

Metal Content Spectrometer



Article Overview

Metal element content spectrometers are instruments designed to accurately determine the elemental composition of metals, available in stationary, portable, and mobile formats using optical emission spectrometry (OES) or spark excitation.

Types of Metal Spectrometers

1. Stationary Spectrometers Stationary analyzers, such as the SPECTROCHECK, are compact and affordable instruments ideal for small foundries, automotive suppliers, and metal fabricators. They perform routine analysis of ferrous and non-ferrous metals like iron, aluminum, and copper. Features include ultra-fast sample standardization using intelligent calibration logic (iCAL), argon-saving designs, and modular plug-in functionality for cost-effective operation and easy maintenance . 2. Tabletop and Laboratory Spectrometers The PG SPARK OES CCD Metal Analyser is a tabletop optical emission spectrometer suitable for small to medium-sized foundries. It uses a high-resolution linear CCD to scan the full spectrum (130–900 nm) and can detect elements such as carbon, nitrogen, sulfur, arsenic, boron, and phosphorus at ultra-low levels. It supports regulatory compliance for trace elements and provides reliable, precise analysis for a wide range of metals and alloys . 3. Mobile and Portable Spectrometers Mobile spectrometers like ferro.lyte® and the Belec Compact Port HLC are optimized for on-site metal analysis in production, processing, and recycling environments. They use spark excitation OES to analyze elements with low atomic numbers (C, P, S, B, Li, Be, Ca, Si, Mg, Al) and nitrogen in duplex metals. These instruments are lightweight, intuitive, and allow flexible connectivity via USB, WLAN, LAN, or Bluetooth. Portable models often include robust batteries, heat-stabilized chambers, and interchangeable sparking probes for diverse sample types...

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Jul 28, 2025

Niton™ XL2 XRF Precious Metal Analyzer

Measure the content of all gold and precious metals with no need to manually change your calibration

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Handheld/Portable XRF Analyzers for Precise Elemental Analysis

Handheld XRF Analyzers are designed for elemental and chemical analysis of a wide range of materials and rapid identification of

Mar 28, 2026

Mobile Metallanalysatoren

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

May 16, 2026

The Basics of Elemental Analysis with XRF – Q& A

Can XRF distinguish between the different forms of an element (metal vs oxide)? XRF is an elemental analysis

Sep 03, 2025

Portable XRF Metal Analyzer

Meet your metal analysis needs anywhere with the JITA19201 Handheld XRF Analyzer. This rugged 245x250x90mm portable

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SPECTROMAXx Metallanalysator | SPECTRO Analytical

Darüber hinaus überzeugt das SPECTROMAXx durch eine intuitive Bedienung: Funktionstasten, User Management und die

Oct 16, 2025

Metal analysis spectrometer

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

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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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SPECTROTEST

The SPECTROTEST mobile arc spark spectrometer is ideal for many applications in the metal producing,

Sep 02, 2025

Portable XRF Metal Analyzer

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

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XRF Metal Analyzer: Quick results | Alloytester

Metal analysis is any analysis that is used to verify a metal or alloys elemental composition. Some metal

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Metals Analysis by Atomic Spectroscopy

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SPECTRO xSORT Handheld XRF Analyzer for Metal

This innovative handheld XRF gun analyzer quickly handles just about every onsite metal testing need

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Mass spectrometry imaging of metals in tissues and cells: Methods

As noted, this review focuses on strategies for imaging trace metals, detecting metal-based drugs, and simultaneous

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Atomic Absorption Spectrophotometry (AAS): Principles,

Atomic absorption spectrophotometry (AAS), also commonly referred to as atomic absorption spectroscopy, is one of

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PG SPARK OES CCD METAL ANALYSER FOR

This high quality, affordable and compact OES Spark Spectrometer is perfect for the routine analysis of

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Stationärer Metallanalysator SPECTROCHECK

Der stationäre Metallanalysator SPECTROCHECK bietet höchste Leistung und Zuverlässigkeit zu einem

May 08, 2026

Spectrographic Analysis — Nortech Advanced NDT Ltd.

Optical Emission Spectrometry (OES) is an advanced method for the elemental analysis of metal samples. Our spectrographic

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Elemental Analysis | Spectrometer Manufacturers & Suppliers

Metal Power Analytical provides world-class spectrometers, metal analysis instruments, and OES technology for steel plants,

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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.

Apr 10, 2026

Metallprüfung und -analyse | SPECTRO

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

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Portable Metal Analyzer

SPECTROPORT delivers many advantages of SPECTRO's portable OES flagship, SPECTROTEST, in a smaller, lighter package. It

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Metal Identification Tool for elemental analysis | Alloytester

Bruker's handheld TITAN metal testing tool enables the rapid determination of the elemental content of

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