

| Rapid | Accurate | Non-destructive |



Precious Metal Testing Expert!

A collection of ornate gold jewelry, including a necklace, a bracelet, and a ring, displayed against a blue background.

Smart 100

X-ray Fluorescence Spectrometer

with SMART 100 results are displayed in 2 seconds



Smart 100 Plus

Intelligent Precious Metal Analyzer

Smart 100 X-Ray Fluorescence Spectrometer is our most advanced instrument for Precious Metals Analysis. Thanks to new generation Silicon Drift Detector (X-SDD) and multi-channel technology, Smart 100 is able to analyze Precious Metals of all sizes and get accurate results in 2 seconds.

Application fields

- Precious metal metallurgical plant and precious metal recovery
- Jewelry stores and jewelry processing
- Precious metals inspection, analysis and testing





■ Features

High power Tungsten Target X ray tube increases excitation efficiency for precious metals

Silicon Drift Detector Fast-SDD with resolution as low as 125eV

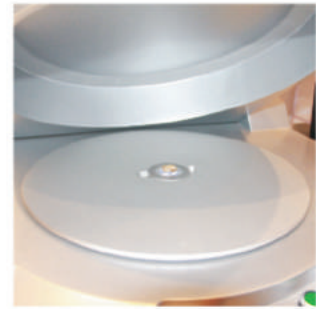
Large detection area(25mm²) improves detection efficiency and lowers detection limits

Optical shutter system improves test efficiency and accuracy

Digital multichannel technology provides ultra-high count rate over 600KCPS

Industrial CCD ultra-definition camera and movable platform ensure accurate sample positioning

Eight collimators and five optical filters allows accurate analysis even for the smallest samples.

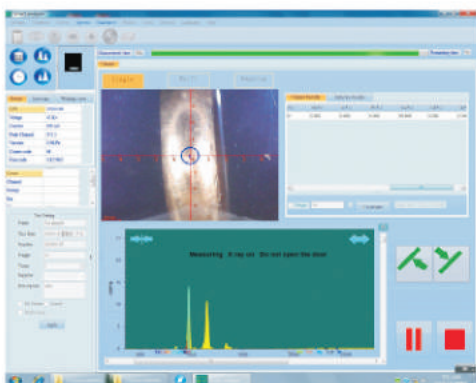


electric two-dimensional mobile platform

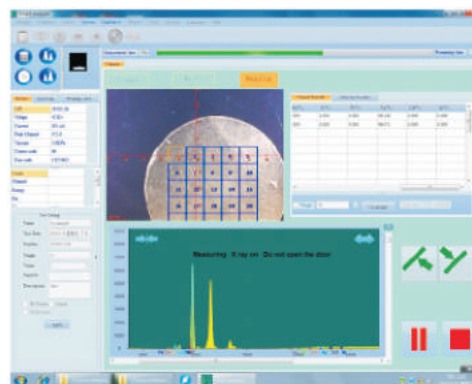
■ Advanced FP Software

Advanced FP Software is easy to use and comes with all the advanced features necessary for Precious Metals testing

- Fast Analysis thanks to automatic -curve function and one key testing
- Multiple test modes for single point testing, multi-point testing and grid testing
- Plating Thickness software for identifying gold plated jewelry



Single point mode operation example



Grid mode operation example



Multi-point mode operation example



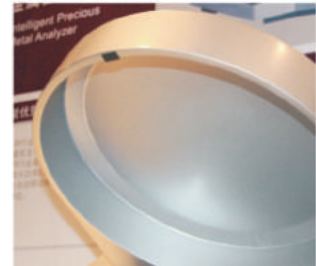
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Safety Features

Thick metal panels and heavy lead coating prevent any radiation leaking

The top Cover is software controlled and cannot be raised when instrument is testing

X-ray tube remains powered off when instrument is on stand-by or is not testing



Configuration and Specification

Refrigeration method	Electrical refrigeration, no liquid nitrogen refrigeration, can be kept in room temperature, exclusively for testing precious metals products, easy operation
Preamplifier and main amplifier circuit	The detector contains preamplifier and main amplifier circuit; integrated design guarantees better stability and higher reliability
X-ray high voltage power	Tube voltage (Max): 50Kv ; tube current (Max) : 1mA
X-ray irradiation mode	Under irradiation
Measurement Accuracy	0.03% (samples with over 96% testing content)
Elements analysis ability	Over 30 kinds of elements
Sample types	Solid, Powder, Liquid
Analysis elements	S~U
Working temperature	15~30℃
Relative humidity	≤70%
Size	700mmx620mmx379mm
Weight	110kg

Skyray Instruments



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• Spectroscopy • Chromatography • Mass Spectrometry

Skyray Instruments specializes in the R&D, manufacturing and sales of analytical and measuring instruments in Spectroscopy, Chromatography and Mass Spectroscopy fields. Our Products include X-ray Fluorescence Spectrometry, Atomic Absorption Spectrometry, Gas Chromatography, Inductively Coupled Plasma Spectrometry, Mass Spectrometry and many others

Skyray has been providing customers around the world with reliable and affordable Scientific Instruments for more than 20 years