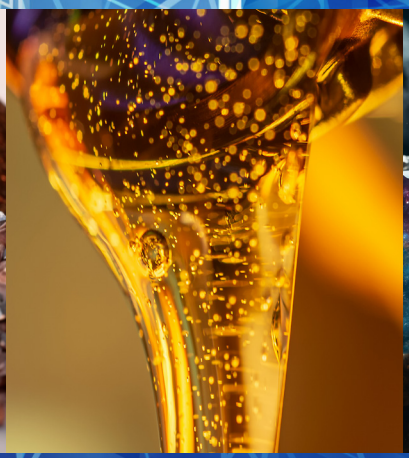
SPECTRO
AMETEK

Introducing

SPECTROCUBE

ED-XRF SPECTROMETER FOR PROCESS MONITORING APPLICATIONS



Easy, accurate, reliable analysis

Advanced elemental analysis

SPECTROCUBE

The SPECTROCUBE is an ideal benchtop solution for process monitoring applications, thanks to its innovative features. It can be equipped with a multi-position auto-sampler for unattended operation.

The SPECTROCUBE C is engineered for high-volume and high-precision analysis. It can handle solids, liquids, powders, pressed pellets, fused beads, filters, and coatings.

Applications include the analysis of slag, cement, ceramics, refractories, ores, concentrates, tailings, coal, coke, graphite, and food products like milk powder. Additionally, it can be calibrated for various applications in the chemical and petrochemical industries.

We assist with setting up these or other applications to ensure fast integration of the analyzer into your processes. For many applications, the instrument can be calibrated to comply with relevant industry test methods.

ONE OF THE NEWEST SPECTROMETERS FROM SPECTRO — A GLOBAL LEADER IN ANALYTICAL INSTRUMENTATION.

SPECTROCUBE employs improved technologies for *energy dispersive X-ray fluorescence (ED-XRF)* elemental measurement. It adapts the performance and reliability that make SPECTRO instruments the benchmarks for X*RF and optical emission spectrometry (OES)* analysis.

SPECTROCUBE ED-XRF ANALYZER FOR PROCESS MONITORING

The compact new SPECTROCUBE spectrometer incorporates the latest developments in XRF detector technology, including exceptionally high resolution and count rate. These innovations help make it the ideal benchtop solution for process monitoring applications.

OUTSTANDING EASE OF USE

Intuitive, user-tested XRF Analyzer Pro software presents relevant information on a single screen. And simplicity is built in. Example: for lube oil analysis, regardless of oil type, only a single testing method is required. So SPECTROCUBE enables a fast, smooth workflow even for minimally trained operators. Analyze each sample in three easy steps: 1) Center the prepared sample cup over the measurement window on the cabinet floor (or on the optional sample changer). 2) Close the lid. 3) Click the PC screen or hit the unit's "start" button.

EXCEPTIONAL SPEED & PERFORMANCE

SPECTROCUBE provides excellent precision for a wide range of concentration levels. Users can choose to simply match other spectrometers' best detection limits — but get the shortest possible measurement times: 2x faster than other analyzers in its class! Or users can elect to merely equal other instruments' speed — and achieve detection limits they can't reach. The analyzer is ideal for high-throughput operations. In most cases, no user calibrations or decisions are required.

COMPREHENSIVE COMPLIANCE

SPECTROCUBE is designed to meet many relevant test methods. For additional information about relevant test methods, please also refer to our website at: https://www.spectro.com/products/xrf-spectrometer/xrf-test-methods

SPECTRO**CUBE**

Exceptional results for the widest range of elements

The SPECTROCUBE analyzer meets or beats the lowest detection limits with outstanding precision. Given the simplicity of its analytical technique, operators at all levels can have the highest confidence in its results.

Users also get the advantage of one of the industry's broadest elemental selections. The analyzer is optimized for testing of element concentrations in the range from sodium (Na) to uranium (U).

With the latest high-resolution silicon drift detector (SDD) and an ultra-high count rate, SPECTROCUBE handles most trace elements with ease. (Some specialized trace elements may require analysis by the top-of-the-line SPECTRO XEPOS ED-XRF spectrometer.)

ENSURED AFFORDABILITY

SPECTROCUBE provides dependable, high-throughput, cost-effective analysis. Its competitive pricing and optimized cost/performance ratio make it affordable for refineries, testing laboratories, and government authorities at all levels. Finally, its high-reliability components and design keep maintenance expenses low.

COMPACT, RELIABLE DESIGN

The analyzer's rightsized, ruggedly built cabinet fits tight benchtop spaces. Its bottom-up design locates detection, excitation, and processing components below the chamber floor. Thus, users can run high numbers of samples simply, quickly, and conveniently. Also, those parts are guarded by a sample window, with the detector further shielded by a shutter open only during measurement. Most components have been time-tested by use in the high-end SPECTRO XEPOS analyzer. Results: high-reliability SPECTROCUBE components are securely protected against contamination, damage — and unneeded downtime. So, the analyzer can provide trouble-free performance over a long service life.

SPECTROCUBE

ED-XRF SPECTROMETER FOR PROCESS MONITORING

Detector	Silicon Drift Detector (SDD)	
Excitation	40 W X-ray tube, palladium (Pd) anode, 50 kV max.	
Dimensions	**Height**	380 mm (15 in)
	Width	520 mm (20.5 in)
	Depth	540 mm (21.3 in)
	Weight	ca. 56 kg (~ 124 lbs)
Sample	HxWxD: 155 x 400 x 320 mm (6.1 x 15.7 x 12.8 in)	
Chamber	Optional sample changer with up to 12 sample positions	
Power	Operating voltage 95-120 V / 200-240 V, 50/60 Hz	
Supply	Power consumption of spectrometer: 145 W	
Evaluation	External computer; Windows operating system;	
System	keyboard, mouse, monitor, printer	
Software	Menu-based software for control of spectrometer functions and evaluation of data	
Analyses	**Various application packages are available as pre-calibrated methods or method templates.**	
	Fundamental Parameters program FP+ for elemental analysis.	

GLOBAL SUPPORT

Process monitoring applications depend on fast, accurate analysis for productivity — and profitability. To ensure that reliable SPECTROCUBE analyzers keep up the pace, SPECTRO offers the AMECARE Performance Services program.

Customers report unmatched levels of coverage, application knowledge, and uptime. More than 200 AMECARE service engineers in 50 countries help ensure peak performance and extended life for every SPECTROCUBE instrument. AMECARE's high-value, customized services include proactive maintenance programs; application solutions; access to specialists; and instrument-specific training.

AMECARE PERFORMANCE SERVICES AMETEK

FULL FAMILY OF ANALYZERS

SPECTRO provides one of the industry's most comprehensive suites of advanced elemental instrumentation. For refining and petrochemical use, the SPECTROCUBE analyzer handles most routine applications with speed, precision, accuracy, and affordability.

For especially demanding tasks, the top-of-the-line, benchtop SPECTRO XEPOS ED-XRF analytical spectrometer provides exceptional analysis of trace elements and/or materials such as biofuels.

Whatever the product, SPECTRO's more than 40 years of experience in elemental analysis, plus its unparalleled record of technological innovation, ensure the best results in the business.

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