Handheld Metal Wire Elemental Spectrometer

AI Overview

Handheld metal wire elemental spectrometers are portable devices that allow rapid, on-site analysis of metal composition using XRF or OES technology.OverviewHandheld elemental spectrometers are designed for fast, accurate, and non-destructive analysis of metals, including wires, alloys, and small components. They are widely used in metal production, recycling, quality control, and field inspections. These devices combine portability with laboratory-grade precision, enabling users to perform elemental identification and quantification without the need for extensive sample preparation .Key TechnologiesX-ray Fluorescence (XRF)Uses X-rays to excite atoms in the sample, causing them to emit characteristic secondary X-rays.Detects elements from magnesium to uranium, making it suitable for a wide range of metals.Advantages: Non-destructive, fast (30–60 seconds per sample), portable, and ideal for field use.Example: The JITAI9201 handheld XRF analyzer features a 50 kV X-ray tube, Si-PIN diode detector, automated filters, and Peltier cooling, allowing precise analysis of metals like silver, tungsten, and tantalum .Optical Emission Spectrometry (OES)Uses a spark or arc to excite atoms, producing light that is analyzed to determine elemental composition.Can detect light elements such as carbon, phosphorus, sulfur, boron, and nitrogen, which XRF may struggle with.Advantages: High accuracy for low atomic number elements, fast analysis (seconds per sample), and suitable for metal production and recycling .Example: The SPECTROPORT and ferro.lyte® devices provide portable OES analysis with intuitive interfaces, automated calibration, and flexible connectivity for data management .Features for Wire and Small Sample AnalysisCompact and lightweight design (typically 1.5–7 kg) for easy handling in the field .Multiple probe options for analyzin...

Article Content

Bruker TRACER 5i Handheld XRF Analyzer

The Bruker TRACER 5i XRF is a handheld, portable spectrometer ideal for elemental analysis in the field and in laboratory-like settings. Specifically

Niton Handheld and Portable Analyzers

Handheld and portable analyzers for advanced elemental analysis and metal identification For more than 30 years, Thermo Scientific Niton analyzers have been the trusted instruments of choice for field

Portable handheld spectrometers

Our portable handheld spectrometer instruments Handheld and portable spectrometers have the ability to quantify or qualify nearly any element without

Portable and Handheld XRF Analyzers | Evident Scientific

Evident handheld XRF analyzers are rugged and portable for fast and accurate elemental analysis where you need it. Explore our complete range here.

Mobile Optical Spectrometer | Spark OES | Hitachi High

Decipher metal specifications and finding the correct grade for a specific application. Find precise traceable and reliable mechanical, physical and other property data

Moving toward a Handheld “Plasma” Spectrometer for Elemental

Given all the advances in both field transportable molecular analysis and new atomic sources, high precision metals analysis has recently moved much closer to being field transportable.

Portable Metal Analyzer

SPECTROPORT delivers many advantages of SPECTRO''s portable OES flagship, SPECTROTEST, in a smaller, lighter package. It accurately analyzes elements such as carbon, sulfur, phosphorus, and

Hand-held XRF Analyzer Fluorescence Spectrometer

Cutting-Edge XRF Technology: Incorporates advanced X-Ray Fluorescence Spectrometry (XRF) technology, providing the latest in non

X-Ray Fluorescence Spectrometer (XRF)

Laboratory XRF Spectrometer Introduction The Laboratory XRF Spectrometer is a powerful analytical instrument used for precise, non-destructive elemental

Portable XRF Metal Analyzer

This rugged 245x250x90mm portable spectrometer delivers fast, precise elemental identification in the field.The 50kV X-ray tube and high sensitivity Si-PIN diode

Elemental Analysis with Handheld XRF Analyzers | Bruker

Elemental analysis with Bruker handheld XRF analyzers enables on-the-spot elemental analysis for high concentrations such as percentage, as well as for trace elemental concentrations such as ppm (parts

SPECTROTEST

The SPECTROTEST mobile arc spark spectrometer is ideal for many applications in the metal producing, processing, and recycling industries. Find out more.

Niton Portable Analyzer Models

Lightweight, high-performance handheld XRF analyzer delivering fast, lab-quality elemental analysis across metals, mining, environmental, and more. Obtain fast, accurate elemental analysis for metal

Mobile Optical Emission Spectrometers (OES) | Metal

Designed for on-site analysis, they deliver rapid and accurate PMI, grade ID, and elemental testing, ideal for scrap yards, foundries, large structures, and remote

Portable Mineral Testers for Mining and Exploration

In mineral exploration and mining, fast access to reliable geochemical data helps guide decisions in the field. X-Ray Fluorescence (XRF)-based portable mineral

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 metal/nonmetal.

Funkenspektrometer für Metallanalyse to go

Das mobile Funkenspektrometer ferro.lyte® erleichtert die mobile Analyse von Metallen. Jetzt mehr über das intuitive OES erfahren!

portable spectrometer | Belec

Whether for mobile analysis on site or for stationary use in the laboratory - our accessories guarantee your metal analysis adapt to your requirements. With our

TRACER 5 pXRF spectrometer | Bruker

TRACER 5 is the high value in-situ pXRF performer synchronizing power, function, precision and accuracy for dynamic, field capable laboratory-like elemental

Portable XRF Spectrometer 5000 – Handheld Alloy

The AELAB Portable XRF Spectrometer 5000 is a powerful handheld analyzer tailored for quick, accurate elemental analysis of alloys and precious metals.

RFA-Handspektrometer | Bruker

Handheld/Mobile/Portable XRF Spectrometers Handheld / portable X-ray fluorescent (XRF) analyzers have the capability to non-destructively quantify or qualify nearly

Mobile optical emission spectrometer ferro.lyte®

ferro.lyte® is a mobile spectrometer, optimized for use in metal production, metal processing and metal recycling. It uses the principle of optical emission spectrometry (OES) with spark excitation.

Metal Power

Our stationary Arc/Spark OES offer high-productivity solutions for metal analysis. Our Mobile OES offer a rugged and reliable solution for on

Handheld XRF Spectrometers for Elemental Analysis

Handheld X-Ray Fluorescence (XRF) analyzers have the capability to quantify or qualify nearly any element - from Magnesium to Uranium.

Mobile Metal Analyzer

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

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://www.sabineamsee.co.za
Email: info@sabineamsee.co.za
Phone: +27 82 415 6793
Address: Unit 7, Innovation Park, 34 Electron Road, Kempton Park, 1620, South Africa

This document is for informational purposes only. Specifications subject to change without notice.