

Edx-le fluorescence spectrometer



AI Overview

An EDX fluorescence spectrometer (EDXRF) is a non-destructive analytical instrument used to identify and quantify elemental compositions in solids, liquids, and powders. Principle of Operation EDX fluorescence spectrometry relies on energy-dispersive X-ray fluorescence (EDXRF), where a sample is irradiated with X-rays, causing inner-shell electrons to be ejected. Electrons from higher energy levels then fill these vacancies, emitting characteristic X-rays unique to each element. An energy-dispersive detector measures the energy and intensity of these X-rays, allowing both qualitative and quantitative elemental analysis without destroying the sample.

Applications EDXRF is widely used across industries for quality control, process monitoring, and regulatory compliance. Common applications include: Metals, alloys, and mining materials Polymers and plastics Environmental testing (soil, water, air) Food safety and pharmaceuticals Coatings, thin films, and powders

Advantages

- Non-destructive: Samples remain intact after analysis.
- Rapid analysis: Some instruments provide results in as little as one minute.
- Minimal sample preparation: Solids, powders, and liquids can often be analyzed directly.
- Cost-effective: Modern detectors, such as Si-PIN or silicon drift detectors, reduce the need for liquid nitrogen cooling, lowering operational costs.

Shimadzu EDX Models Shimadzu offers a range of EDX spectrometers tailored to different needs:

- EDX-LE / EDX-LE Plus: Designed for screening elements regulated by RoHS/ELV directives, with automated analysis and fast measurement times.
- EDX-7200: Flagship model with high sensitivity, speed, and precision, supporting compliance with RoHS, REACH, and TSCA regulations.
- EDX-8100: High accuracy and speed, capable of detecting ultra-light elements.
- ALTRACE: Advanced model with high sensitivity and expandability for trace element detection.

Summary EDX fluorescence spectrometers provide fast, reliable, and non-destructive elemental analysis suitable for a wide range of industrial, environmental...

Article Content

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Spectrometer XRF EDX3600H

Spectrometer XRF EDX3600H is a energy dispersive laboratory X-ray fluorescence spectrometer EDXRF intended for elemental analysis in full scope. The advantage of the device in addition to the

EDX-LE : Shimadzu (Asia Pacific)

EDX-LE is an X-ray fluorescence spectrometer designed specifically for screening elements regulated by RoHS/ELV directives. The model uses a detector (Si-PIN

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Energy Dispersive X-ray Fluorescence Spectroscopy

This page provides a quick overview of 4 models of Energy Dispersive X-ray fluorescence spectrometers. Choose the model that best suits your analysis needs from our EDX-LE for

C142-E035D_EDX-LE

The EDX-LE can perform qualitative analysis and non-standard quantitative analysis based on the FP method. This means it can be used to analyze foreign substances or differentiate between different

C142-E035D_EDX-LE

EDX-LE utilizes a BG internal standard method* to eliminate the effect of shape and thickness in order to provide highly precise results. Fluorescent Fluorescent X-ray X-ray intensity intensity of of each each

ESI EDX8800M MAX Energy Dispersive X-Ray Fluorescence Spectrometer

Overview The ESI EDX8800M MAX is a high-performance, vertically configured Energy Dispersive X-Ray Fluorescence (EDXRF) spectrometer engineered for precise, non-destructive elemental analysis

X-Ray Fluorescence Spectrometers / XRF Analyzers

X-Ray Fluorescence Spectrometer (XRF Analyzer) X-ray fluorescence spectrometers use high-energy X-rays (or gamma rays) to excite fluorescent radiation from a sample for quantitative chemical or

Spectrometer XRF EDX3000 PLUS

XRF spectrometer EDX3000 PLUS is the latest model of energy dispersive X-ray fluorescence spectrometer EDXRF, designed specifically for non-destructive analysis of alloys and products made

2017 Shimadzu EDX-7000 Fluorescence spectrometer

Home page Medisch Medical Equipment 2017 Shimadzu EDX-7000 Fluorescence spectrometer Location Thorn, NL Sold by Company seller Lot A1-40521-2956 Auction EX US Army vehicles, parts,

Shimadzu X-Ray Fluorescence Spectrometer EDX-LE

EDX-LE is an X-ray fluorescence spectrometer designed specifically for screening elements regulated by RoHS/ELV directives. The model uses a detector (Si-PIN semiconductor detector) that does not

EDX-LE Plus — Energy Dispersive X-Ray Fluorescence

- Includes analytical conditions for measuring cadmium, lead, mercury, chromium, and bromine (with built-in calibration curves).
- The included polyethylene check

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Contact Us

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