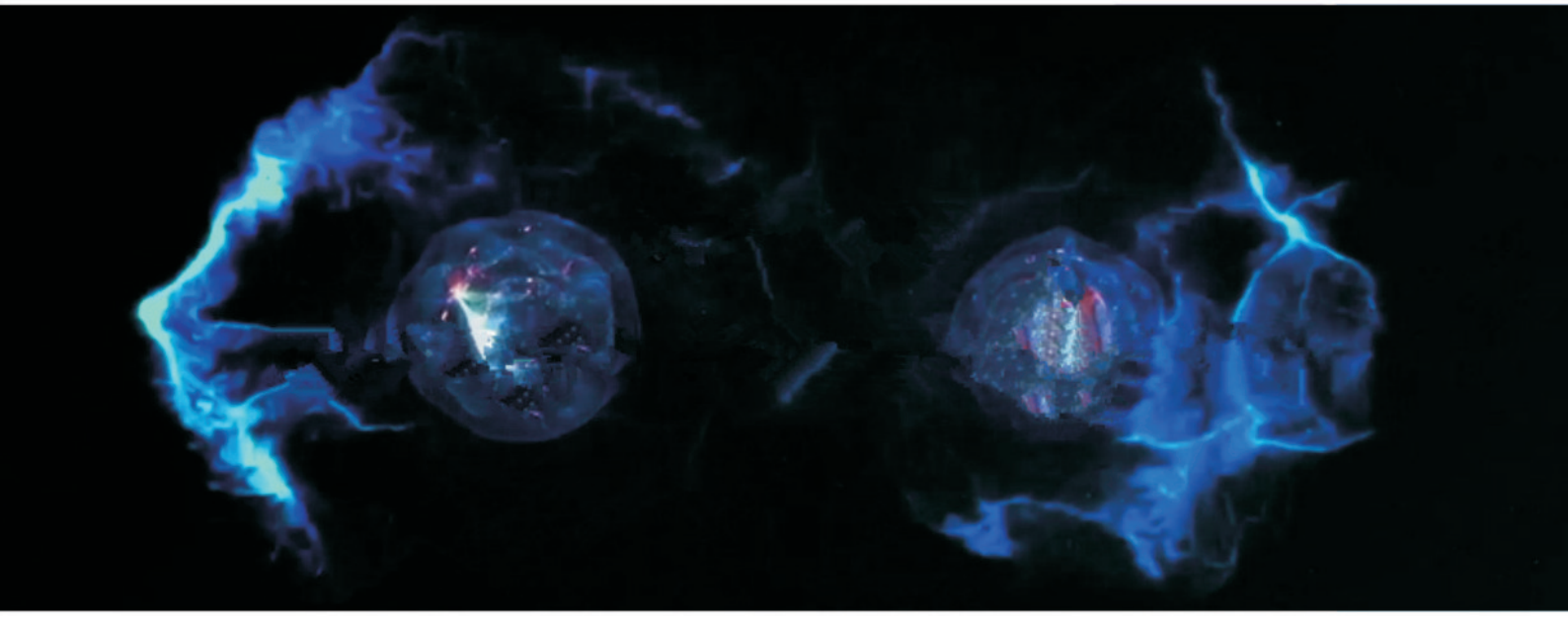
金义博®

JINYIBO INSTRUMENT

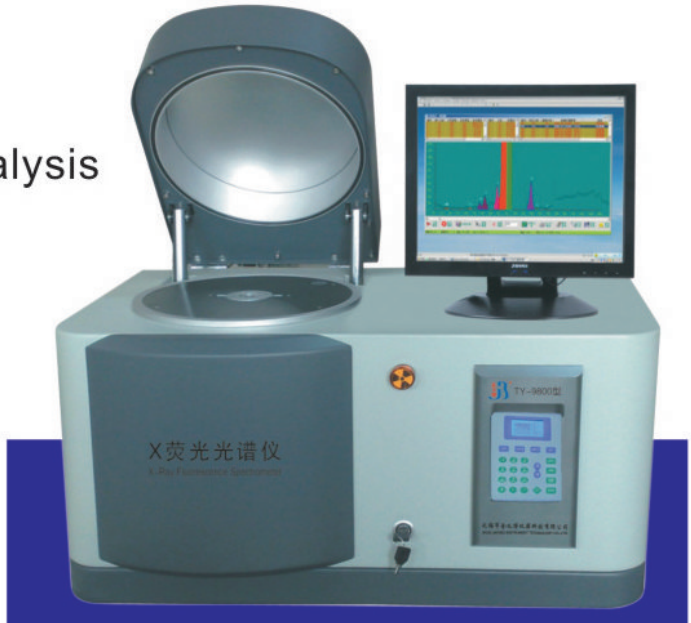
Precise Instruments,Perfect Experience

TY-9800

Energy Dispersive X-ray Fluorescence Analyzer



Flexible and On-site elemental analysis



TY-9800

Energy Dispersive X-Ray Flurescence Analyzer

Introduction

TY-9800 Energy Dispersive X-Ray Fluorescence Analyzer is one of the best analytical techniques to perform elemental analysis in all kinds of samples, no matter if liquids, solids or loose powders must be analyzed. Energy dispersive X-ray fluorescence (EDXRF) is the best choice for dedicated applications in quality and process control with demands for ease of use and compact size. It delivers analytical flexibility for research and monitoring tasks.

Application

Alloy analysis is an important process for many businesses today in order to determine alloy composition , An alloy is a combination of a metal with one or more metallic or nonmetal chemical elements, Alloys are widely used for their individual properties, such as hardness or malleability, corrosion resistance, etc.

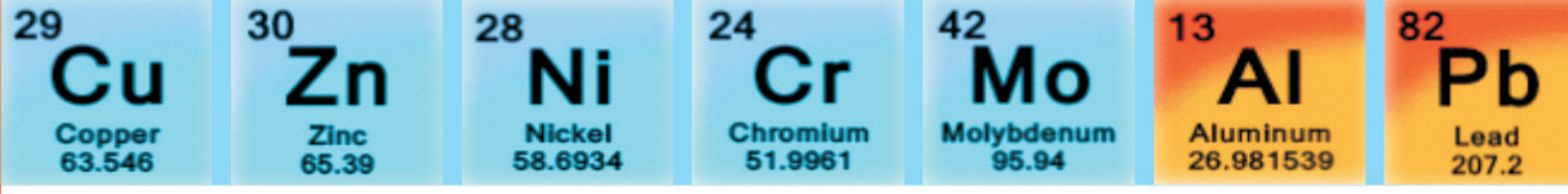
Alloy XRF Analyzers can be used for variety of alloy types including:

Copper Alloys- metal alloys with high resistance against corrosion that have Copper (Cu) as main component.

Brasses (alloys of copper and zinc) are common utility metals because of their practical combination of corrosion resistance, strength, formability, castability, electrical and thermal conductivity, and nice color at temperatures less than 200º C. They are used as cartridges, electrical contacts, decorative linings, condenser tubing in seawater systems and the petrochemical industry, and cooler materials.

Bronzes (alloys of copper and tin) are also common metals and have good corrosion resistance, castability, and low friction. They are used primarily as valves, bearings, pump parts, container materials, springs, sliding contacts, and gearwheels.

Stainless Steel- corrosion resistant alloys containing Nickel(Ni), Chromium (Cr), Molybdenum (Mo), and Copper (Cu)
Stainless steels provide good corrosion resistance in a wide range of environments. Although Ni is almost always added in stainless steels, the elements which provide the corrosion resistance are Cr, Mo, and sometimes Cu, One important property of stainless steels is their ability to hold their corrosion resistance and mechanical strength up to 800º C.



Why Choose XRF for Verifying Jewelry?

XRF can nondestructively analyze gold, silver, and platinum group metals, as well as nonprecious alloying metals, contaminants, and gold plating. XRF can even be used to identify certain fake gemstones, such as cubic zirconia, titanite, and leaded glass. Verifying jewelry's material composition is important to help avoid fraud and to identify items that could be hazardous. For example, some materials, such as nickel, can cause an allergic reaction for certain people. Other hazardous materials can be dangerous when worn on or inside the body (such as in earrings).

EDXRF for RoHS & WEEE

Restriction of use of certain hazardous substances — directives on waste electrical and electronic equipment Specifically, RoHS provides that new electrical and electronic equipment put on the market for the first time from July 1, 2006 should not contain certain heavy metal toxins, including: lead (Pb), cadmium (Cd), mercury (Hg), and hexavalent chromium (Cr). TY-9800 Energy Dispersive X-ray Fluorescence (EDXRF) can help manufacturers comply with RoHS/WEEE by providing rapid elemental analysis.

EDXRF for Coating Thickness

Coating thickness and materials analysis based on X-ray fluorescence (XRF) is a widely accepted and industry-proven analytical technique, offering easy-to-use, fast and non-destructive analysis, requiring little to no sample preparation, capable of analysing materials. While the application reach of the non-destructive testing technology has grown, the measurement of coatings and thin films continue to be an ideal, and popular, use of XRF. This critical quality control technology is relied upon in a wide range of facilities - from general plating shops to aerospace, automotive, and military manufacturing plants.

Feature

1. High reliability measurement with high sensitivity sensor

2. Multiple applications in a single unit thanks to superior load control technology

3. The instrument adopts Digital Pulse Processing(DPP) Technology with high count rate, no leakage and good stability.

4. 2048-Channel Multi-Channel Spectrometer performs real-time measurement and display, and does elaborate analysis of X-ray spectrum in samples.

Parameter

Item	Index
Analysis elements	Na-U, mainly Al, Si, P, S, K, Ca, Ti, V, Fe, Ni, Mn, Pb, Zn, Cu, Sn, Sb, Ast and so on.
Analysis range	1ppm-99.99%
Simultaneous analysis	Analysis of 30 elements
Energy range	1-50keV
Measurement time	The content analysis of all elements to be analyzed can be completed within 1-2 minutes.
Resolution of imported electrical refrigeration semiconductor detector	130ev
Tube voltage:0-50Kv tube current	1~2000 μA
Analytical precision	Standard deviation ≤ 0.08%
Analytical error	Better than National Standard
Radiation dose	<25 μ sv/h
Temperature requirement	15℃-35℃
Working power supply	220±10% VAC, Frequency 50~60Hz