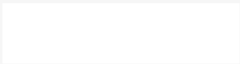# ScopeX GOLD 1 Benchtop Precious metal analyzer

Product introduction

Precious metals mainly refer to gold, silver and platinum group metals (ruthenium, rhodium, palladium, osmium, iridium, platinum) and other 8 metal elements. Most precious metal elements have beautiful color and lustre, but also have excellent electrical properties (excellent conductivity, high temperature thermoelectric properties and stable resistance temperature coefficient, etc.), high catalytic activity, strong coordination ability, etc.

In addition to jewelry manufacturing, precious metals are widely used in the industry, and their "few, small, fine, wide" characteristics are called as the modern "industrial vitamins".

LANScientific Scopex has excellent capability of precious metals analysis, which can quickly and accurately determine precious metals and impurity materials such as gold, silver, rhodium and palladium on site without damaging the tested samples. The Scopex Desktop X Fluorescence Analyzer is more convenient and economical than other methods for detecting precious metals. It is ideal for determining carat grade and precious and non-metallic content. It is a cost-effective tool for pawnshops, gold trading venues, jewelry shops, museums and recycling.

Application range

1. Color inspection of incoming materials, process abrasives, recycled materials and finished products from jewelry factory

2. Detection of recovered components of bank precious metals/gold products

3. Finished products inspection of gold stores and components of recycled jewelry

4. Evaluation of the pawn value of precious metals and jewelry in pawnshops

5. Teaching in laboratories of gold, silver and precious metals testing institutions and colleges

Technical parameters and specifications

The main specifications

The measurement	X-ray fluorescence analysis
Determination method	Energy dispersion type
The determination of the object	Solid, liquid, powder
Range of measurement	Fe, Co, Ni, Cu, Zn, Se, Ru, Rh, Pd, Ag, Cd, In, pt, Au, pb and so on, Specific can be configured according to the requirements
Sample room size	368*304*78mm
Maximum sample weight	2.5 KG
Open way	
X - ray generating department	
X-ray tube	High power side window X-ray tube
voltage	Maximum 50 kv
current	Limit 1 ma
Cooling way	Air cooling
collimator	5mm, 3mm, 1mm, 0.5mm
The detector	
type	Si-pin detector
Cooling way	Peltier cooling
Sample room	
Determination of environmental	Atmosphere, Vacuum (optional), Helium (optional)
Sample observation	5 megapixel high-definition industrial camera
Data processing department	
PC processor (CPU)	I3-7100 equivalent frequency or above
Memory (RAM)	DDR4 4G memory or above
Hard disk capacity (ROM)	1TB HDD or 256GB SSD or above
OS	Windows 10
Environment setup	
Temperature conditions	10 ° C ~ 35 ° C
Relative humidity	40~70%(no dew)
The power supply	220VAC
Rated power	100W
Set the example	
Size of the host	570*402*400mm
The host weight	47KG

Product detail

Accurate and reliable quantitative method

Wave sound international leading XRF analysis software, the integration of correction curve method, basic parameter method (FP method) and other analysis methods, the accuracy of the test data performance has been fully guaranteed.

Simple and intuitive

It can accurately describe the analysis spectrum, and has the function of spectrum comparison, fast track the possible changes of material composition, reduce the risk.

Easy customization

On the basis of the built-in template to provide a variety of custom options, according to the screening needs of the threshold and decision string, to achieve personalized screening of different materials, different elements.

Facilitate the management

Through permission level management, operators can use different user names and passwords to log in to the system, thus binding the test report to testers. A variety of test report output formats (Excel, PDF, etc.), and can be customized test report content, to meet different test data management needs.

X-ray tube aging automatically

After the X-ray tube is idle for a period of time, its internal vacuum degree will be reduced. If the X-ray tube is directly used without aging, it will cause damage to the X-ray tube. Wave sound resoftware is equipped with automatic aging function of X-ray tube to protect equipment and minimize the energy required for device maintenance.

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