

Handheld XRF Analyzer

ATX3100C

Features

- Measuring coating range: 0-50um
- Wide detection range: Unparalleled light element analysis function can quickly and accurately analyze conventional metal elements Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Y, Zr, Nb, Mo, W, Ta, Hf, Re, Au, Pb, Bi, Ru, Pd, Ag, Cd, Sn, Sb, etc.
- It can quickly detect and identify the grades and element contents of various high and low alloy steels, stainless steels, tool steels, chromium/molybdenum steels, nickel alloys, cobalt alloys, nickel/cobalt heat-resistant alloys, titanium alloys, etc.
- Compact and light weight: the instrument weighs about 1.6kg
- Test coating types: silver plating, gold plating, nickel plating, zinc plating, chromium plating, tin plating and other single plating, multi-layer plating, alloy plating

Application

- Shipbuilding, aerospace
- Electric power station
- Industrial manufacturing

Description

The ATX3100C is a handheld coating analyzer that uses X-ray fluorescence spectroscopy technology. With the continuous promotion of X-ray fluorescence spectrometry analysis technology, the use of X-ray fluorescence spectrometer analysis and detection has become the main means of quality control in many industries.

ATX3100C can quickly analyze single-layer (or multi-layer) metal coatings on various materials, detect the thickness and composition of the coating (including alloy coatings), and analyze the composition and concentration of the plating solution.

The ATX3100C analyzer is equipped with professional application software specifically for coating thickness analysis. It has the characteristics of intelligence, high sensitivity, short test time, automatic judgment of whether it exceeds the standard, easy operation, and the ability to measure and print at the same time. Brand new intelligent software, one-click intelligent operation to detect alloy composition and coating thickness.



1. Parameter

Table 1 ATX3100C handheld coating thickness analyzer configuration

Model	Remark
Coating Element Range	Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hf, Ta, W, Re, Pb, Bi, Zr, Nb, Mo, Cd, Sn, Sb and other 23 elements
Coating Thickness Analysis Method	Energy dispersive X-ray fluorescence analysis method
Measuring Coating Range	0-50um
Detect Coating Type	Copper silver plating, copper tin plating
Analysis Accuracy	The relative error of single layer plating does not exceed 10%
Detection Time	15-20 seconds
Detection Window	12mm
Excitation Source	High-power miniature straight-plate electronic X-ray tube with an excitation voltage of 35kV; no high-voltage cables, no radio frequency noise, better X-ray shielding, and better heat dissipation.
Detector	Fixed voltage 35kV, current 100uA (Moxtek, USA), standard Ag target
Operation Method	Si-pin detector (6 mm ² energy resolution 190eV FWHM)
Battery	KMX-FP standard-free test method
Size	1 battery included as standard
Weight	220mm*150mm*220
Safety	1.6kg