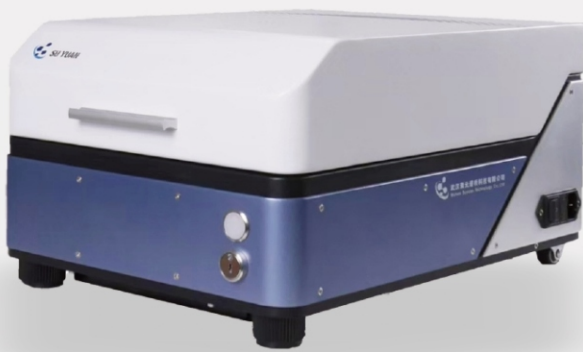




素元谱析

Suyuan Technology



EDX-PE5E XRF SPECTROMETER

- ✓ Lossless sampling Quick detection Accurate analysis
- ✓ Higher precision Higher resolution Higher reliability
- ✓ Humanization boundary Easy and fast operation
- ✓ Reduces reliance on specialized technical expertise

Integrated type +
Comprehensive
Precious Metal Solutions

Technical Index

Scope of Elemental Analysis: Sulfur(S)–Uranium(U)

Common analysis elements: Gold (Au), Silver (Ag), Platinum (Pt) and so on

Detector energy resolution: SDD $133 \pm 5\text{eV}$

High voltage power: 0-50KV/0-1mA

X-ray tube: Be window, Tungsten(W) target material, 50W
(Can be adjusted according to different needs)

The detection limit for analysis can reach 1ppm

Power supply: AC $220 \pm 5\text{V}$

Overall Dimensions: 443x326x233 mm

Sample compartment size : 421x321x90 mm

Weight: 23 kg

Environmental

Environmental temperature: $0\text{ }^{\circ}\text{C}$ - $35\text{ }^{\circ}\text{C}$

Relative humidity: 35% -70%

Power requirement: AC $220\text{V} \pm 5\text{V}$ 50/60HZ

There is no high-power strong electromagnetic interference around

Standard Conguration

Imported SDD digital multi-channel detector

High power X-ray tube, high-voltage power supply

Quantitative and qualitative analysis software

X-ray safety protection linkage device



R&D design



Accurate analysis



Customized Solution



Simplify operation

- Upgraded version of digital multi-channel detector, achieving high resolution and high counting pass rate.
- Downward-facing X-ray inspection can meet the testing needs of different shapes samples.
- The automatic switching of multiple collimators and filters can be applied to various testing methods.
- The new generation of high-voltage power supply and X-ray tube have more stable and reliable performance, achieving higher testing efficiency with a power of 50 W.
- Multi channel radiation protection sensors achieve dual pronged approach to achieve comprehensive safety protection.

EDX-PE5E Application Field

Jewelry Industry - Quality Appraisal and Authenticity Identification

Karat identification (K-gold testing): In the procurement process, rapid testing is conducted on the gold, platinum, and K-gold materials provided by suppliers. The instrument can accurately analyze the purity of gold (such as AU750, AU999) and the exact content of platinum (Pt950, Pt990) within seconds, effectively eliminating the problem of "insufficient color" or "adulteration", ensuring the quality of raw materials and finished products, and avoiding significant economic losses.

Quality control: In the production process of precious metal jewelry, this analyzer precisely monitors the composition ratio of alloy materials to achieve strict control over key attributes such as product hardness and color. It not only ensures a high degree of consistency in the quality of products from the same batch, but also effectively optimizes the stability of production processes, significantly reducing quality fluctuations and scrap rates caused by component deviations, ultimately enhancing overall production efficiency and market competitiveness.

Authenticity identification: Faced with the constantly emerging counterfeit products in the market (such as gold-plated or gold-plated products impersonating pure gold), the analyzer can instantly penetrate the surface and detect the internal material. For example, high-density counterfeit methods such as "tungsten core gold" can be easily identified to maintain brand reputation.

Pricing for old material recycling: When recycling customers' old jewelry, there is no need to melt or damage it, and on-site non-destructive testing is directly conducted. Fair and transparent pricing is based on accurate precious metal content and weight, greatly improving customer trust and transaction efficiency, and achieving standardization and efficiency in recycling business.



✓ EDX-PE5E Instrument Features

EDX-PE5E adopts advanced X-ray fluorescence spectroscopy technology, which can accurately detect 74 metal elements such as gold, silver, platinum, palladium, rhenium, tungsten, iridium. In addition to the conventional analytical capabilities for precious metals such as gold and platinum, the instrument can also accurately identify common adulteration methods such as "gold doped with rhenium" and "gold doped with tungsten", effectively responding to hidden adulteration behaviors in the market. Its excellent stability and extremely high analytical accuracy can clearly distinguish between 99.99% and 99.90% high-purity gold, ensuring accurate composition determination. EDX-PE5E, with its fast, non-destructive, and precise characteristics, has become the "gold standard" for precious metal content detection and quality control in many industries.





Wuhan Suyuan Spectral Analysis Technology Co., Ltd. is a high-tech enterprise specializing in the design, research and development, production, sales, and service of spectral analysis testing instruments and software.

Our R&D team has over ten years of industry experience and has designed and developed a series of energy dispersive X-ray fluorescence spectrometers, stable digital multi-channel pulse analysis acquisition systems, advanced spectral analysis methods, and solved various industry problems in component analysis. We provide customers with more efficient products and more thoughtful services, while also providing more comprehensive industry solutions for many industries such as electronics, appliances, jewelry and toys, food, building materials, metallurgy, geology and mining, plastics, petroleum, chemical, and medicine, maximizing cost savings and value creation for customers.

Advanced technology, professional team, and strict enterprise management are the fundamental factors that enable us to continuously grow and win the trust of our customers. We are willing to support advanced spectral analysis methods with cutting-edge technology, solve various industry problems in component analysis, provide technical support, high-quality product quality, and perfect after-sales service to customers, and work together with our customers to create brilliance.

Sri Bhavani Ganesh Power Systems Pvt Ltd



Surya N

TEL : 9489214916 / 9108341004

Mail Id: suryan.n151@gmail.com

Website: www.sbgpowersys.com

Add : No. 47 / 9/11, Nithin Buliding, Sriramapura Main Road,
Near Achievers School, Bommasandra - Jigani Link Road,
Bangalore - 560 105, Karnataka.

