around the world aimed at reducing the health and environmental impacts of a variety of harmful substances in consumer goods and other manufactured products. Controls exist not only on the materials used in manufacture but on the procedures used for disposal of products at the end of their useful lives. Different standards apply in different countries to products as diverse as electrical and electronic products, toys and cosmetics. Certain notorious elements of very high concern, especially lead, figure widely in the legislation, so elemental analysis may be the only way of demonstrating compliance.

Enter the new SPECTRO xSORT



**THIS HANDHELD ENERGY DISPERSIVE X-RAY FLUORESCENCE (EDXRF) SPECTROMETER** has exceptional performance for this class of instrument, and can provide laboratory quality screening results in a matter of seconds. The SPECTRO xSORT has been optimized for fatigue-free on-site measurements.



### HIGH SPEED COMPLIANCE TESTING

The SPECTRO xSORT is particularly powerful portable EDXRF analyzer with exceptional capabilities. Compared to conventional handheld instruments, it allows decidedly shorter measurement times.

### FLEXIBLE FOR ANY KIND OF SAMPLE

Samples to be analyzed can be anything from polymers and plastics to metal alloys. A few-second spot check offers an immediate read. Hold on the sample longer for even more accurate parts-per-million analyses of arsenic, cadmium, chromium, copper, lead, mercury, or your contaminant of choice.

### REPEATABILITY, PRECISION AND THE PASS/FAIL DECISION

Efficiency and simplicity pervade every aspect of the product's fit and function. Operators won't have to mess with methods or bother with flushes or vacuum systems. When configured for RoHS screening, the SPECTRO xSORT can compare results with stored limit values as ABOVE LIMIT, BELOW LIMIT or INCONCLUSIVE.

# SPECTRO xSORT

## advantages for elemental compliance screening

### FEATURES

Radiation safety gasket to prevent back-scatter radiation from scattering samples like those that contain oxygen, carbon, organics, etc.

Low detection limits — down to ppm range for heavy metals and more



Integrated video camera for precise spot testing, with visual memory storage

SDD detector with up to 10X faster signal throughput

Interface bezel with operator-defined hot keys to maximize speed of common tasks

“Live” analysis results (display updated every few seconds) with 2-4 second hot spot detection, or even lower detection limits in a few seconds more

Simplified software featuring touchscreen interface with only two menu levels - intuitive ease for highest productivity

Optional integrated global positioning system (GPS) for returning to previously checked spots without time-wasting resurveys

Quick-change battery

Exclusive SPECTRO ICAL one-sample, one-time easy calibration system



Optional docking station for stationary operation, adding stability for very small samples or for extended analysis with ultra-low detection limits

Conc.	LL	UL
Cl	<65	700
Br	<5	300
Cl	<22	70
Hg	<6	700
Pb	<10	700

### SPECTRO xSORT SERVICE AND SUPPORT

Organizations engaged in high-volume compliance screening must keep multiple instruments operating at the highest possible levels of availability. To ensure that SPECTRO xSORT spectrometers meet and exceed these goals, SPECTRO offers the AMECARE Performance Services program.

More than 100 AMECARE service engineers based in 20 countries help to ensure peak performance and extended useful equipment life via high-value, customized services. These can include proactive maintenance programs; application solutions; access to relevant experts; and training.

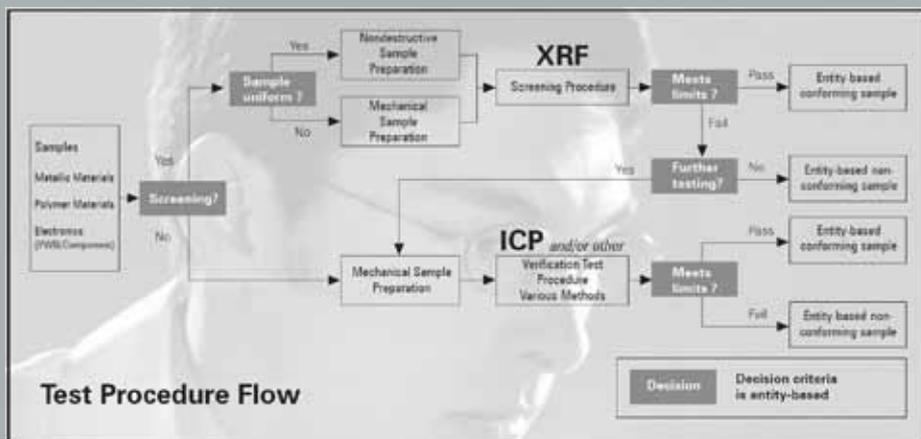


# SPECTRO xSORT Specifications



<b>Detector</b>	High resolution silicon drift detector (SDD)
<b>Excitation</b>	X-ray tube, Rh anode, 50 kV max.
<b>Dimensions and weight</b> (including battery pack)	Height: 270 mm (10.7") Width: 93 mm (3.7") Depth: 230 mm (9.1") Weight: 1.64 kg (3.62 lb)
<b>Spectrometer control</b>	Integrated PC with Touch Screen, Windows Mobile 6.0, Interfaces: Bluetooth, Wireless LAN, USB Host/Client
<b>Software</b>	SPECTRO XRF Analyzer CE ICAL (Intelligent Calibration Logic) Analysis mode with Pass/Inconclusive/fail display for Screening, Sorting mode (Fast pass/fail assessment) Result manager for post-processing of testing results
<b>Accessories (Included)</b>	Transport case Instrument/battery Holster 2 <sup>nd</sup> battery pack Charger USB-Cable Consumables (films)
<b>Accessories (Not included)</b>	Docking station Small parts/wire adapter Printer Barcode reader
<b>Options</b>	Video camera Internal GPS receiver

Test Procedure Flow according (IEC 62321)



SPECTRO: The industry's most comprehensive analytical line

While XRF is recommended for screening measurements, the standard also recognizes that only methods that eliminate sample effects can be used as verification tests for the final confirmation of compliance. These are invariably solution techniques like ICP-OES spectrometry, and instruments like the SPECTRO ARCOS represent the state-of-the art in such instrumentation.

It has been mentioned before that in the case of RoHS, analysis of finished products may not be needed if it can be demonstrated that fully compliant materials have been used in their manufacture. The SPECTRO XEPOS is a high sensitivity, laboratory EDXRF instrument suitable for screening bulk materials.

Whatever the choice is, SPECTRO's more than 30 years of experience in elemental analysis and record of technological innovation ensures the best results in the business.

[www.spectro.com](http://www.spectro.com)

**AMETEK®**  
MATERIALS ANALYSIS DIVISION

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