TFN

MIX5-500   **MIX5-600**

Handheld Alloy Analyzer

Fast ✓   Accurate ✓   Non-destructive ✓   Reliable ✓

More than just good-looking it strives for excellence

Speak with details and quality

Excellent non-destructive testing performance

Outstanding light element analysis capability

Accurate analysis of trace /residual elements

Extensive customizable grade library

Large 4.3-inch touch color screen

Shareable via WIFI/Bluetooth

Excellent non-destructive
Testing performance

1 Material screening can be completed quickly and non-destructively on site, reducing the number of samples tested in customer laboratories and greatly reducing testing costs

2 Outstanding light element (**magnesium, aluminum, silicon, phosphorus, sulfur**) analysis capability

3 Low detection threshold, accurate analysis of trace elements/residual elements

Comprehensive brand library
Covering 1600 alloys

MIX5 series contains a comprehensive brand library, including AISI American standard, DIN German standard, JIS Japanese standard and GB Chinese standard brand library, covering more than 1600 alloys

Pre-installed brand library includes:

Stainless steel	Tool steel	Low alloy steel	Aluminum alloy
Copper alloy	Nickel alloy	Titanium alloy	Zirconium alloy

Widely used in various fields
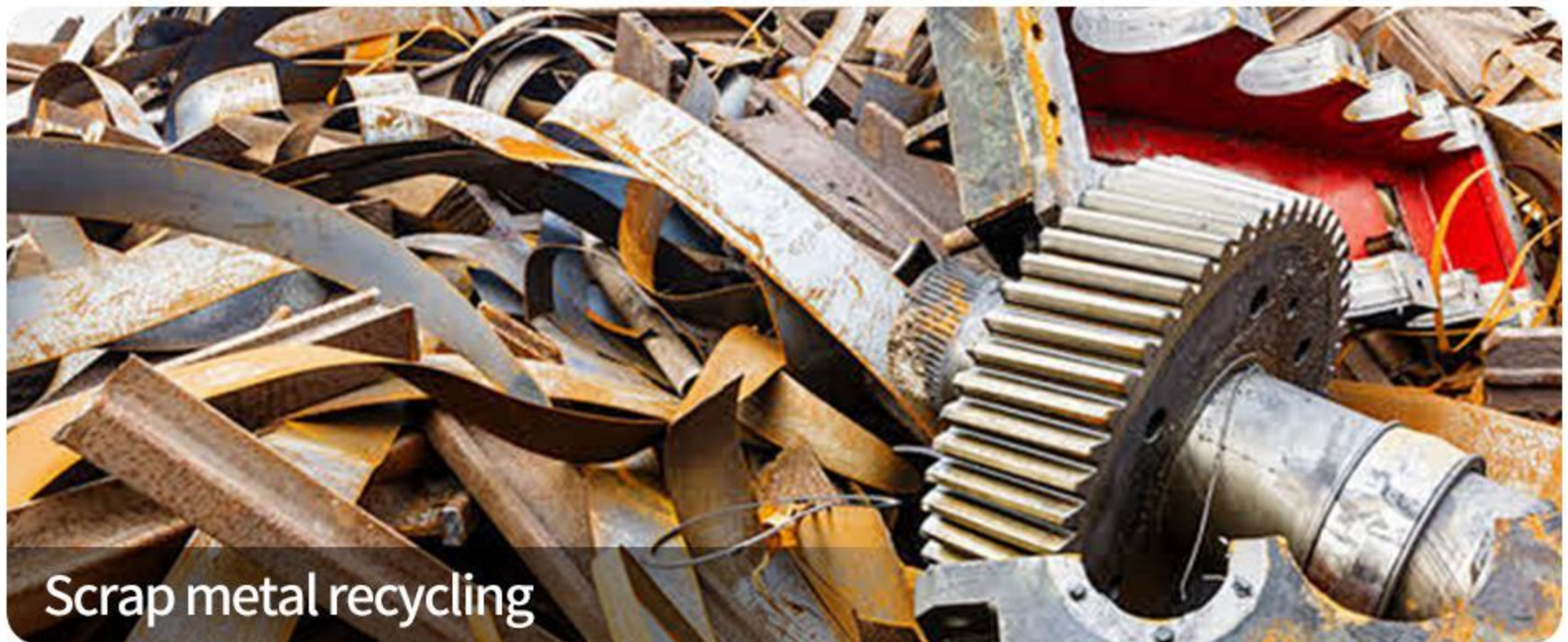

On-site material identification

In metal manufacturing, the emergence of the MIX5 series makes it possible to replace sampling inspection with 100% full inspection of alloy materials in industrial production. It can be analyzed quickly and reliably under non-destructive conditions. It is durable, lightweight, and can adapt to various on-site testing conditions

Mechanical processing and manufacturing

In mechanical processing, the MIX5 series can accurately detect large quantities of metal alloy materials without preparing samples. After pulling the trigger, the alloy grade and alloy element content can be accurately detected in 1-2 seconds. Extending the detection time can produce more accurate laboratory-level test results
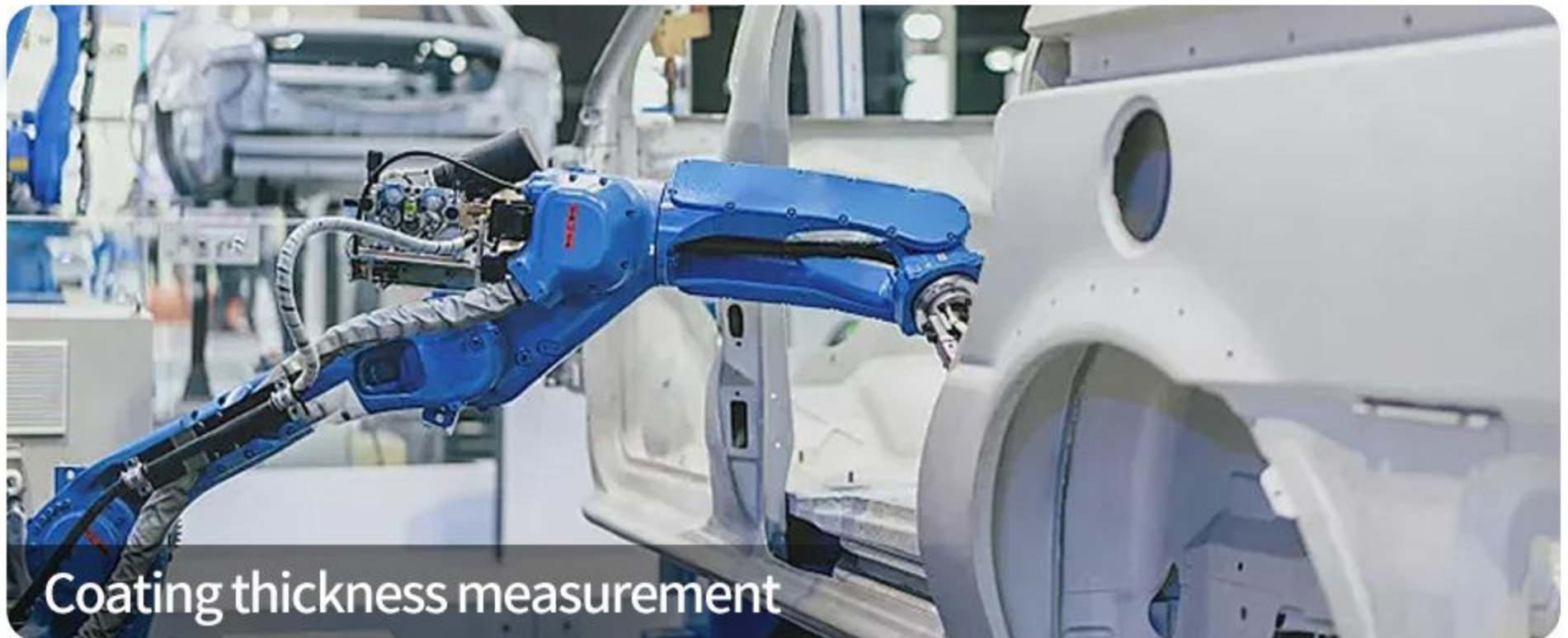

Scrap metal recycling

In scrap metal recycling, the MIX5 series can quickly identify alloy grades, especially the light elements in aluminum-magnesium alloys, to facilitate identification and classification. It provides strong guarantees for both buyers and sellers to make quick and reliable judgments during transactions.

Precious metal detection

It only takes a few seconds to identify precious metals. The MIX5 series can produce accurate and detailed output analysis results to help customers make important decisions on site

Coating thickness measurement

X fluorescence thickness measurement technology has higher accuracy than eddy current method, magnetic induction method, BETA scattering method, etc., and can obtain the thickness of metal coating completely non-destructively within seconds. Mainly used in automobile, aerospace, industrial design, fasteners, cutting tools and other industries

RoHS harmful substances detection

In ROHS detection mode, it can provide fast and reliable analysis results for the content of lead, chromium, mercury and other toxic metal elements in products such as toys, clothing, footwear and electronic devices. Determine whether the product complies with ROHS regulations within seconds. The test is very simple, and the result display can also be customized to display "pass/fail" for quick judgment.

Product Features

Sturdy and durable protective window design
Optional protective window (MIX5 600/900) and high-strength Kapton anti-puncture film window (MIX5 500) can effectively protect the entire test front end

Large area heat sink
Ideal reliability and stability even under long-term continuous working conditions

Compact instrument head design
Conical test front end can easily detect curved or corner parts (welds)

IP54 protection level
High dust and water resistance

Ergonomic design
Light weight (1.5KG), small size, centered center of gravity, good balance

Large battery capacity
10~12 hours of battery life on a single charge

MIX5 Handheld Alloy Analyzer
Configuration Comparison

	MIX5-500	MIX5-600	MIX5-700	MIX5-800
Picture				
Detection elements	TI、V、CR、MN、FE、CO、NI、HF、TA、RE、CU、ZN、W、SE、PB、BI、ZR、NB、MO、AL、PD、AG、SN、SB、etc.	TI、V、CR、MN、FE、CO、NI、HF、TA、RE、CU、ZN、W、SE、PB、BI、ZR、NB、MO、AL、PD、AG、SN、SB、MG、SI、P、S etc.	CD、HG、AS、PB、CR、CU、NI、ZN、W、CO、FE、CR、V、TI、BA、MO、NB、ZR、BI、SE、MN、RB、SR、K、CA etc.	Alloy Mode: Ti、V、Cr、Mn、Fe、Co、Ni、Hf、Ta、Re、Cu、Zn、W、Se、Pb、Bi、Zr、Nb、Mo、Al、Pd、Ag、Sn、Sb.etc. Soil Mode: Cd、Hg、As、Pb、Cr、Cu、Ni、Zn、W、Co、Fe、Cr、V、Ti、Ba、Mo、Nb、Zr、Bi、Se、Mn、Rb、Sr、K、Ca.etc.
Instrument weight	1.5kg (including battery)	1.5kg (including battery)	1.5kg (including battery)	1.5kg (including battery)
Instrument volume	220MM*91MM*276MM	220MM*91MM*276MM	220MM*91MM*276MM	220MM*91MM*276MM

Excitation source	High-performance ceramic package micro-focus X-ray tube,Ag anode target, maximum voltage 50KV, maximum power 4W	High-performance ceramic package micro-focus X-ray tube,Ag anode target, maximum voltage50KV, maximum power 4W	High-performance ceramic packagemicro-focus X-ray tuhe,Ag anodetarget, maximum voltage 50KV, maximum power 4W	High-performance ceramic package micro-focus X-ray tube,Ag anode target, maximum voltage50KV, maximum power 4W
Detector	High-performance Si-Pin detector	High-performance SDD silicondrift graphene window semiconductor detector	High-performance Si-Pin s iliconsemiconductor detector	High-performance Si-Pin siliconsemiconductor detector
Electronic System	i.MX 8M Mini quad-core 1.8GHz,4096-pixel multi-channelanalyzer/80 MHz ADC digitalsignal processor	i.MX 8M Mini quad-core 1.8GHz,4096-pixel multi-channelanalyzer/80 MHz ADC digitalsignal processor	i.MX 8M Mini quad-core 1.8GHz,4096-pixel multi-channelanalyzer/80 MHz ADC digitalsignal processor	i.MX 8M Mini quad-core 1.8GHz,4096-pixel multi-channelanalyzer/80 MHz ADC digitalsignal processor
Filter	Intelligent multi-position	Intelligent multi-position	Intelligent multi-position	Intelligent multi-position
Heat dissipatio n design	Super heatsink cooling	Super heatsink cooling	Super heatsink cooling	Super heatsink cooling
Collimator	5mm collimator	5mm collimator	5mm collimator	5mm collimator
Window film	Kapton Windows	Kapton Windows	Kapton Windows	Kapton Windows
Display screen	5-inch touch color display	5-inch touch color display	5-inch touch color display	5-inch touch color display
Working environment	Operating temperature -10°C to +50°C,relative humidity 0-80%(non-condensing)	Operating temperature -10°C to +50°C,relative humidity 0-80%(non-condensing)	Operating temperature -10°C to +50°C,relative humidity 0-80%(non-condensing)	Operating temperature -10°C to +50°C,relative humidity 0-80%(non-condensing)

Memory	8G,can store 100,000 data items,with date and time feature descriptions	8G,can store 100,000 data items,with date and time feature descriptions	8G,can store 100,000 data items,with date and time feature descriptions	8G,can store 100,000 data items,with date and time feature descriptions
Operating system	Smartphone-style operating system	Smartphone-style operating system	Smartphone-style operating system	Smartphone-style operating system
Security system	Safety Guard sens or,infrared and detector counting anti-runaway protection	Safety Guard sens or,infrared and detector counting anti-runaway protection	Safety Guard sensor,infrared and detector counting anti-runaway protection	Safety Guard sens or,infrared and detector counting anti-runaway protection
Data transmission	WIFI，USB	WIFI，USB	WIFI，USB	WIFI，USB
Data format	Excel &TXT	Excel &TXT	Excel &TXT	Excel &TXT
Grade library	1600+,Chinese standard, American standard,Japanese standard,German standard	1600+,Chinese standard, American standard,Japanese standard,German standard	Soil Mode	Alloy Mode & Soil Mode
Algorithm	Fundamental Parameters Method	Fundamental Parameters Method	Fundamental Parameters Method	Fundamental Parameters Method
Language	Chinese,English	Chinese,English	Chinese,English	Chinese,English
PC software	AXRSPEC V2.0	AXRSPEC V2.0	AXRSPEC V2.0	AXRSPEC V2.0
Battery	A single battery can last 8-10 hours on a normal charge	A single battery can last 8-10 hours on a normal charge	A single battery can last 8-10 hours on a normal charge	A single battery can last 8-10 hours on a normal charge

Product Display