

Portable H-beam steel elemental spectrometer



AI Overview

Portable XRF and LIBS spectrometers provide fast, accurate, and on-site elemental analysis of steel H-beams and other metal alloys. Overview Portable spectrometers are designed to deliver rapid, non-destructive elemental analysis of metals, including steel used in H-beams. These devices are ideal for field inspections, quality control, and alloy verification without the need to transport heavy samples to a laboratory. Two main technologies are commonly used: X-ray fluorescence (XRF): Detects a wide range of elements, including heavy metals and alloying elements, with high precision. Laser-induced breakdown spectroscopy (LIBS): Excels at detecting light elements such as carbon, lithium, and boron, which are difficult to measure with XRF. Key Portable Spectrometer Options Handheld XRF Analyzers Example: JITA I9201 Handheld XRF Features: 50 kV X-ray tube, Si-PIN diode detector, automated beam switching, Peltier cooling (-35°C), 2GB storage, lightweight (1.5 kg) and rugged for field use. Applications: Steel alloy verification, impurity detection, and on-site quality control. Portable Benchtop XRF Example: SciAps PowerHouse X Features: 80 kV X-ray tube for enhanced sensitivity, broader elemental range, robust design for field deployment. Applications: Rare Earth Element (REE) analysis, high-throughput steel and metal testing. Handheld LIBS Analyzers Example: Niton Apollo and Malvern Panalytical Z-Series Features: Laser-induced breakdown spectroscopy, IP54-rated for dust and moisture resistance, rapid detection of light elements, minimal sample preparation. Applications: Carbon content in steel, alloy sorting, battery materials, and forensic analysis. Arc Spark OES Spectrometers Example: SPECTRO Mobile Metal Analyzer Features: Arc spark optical emission spectroscopy, laboratory-grade precision in a portable format, capable of detecting nitrogen and other elements in...

Article Content

Portable XRF Spectrometers

Handheld XRF (energy-dispersive X-ray fluorescence, EDXRF) analyzers are used to identify presence of a wide range of elements, namely every single element that is located between sodium and

portable spectrometer | Belec

For maximum flexibility and precision, Belec offers a comprehensive range of accessories for the portable spectrometer Belec Compact Port HLC and our

Portable XRF Analyzer & Price List

See many used XRF Analyzer Models and their prices. Here I list the price of a Portable XRF Analyzer (AKA handheld XRF spectrometer) depends on

Niton™ Apollo™ Handheld LIBS Analyzer

Identify low alloy/carbon steels and L and H grade steels. This analyzer transforms a traditional cart-mounted optical emission spectroscopy (OES) system into a highly portable, easy-to-use handheld

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.

SPECTROSCOUT

SPECTROSCOUT SPECTROSCOUT – The portable, energy-dispersive X-ray fluorescence (ED-XRF) spectrometers that bring lab-grade analysis into the field

XRF Analyzers | XRF Spectrometers | Malvern Panalytical

Malvern Panalytical XRF spectrometers for elemental and thin-film thickness analysis, suited for a variety of analytical and sample throughput.

portable spectrometer | Belec

Our Belec Compact Port HLC is your reliable partner for mobile metal analysis. With its robust design and state-of-the-art technology, it delivers accurate results,

X-ray Fluorescence Spectrometer for Stainless Steel

X-ray Fluorescence Spectrometer for Stainless Steel, Find Details and Price about Portable Xrf Fluorescence Spectrometer Spectrometer for Alloy Analysis from X

TXRF Spectrometers

TXRF Spectrometers Benchtop TXRF Spectrometers for Trace Element Analysis Total reflection X-ray fluorescence spectrometry (TXRF) is a well-established

Handheld LIBS Analysers | Portable Analytical Solutions

Choose PAS for an extensive range of Handheld LIBS Analysers. Unmatched expertise, tailored solutions – the key to fast and accurate analysis in your hands.

Portable Metal Analyzer

It accurately analyzes elements such as carbon, sulfur, phosphorus, and boron. It's as fast as an XRF, with many analyses taking only a few seconds. And it enables effortless point-and-shoot

XRF Analyzers | XRF Spectrometers | Malvern Panalytical

With the recent acquisition of SciAps, we now also offer cutting-edge handheld XRF and LIBS analyzers - such as the X-Series, Powerhouse X, and Z

Portable Optical Emission Spectrometers (OES): Everything You

An optical emission spectrometer, or OES, is a spark- or laser-based system designed to accurately determine the elemental composition of metals by burning the metal surface and

Handheld XRF Spectrometers for Elemental Analysis

Bruker's portable XRF solutions offer multi-element analysis with off-the-shelf or customized methods to provide actionable results at any stage of the food

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

Elemental analyzers

Malvern Panalytical elemental analyzers are designed for various applications and industries, including pharmaceuticals, mining and environmental monitoring.

In situ elemental characterisation of marine microplastics by portable ...

To this end, field-portable x-ray fluorescence (XRF) spectrometry is particularly useful in providing a rapid and non-destructive means of characterising the elemental composition of synthetic

Field-portable and handheld laser-induced breakdown spectroscopy ...

Two types of devices are described – (i) field-portable type systems consisting of multiple units connected by an umbilical (fp LIBS) and (ii) handheld analyzers (h LIBS). The performance of

Portable XRF Spectrometers

Portable X-Ray Fluorescence Analyzers Handheld XRF Spectrometers Our XRF Analyzers Provide Fast and Precise Qualitative and Quantitative Analysis of Elemental Compositions.

Methodology and applications of elemental mapping by laser induced ...

The dispersive optical arrangement of spectrometers used for elemental imaging is no different from regular LIBS analysis. The choice of the optical setup of the spectrometer is dictated by

Handheld LIBS Analyzer, Portable Elemental Analysis | Thermo Fisher ...

The Thermo Scientific™ Niton™ Apollo Handheld LIBS Analyzer delivers fast, accurate, Portable Elemental Analysis. Click here to learn more.

Analyzers

Accurate Precise Chemistry Grade ID Assay Elemental Analysis Budget & Low Price Affordable Cost Inexpensive Cheap Pre-owned / Preowned & Used

Handheld/Portable XRF Analyzers for Precise Elemental Analysis

Ideal for applications such as alloy grade identification, elemental composition verification, and multi-material analysis, these handheld XRF analyzers are used across industries including

Contact Us

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