

Domestic Metal Spectrometer



Overview

Stationary Metal Analyzer SPECTROCHECK | SPECTRO Analytical This high-quality, compact and affordable instrument is ideal for routine analysis of elemental.

Key Takeaways

Domestic metal element spectrometers provide precise, cost-effective, and versatile solutions for analyzing elemental composition in metals, available in stationary, mobile, and handheld formats. Stationary Spectrometers

Stationary metal analyzers, such as the SPECTROCHECK, are designed for small foundries, automotive suppliers, and metal fabricators. They offer high precision and stability for routine analysis of ferrous and non-ferrous metals like iron, aluminum, and copper. Features include ultra-fast one-sample standardization, argon-saving technology, and a compact, modular design for easy maintenance and operation, even by non-specialized personnel. Other stationary options, like the Belec VARIO Lab and Belec IN-SPECT, provide laboratory-grade spectral analysis with high accuracy and versatile applications in production environments.

Mobile and On-Site Spectrometers



Mobile optical emission spectrometers, such as ferro.lyte®, are optimized for on-site metal production, processing, and recycling. 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 alloys. These devices combine laboratory-level precision with portability, intuitive interfaces, and wireless connectivity (USB, WLAN, LAN, Bluetooth), enabling fast, reliable, and safe on-site analysis. Mobile spectrometers are particularly useful for quality control in production lines or field inspections.

Handheld and Portable Spectrometers

Handheld XRF analyzers, like the JITA19201, offer non-destructive, portable metal analysis. Compact and lightweight, they feature a 50 kV X-ray tube, high-sensitivity Si-PIN detector, automated beam switching, and Peltier cooling for consistent performance in the field. These devices store large datasets, support multiple connectivity options (USB, Bluetooth, GPS), and allow rapid elemental identification of alloys and impurities, making them ideal for fieldwork or laboratory use.

Key Considerations

When selecting a domestic metal element spectrometer, consider:

- Type of metals to analyze (ferrous, non-ferrous, or specialty alloys)
 - Portability needs (stationary lab vs. mobile on-site vs. handheld)
 - Analytical precision and detection limits
 - Ease of use and software interface
 - Operational costs, including argon consumption and maintenance
 - Data management and connectivity for integration with quality control systems.
- Domestic spectrometers now offer high performance at lower costs, combining laboratory-grade accuracy with user-friendly operation, making them suitable for a wide range of industrial and field applications.

Article Content

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

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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We are a dealer specializing in second hand optical emission spectrometers (OES) used for base metal analysis of primary metal

VAS Spectrometers | Optical Emission Spectrometers for Metal Analysis

VAS Spectrometers offers high-precision Optical Emission Spectrometers (OES) and spectrometer solutions for ferrous and non

Optical Emission Spectroscopy Metal Analyzer

The direct reading spectrometer OES8000s is widely used in the elemental analysis of steel and non-ferrous metal products. It can

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

