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Home of Quality Products

JAGUAR EDX7800E



Product name and model introduction

1.1 Product name and model: (OCEAN) energy dispersive x-ray fluorescence spectrometer---JAGUAR EDX7800E

1.2 Manufacture: OCEAN

1.3 Real picture of the JAGUAR EDX7800E

Jewelers

Recyclers *

Refiners * QC

Department *

Cash-for-gold

XRF for Non-

destructive precious

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Sales and Support:

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metals analysis-

Ocean –

JAGUAR EDX7800E

1.4 Working environment

Temperature: 15-30°C Humidity: 30%~70% Power supply: AC 220V ±10%

1.5 Features and advantages

Specifications Composition range 1ppm to 100 % Repeatability RSD≤0.05% Au≥90% Sample type Solid, powders, liquid Elements of interests Au, Ag, Pt, Pd, Ru, Rh, W, Os, Ir, etc. Basic metals Cr, Mn, Fe, Co, Ni, Cu, Zn, Cd, Sn, Pb, etc. Tube voltage 5KV ~ 50KV HV unit 0 ~ 50KV Spellman(USA) Tube current 0μA ~ 1000μA HD camera Ocean -DMCP Sample chamber Dimensions 380*372*362 (mm) Test time 30sec ~ 100sec Software Ocean-FP Instrument dimensions 380*372*362 (mm) Instrument weight M

2. Hardware configurations

2.1 Peltier cooling Si-Pin semiconductor detector.

2.1.1 The latest Si-pin detector with the resolution 149±5ev. 2.1.2 The amplifier: The collected signal by detector are amplified

2.2 The x-ray source

2.2.1 X-ray tube with filament current limit: 1mA 2.2.2. The 50 watts x-ray tube is a consumable part

2.3 High voltage device

2.3.1 Voltage output limit: 50kV 2.3.2 The minimum controllable adjustment is 5kV. 2.3.3 Overvoltage protection function

2.4 Multi channel analyzer (MCA)

2.4.1 The collected analog signal is converted to digital signal. 2.4.2 Maximum channels: 4096 2.4.3 Equipped with SES processor

2.5 Optical path filter module

2.5.1 It is designed to decrease the interference and lost of the x-ray optical path.

2.5.2 Integrated collimator and filter module.

2.6 Auto load of the calibration curves

Calibration curves can be automatic chose by the program based on the sample type.

Introduction

Qualitative and quantitative analysis for Jewelry/ Karat Identification The energy dispersive X-ray fluorescence spectrometer (EDXRF) technique is one of the most versatile and popular analytical methods for the elemental analysis of Precious metals and karat identification. Elements from Sodium to Uranium can be analyzed in a short period of time with high accuracy, precision and reliability.

The virtue of its simplicity, non-destructive, speed, affordability and reliability are clearly advantageous over traditional wet chemistry (fire assay for example) and other spectroscopic methods. Modern technological developments have also helped to include EDXRF into standard test methods for Jewelry application.

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The JAGUAR EDX7800E is mature enough to establish clear qualitative and quantitative characterization of the gold value as well as Karat grade. The optimized excellent performance of JAGUAR EDX7800E ensures it is the best solution for your analytical requirements whether you buy gold, sell or produce jewelry, fabricate metal or recycle scrap metal.

3.3 Ocean advantages and features

Excellent detector resolution, HD camera, easy to operate, Fast routine

analysis, user-friendly interface Easy to analyze composition and karat results with one push of a button, accurate chemistry and karat results within seconds Designed to be compact, taking up minimum desktop space. An attractive design suitable for the showroom floor. Quick certificate results with PC software.

Interior lighting and camera allows continuous sample viewing for utmost customer security Easy access to the test results by uploading and downloading to the network X-ray safe protection secures the whole operation process.

The result of Au (Au : 75, Ag : 14.86, Cu : 4.01, Zn : 4.45, Ni : 1.67)

3.4 Typical Applications

Identify composition of elements Au, Pt, Ag, Pd with high accuracy and repeatability Classify grades of karat of gold quickly and accurately on-the-spot Quality control of the gold composition in scrap metals Identify the impurities of fine gold Identify and characterize wide range of unknown elements in various samples

The followed accuracy and precision data was generated by using

Performance index :

JAGUAR EDX7800E system.

3.5 The analytical accuracy by JAGUAR EDX7800E of measuring Au and Ag in jewelry

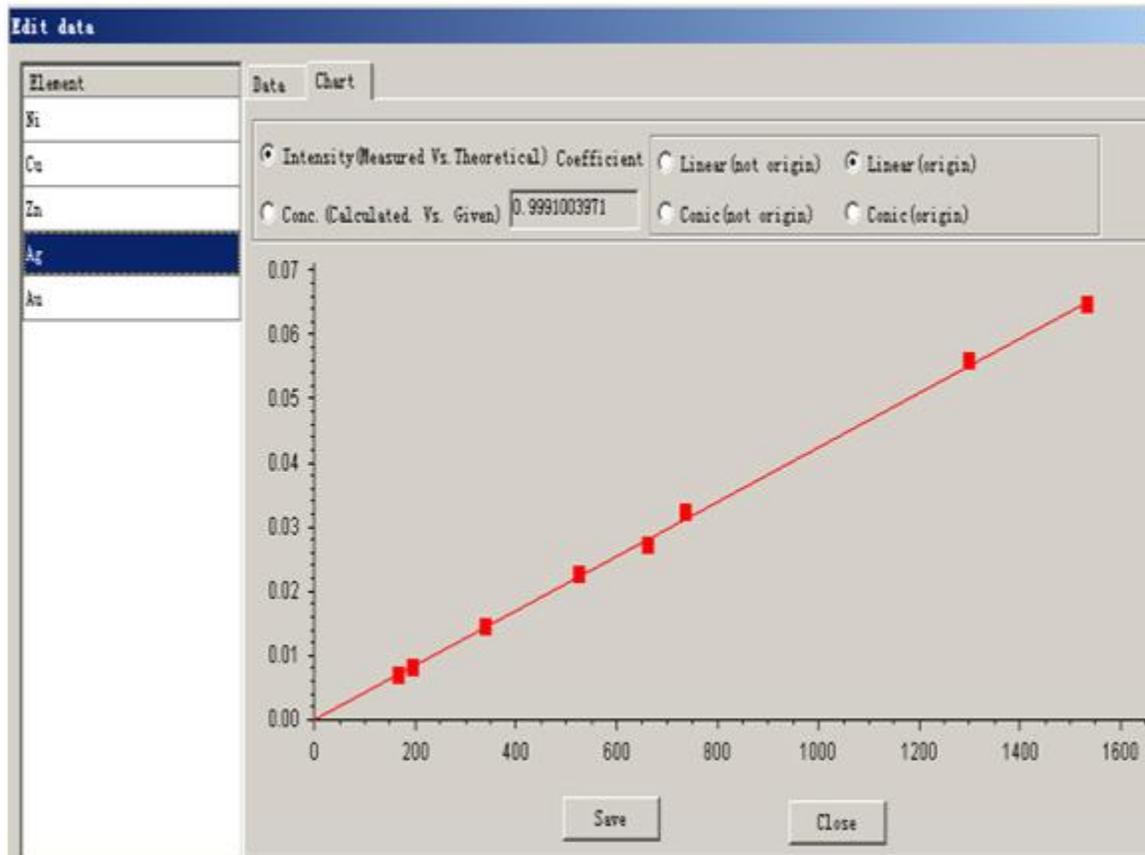
The calibration curve of Ag

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4. Standard samples

Standard samples for calibration and correction

4.1 sample chamber.

Open sample chamber with large space.

4.2 standard samples

Warranty and after-sale service

On-site installation and training is available.

One year warranty is offered after the first installation.

The lifetime service is provided to all our products.

Free software upgrade can be downloaded from our website.

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