

# SPECTRO xSORT<sub>XHH03</sub>

HANDHELD EDXRF SPECTROMETER



Advanced environmental screening  
on-site in seconds

Get the fastest environmental analysis  
in the field with

## SPECTRO xSORT

Service companies, government agencies, universities, corporations, and testing labs perform environmental screening of soil, sediment, waste, and waste oil in everything from development areas and landfills to military installations, cement plants, and even picnic tables. Often they must test the material for heavy metals and other toxic elements for appropriate clearing or remediation.

However, surveying a large site can require hundreds of separate measurements — especially when you must also detect small, high-concentration hot spots.

The need for speed is paramount.

Enter the new SPECTRO xSORT.



### HIGH SPEED SPOT CHECKS

For many environmental analysis tasks, SPECTRO xSORT displays results twice as fast as competitive instruments! Get accurate preliminary measurements in as little as a few seconds. Screening even a large site or sizable pile of waste material takes hours, not days.

THIS HANDHELD ENERGY DISPERSIVE X-RAY FLUORESCENCE (EDXRF) SPECTROMETER provides extremely rapid, direct elemental testing and spectrochemical analysis of environmental samples with widely varying matrices, without complicated sample preparation. Achieving very low detection limits in the shortest possible time, SPECTRO xSORT furnishes laboratory-quality results, on-site, in seconds.

### LOW LIMITS: PERFECT FOR PPM PRECISION

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. SPECTRO xSORT is the ideal environmental analysis tool for qualitative or simple quantitative screening.



### UNBEATABLE EASE: POINT, CLICK, READ, MOVE ON

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. This instrument's compact, ergonomic, one-piece 1.64 kg (3.62 lb) design is optimized for easy, fatigue-free use in the field. And SPECTRO xSORT supplies one of the most intuitive software in its class.

# SPECTRO xSORT

## advantages for environmental screening

### FEATURES

X-ray safety gasket to prevent backscatter 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

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

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

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



### SPECTRO xSORT SERVICE AND SUPPORT

Organizations engaged in high-volume environmental 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 (including battery pack)</b>	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 grade ID/grade verification option, 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

## Typical ENVIRONMENTAL applications

	Hand-held XRF	XRF	ICP-OES	ICP-MS
Fast screening of soil and sewage sludge	■	■		
Elemental analysis of contaminants in soil	■	■	■	■
Elemental analysis of dust and fly ash	■	■	■	■
Elemental analysis of water / waste water			■	■
Elemental analysis of drinking water			■	■
Elemental analysis of eluates			■	■
Elemental analysis extractables			■	■
Ambient air monitoring		■		■
Fast elemental screening of alternative fuel	■	■		

SPECTRO: The industry's most comprehensive analytical line

Unlike other handheld instruments, the SPECTRO xSORT spectrometer takes its place among today's most complete suite of advanced elemental analyzers.

Example: our flagship SPECTRO XEPOS XRF spectrometer offers even better accuracy at identifying and measuring elements and their concentrations in unknown environmental samples. In fact, SPECTRO XEPOS achieves detection limits up to 10 times lower than other XRF spectrometers. Also, our new SPECTROBLUE ICP-OES provides detection below the parts-per-billion level when analyzing liquid or solid samples after digestion or elution, with comprehensive, compliant factory-prepared methods for many common environmental analyses.

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**<sup>®</sup>  
MATERIALS ANALYSIS DIVISION

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