

Metallic Material Spectrometer



Article Overview

Metallic material spectrometers are instruments used to rapidly and accurately determine the elemental composition of metals, available in both stationary and portable formats for laboratory and on-site analysis.

Types of Metallic Material Spectrometers

1. Arc/Spark Optical Emission Spectrometers (OES) These spectrometers, such as the SPECTROMAXx series, use an electric arc or spark to excite metal atoms, causing them to emit light at characteristic wavelengths. The emitted light is analyzed to determine the elemental composition. They are highly precise, capable of detecting multiple elements simultaneously, and are widely used in metal production, fabrication plants, and foundries. Modern OES instruments feature intuitive software, dynamic measurement control, and remote monitoring options to ensure accuracy and reduce downtime . 2. X-ray Fluorescence (XRF) Spectrometers XRF spectrometers, including handheld and portable models, use X-rays to excite atoms in the metal sample, causing them to emit secondary X-rays that are characteristic of specific elements. These devices provide rapid, non-destructive analysis, often within seconds, and are suitable for on-site testing of alloys, metals, and even complex materials. Portable XRF spectrometers can connect to mobile devices for data transmission and reporting, offering laboratory-level accuracy in a compact, safe, and user-friendly design . 3. Wavelength Dispersive X-ray Fluorescence (WDXRF) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) High-end laboratory spectrometers, such as the ARL X900 and ICPMS-2040/2050 series, provide ultra-precise elemental analysis with low detection limits. These instruments are ideal for quality control, research, and process monitoring, capable of analyzing elements fr...

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Optical Emission Spectrometry | Optical Emission Spectrometer

Optical emission spectrometers for metal analysis Our optical emission spectrometers come with turn-key analytical solutions

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Spectro Analysis and Metal Detection | Cast Steel Products

The Spectrometer gives CSP sales representatives instantaneous readouts of scans done in field or in shop. We utilize the

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Spectrographic Analysis — Nortech Advanced NDT Ltd.

Spectrographic Analysis Optical Emission Spectrometry (OES) is the reference technique for elemental analysis of solid metallic

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Metal Analysis Spectrometer

They are used in the metallurgy, manufacturing, recycling, aerospace, automotive, and quality control industries to assess the

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Metal Testing & Analysis

SPECTRO metal analyzer instruments carry out a wide diversity of analytical tasks for metals analysis. The

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Elemental Analysis Solutions & Analytical Instruments | SPECTRO

SPECTRO is a global leading supplier of advanced analytical instruments like ICP, Arc Spark OES, and XRF spectrometers for

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Optical Emission Spectrometry for Alloying and Trace Elements in Metals

Optical emission spectrometry (OES) is a widely-used, industry-accepted technique to provide chemical analysis for

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Optical Emission Spectroscopy | SPECTRO Analytical

Optical emission spectroscopy using arc and spark excitation (Arc Spark OES) is the preferred method for trace metal analysis to

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Metal Analyzers

With more than 350,000 metal grades worldwide, Hitachi's toolbox of metal and alloy analyzers can help

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LIBS Spectrometer | Portable Metal Spectrometer Without Argon Gas

LIBS Spectrometer LIS-02 The Portable Metal Spectrometer is intended for operational input inspection of rolled metal products,

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This rugged 245x250x90mm portable spectrometer delivers fast, precise elemental identification in the

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XRF Spectrometers and Metal Analyzers | Worldoftest

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Find your metal analysis spectrometer easily amongst the 40 products from the leading brands (Thermo Fisher Scientific,

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Metallurgical Testing | Metal Analysis | Electron Microscopy ...

Modern, automated analytical workflows can combine electron microscopy, focused ion beam (FIB) milling, and

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Online Spectrometer | Metal Spectrometer LIS-01 | XRF

A metal spectrometer lis-01 & online spectrometer is used for alloy identification, metal analysis with

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Mobile optical emission spectrometer ferro.lyte®

ferro.lyte® is a mobile spectrometer, optimized for use in metal production, metal processing and metal

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Spektrometer für die Metallanalyse

Finden Sie das Produkt spektrometer für die metallanalyse problemlos unter den 40 Artikeln der führenden Marken (Thermo Fisher

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SPECTROMAXx Metallanalysator | SPECTRO Analytical

Metallverarbeitende Betriebe benötigen in der Qualitätseingangs- und Ausgangskontrolle von Materialien

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SPECTROMAXx Metal Analyzer | SPECTRO Analytical Instruments

The SPECTROMAXx ARC/SPARK OES analyzer delivers fast, accurate elemental analysis in metal producing and fabricating

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Mobile Metal Analyzer

For onsite metal analysis, SPECTRO offers a complete range of mobile metal analyzer products, from handheld XRF to portable Arc

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Spectrochemical Analysis | Metal Casting Resources

Spectrochemical analysis is used to determine the arrangement of atoms and electrons within molecules of chemical

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Mobile Metallanalysatoren

Als ein weltweiter Marktführer auf diesem Gebiet mobiler Spektrometer bietet SPECTRO eine komplette Produktfamilie – vom RFA

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Instrumentation for precise metal analysis

Our high-performance metal analyzers use either elemental analysis or optical emission spectrometry for easy, precise metal analysis.

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Metallprüfung und -analyse | SPECTRO

Metall Mit einer kompletten Produktpalette von Metallanalysatoren bietet SPECTRO Lösungen für alle

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Spectro Metaldatabase_int dd

Easy Search within thousands of materials and get the required grade displayed in a few seconds! Identification of unknown

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