



SPECTRO **xSORT**

HANDHELD XRF SPECTROMETERS



The handheld family you can trust for accurate,
affordable elemental analysis and screening

Reliable on-site identification, analysis,
and screening for every budget

SPECTRO xSORT

The SPECTRO xSORT family of handheld XRF spectrometers supplies elemental testing and spectrochemical analysis of myriad materials in widely varying conditions. These energy dispersive X-ray fluorescence devices are recognized for ruggedness and reliability on the job. They offer metals or nonmetals identification in seconds, with innovative technologies and designs that provide repeatable, laboratory-quality results. Simple, user-friendly displays and efficient ergonomics make these instruments extremely easy to use. At a range of affordable prices, SPECTRO xSORT spectrometers are leaders in their class for a broad spectrum of applications.



SPECTRO xSORT Alloy AFFORDABLE METALS IDENTIFICATION

This entry-level model employs an innovative silicon PIN (Si-PIN) detector. Get grade identification of metals in seconds without extensive analysis. With the xSORT family's reliability and ease of use (including an ultra-simple pass/fail sorting mode), SPECTRO xSORT Alloy is ideal for the quick incoming inspection of materials — and more!



SPECTRO xSORT AlloyPlus ADVANCED METALS ANALYSIS

With its top-of-the-line silicon drift detector (SDD), this model provides reliable, high-productivity measurement and analysis. Get metal grade analysis in only 2 seconds for most alloys. For alloys containing difficult light elements such as aluminum, magnesium, silicon, phosphorus, and sulfur, metal grade identification now takes only 7 seconds. It's ideal for scrap metals sorting, positive material identification (PMI), and more!



SPECTRO xSORT NonAlloy FAST ELEMENT SCREENING

Our largest silicon drift detector (SDD) helps provide reliable measurement and analysis of nonmetallic materials — with an outstanding level of performance. Get high-productivity spot checks in a few seconds, or hold on the sample longer for laboratory-quality ppm results. Ideal for environmental and RoHS compliance screening, as well as for geological exploration and more!



SPECTRO xSORT

advantages across the entire handheld family

X-ray safety gasket to prevent backscatter radiation from light element matrix samples

Optional integrated GPS receiver

Optional integrated video camera for precise spot testing, with visual memory storage

Low detection limits — down to ppm range for heavy metals and now even light elements

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

“Live” analysis results (display updated every few seconds)

Si-PIN detector (on xSORT Alloy only) or high-resolution, high-sensitivity SDD

Easy-to-use wireless LAN to deliver results anywhere on network; users can view and manage results or collaborate remotely and archive the information

Quick-change battery

SPECTRO iCAL one-sample, one-time automated standardization system

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

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

Element	Concentration	Unit
Al	1.01	Ct
Mn	0.31	Ni
Cu	0.64	Cu
Ti	0.85	V
Cr	0.40	Fe

FIELD-PROVEN QUALITY

SPECTRO xSORT spectrometers are used in the plant, on the jobsite, or in the most challenging field location. They deliver laboratory-quality results in a matter of seconds. SPECTRO xSORT models are optimized for fatigue-free, on-site measurements. A focus on long-term reliability is evident in every facet of their design. Example: its shutter and unique iCAL standardization system allow SPECTRO xSORT to continuously correct for drift — eliminating the need for tedious annual recalibration!

SPECTRO xSORT: SERVICE AND SUPPORT

So that SPECTRO xSORT instruments continue to meet and exceed customer availability goals, SPECTRO offers AMECARE Performance Services. The program fields more than 200 service engineers in more than 50 countries. The high-value, customized services they deliver help ensure optimum performance and the longest possible equipment life. Available AMECARE support includes protective maintenance programs, applications solutions, expert consultation, and targeted training.



SPECTRO **xSORT**: THE FULL FAMILY



	SPECTRO xSORT Alloy	SPECTRO xSORT AlloyPlus	SPECTRO xSORT NonAlloy
Detector type	Si-PIN detector	Silicon drift detector (SDD)	Large area silicon drift detector (SDD)
Excitation	Miniaturized X-ray tube 50 kV with Rh anode	Miniaturized X-ray tube 50 kV with Rh anode	Miniaturized X-ray tube 50 kV with Rh anode or W anode
Applications	First information about alloy measured after seconds	First analysis result about alloy measured after 2 s	Testing the RoHS/WEEE compliance of plastics (optional)
	Identification of metal alloys	Analysis and identification of metal alloys	Environmental screening of soils and sediments (optional)
	Analysis of precious metals (platinum group metals applications)	Analysis of metal alloys incl. elements Mg, Al, Si, P, and S Analysis of precious metals (platinum group metals applications)	Environmental screening of waste and waste oil (optional) Analysis of ores, concentrates, and tailings (optional)
Features	WLAN	WLAN	WLAN
	USB (host/client)	USB (host/client)	USB (host/client)
	Bluetooth	Bluetooth	Bluetooth
Options	GPS package	GPS package	GPS package
	Video imaging (camera)	Video imaging (camera)	Video imaging (camera)
	Adapter for small alloy samples	Adapter for small alloy samples	Docking station for small samples/ non-alloys

SPECTRO xSORT COMBI METALS AND ENVIRONMENTAL ANALYSIS COMBINED

It delivers all the speed and power of xSORT Alloy Plus for metals (including light elements) identification and analysis. xSORT Combi then adds xSORT NonAlloy's capabilities for measurement and analysis of nonmetallic materials, in applications such as environmental screening.

COMPREHENSIVE LINES OF ANALYSIS FROM SPECTRO

SPECTRO xSORT spectrometers take their place among today's most complete suite of advanced elemental analyzers. These include OES instruments such as the powerful mobile SPECTROTEST and stationary SPECTROMAXX and SPECTROLAB models; the top-of-the-line XRF analyzer SPECTRO XEPOS; plus SPECTRO ARCOS, SPECTROBLUE, and SPECTRO GENESIS ICP-OES spectrometers. Whatever the instrument, SPECTRO experience and innovation ensure the best results in the business.



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▶ SPECTRO operates worldwide and is present in more than 50 countries. For SPECTRO near you, please visit www.spectro.com/worldwide

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