Handheld XRF Environmental Soil Heavy metal Analyzer

DW-EX 9000

Based on ten-year research and development experiences of portable instruments, DW-EX-9000 handheld XRF adopt photoelectron, microelectronics, semiconductor, computer and many other technologies and develop a new generation of handheld XRF of our own.

DW-EX-9000 handheld soil heavy metal analyzer is the first to use large-screen,high resolution FCD and the new digital signal processor. It's able to carry out in— situ test and repairing analysis for the soil pollutants, effective testing about heavy metals including mercury, cadmium, lead, arsenic, copper, zinc, nickel, cobalt, vanadium, chromium, manganese in polluted soil, and also add testing elements according to clients' requirements. With small size and light weight, DW-EX-9000 is portable for testing heavy metal in soil, even for low content and its performance is as great as desktop.

»Application field in environmental protection soil industry

1.Soil pollution survey and environmental assessment

2.Soil pollution emergency treatment

3.Soil restoration

4.....

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»Application advantages

1.Soil heavy metal survey

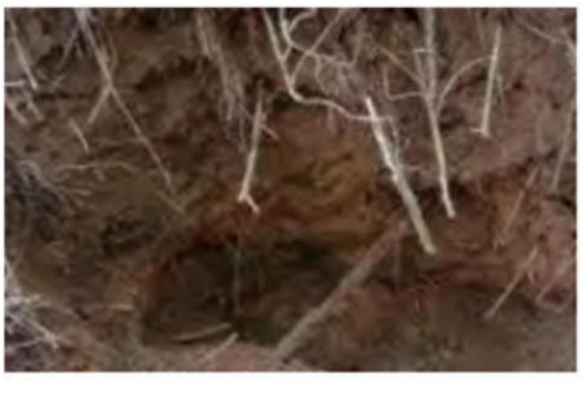
Builtin GPS helps to search for satellite signals in the field any time to determine the geological information of sampling location, and rapidly survey large range of soil polluted area, establish pollution maps and real-time monitoring of pollution in different regions. Carry out heavy metal environmental pollution assessment about various types of agricultural land, residential land, commercial land and industrial land.

2.Soil pollution emergency treatment

Commonly used in emergency treatment after the pollution happens.
Abletoimplementrapidandon-sitetrackingaboutabnormalpollution,
effectively search "tainted" zone,circle out the boundary of contaminatedareaforreal-timesurvey.

3.Soil restoration in polluted area

Classify pollution regions;circle out key soil polluted areas, target on the divided areas for key governance to improve screening efficiency and carry out real-time monitoring of remediation situation about polluted soil.



»Application advantages

1.Easier Operating

•Light & small, ergonomic handle design, equipped with a special instrument case, easier to grasp and more convenient to use in the field.

•5 inch high-definition screen with 360 degree rotation, multiple points operating, can display clearly at any lights.

•Integrated design of Seal type, with waterproof and dustproof function, can be used continuously in harsh environments.

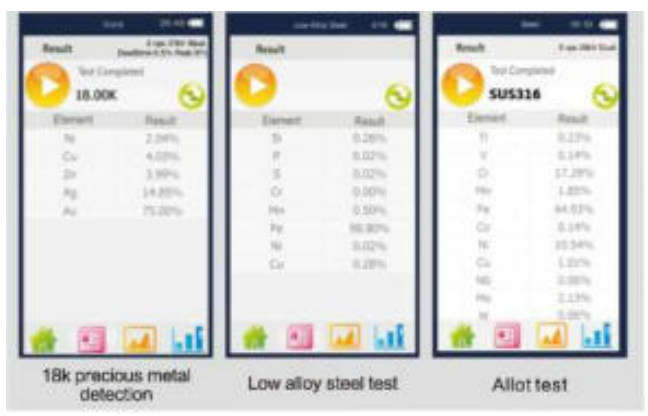
•Directly measure and analyse the surface of samples and goods. Can do a quick measurement by its handheld benefit and accurately test samples for a long time by its test block.

2.Better Performance

•Rapid nondestructive detection and quick measurement by aiming, report results within one second. Comparable to the bench-top XRF, fast and accurate.

•Simultaneous detection of Ti)V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, Zr, Nb, Mo, Ru, Rh, Pd, Ag, In, Sn, Sb, Hf, Ta, W, Re, Pt, Au, Pb, Bi, Mg, Al, Si, P, S, and it can add customized elements.

•Instrument can run without helium by the ultra near optical path design, and can detect the light elements from the beginning of Mg that fully meets the needs of specific users.



Strong Battery

* Large lithium batteiy at 27000mAh could be as a selected configuration; the battery duration working time is up to three days, and it equipped with communicator and car charger to ensure power supply.

* A Built-in memory battery can continue replace the battery power.

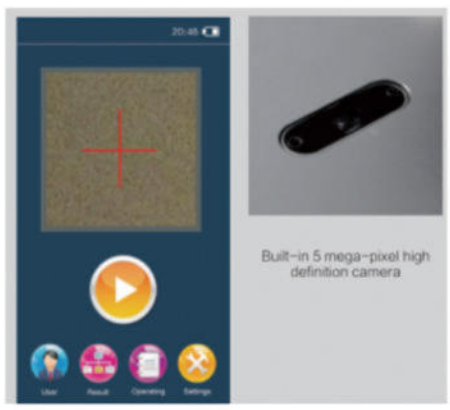
3.Higher Configuration

•Four core parts which are Miniature X-ray tube, Fast-SDD detector (the world's best detector), digital signal processor and micro multichannel intelligent analysis module, can achieve the accuracy as good as bench- top's.

•Large data storage is by ultra-high frequency memory and mass storage space. Our new independent research and development Digital multichannel technology ensure effective mining spectral counts per second is up to 500K cps.

•Collimation filter system, its combination can reach to the limit of 12 groups, to meet the testing requirements of different customers.

•A built-in 500W pixels high definition camera, can observe sample's testing position at any time that makes the measurement more accurate.



4.Safer Protection

•Intelligent-tricolor-early-warning-system: 360 degrees without dead angle display by LED three-color lamp design.

Instrument status shown in different colors: Green light means power on; Red flushing means testing; Yellow flushing means fault.

•Triple safety protection function:

a: Automatic induction, instrument does not work without sample, no leakage radiation.

b: Thicken - preventing - testing - wall can effectively prevent the scattering.

c: Safety - protection - cover can prevent the surrounding light matrix scattering.

• Security-linkage-locking device protects your security; it can guard the final checkpoint if the software is unable to control the instrument turn off.

5.More Intelligent Software

* DW-EX5000 alloy analyzer is equipped with professional application software, specifically for alloy industry; the feature is intelligent, high sensitivity, short testing time, and easy operation.

* Brand new knowledge-ware is one key operation with dual mode design

a. User mode uses for recognizing categories of sample by one key operation;

b. Expert mode uses for increasing the elements and increasing the specific in-depth analysis of the operation curve.

* Internal intensity correction method can correct deviation caused by uneven sample of different geometries, densities and structures.

Parameters

Analytical Method	**Energy dispersive X ray fluorescence analytical Method**
Elements Measuring Range	**Atomic number from 12 to 92 [elements from magnesium (Mg) to uranium (U)] can be measured**
Simultaneous detector elements	**Simultaneous analyze 40 elements**
Microcomputer system	**Customized system; CPU: 1G ; System memory: 1G ; extended stored maximum support 32G ; Standard 4G for mass storage data**
The content range	**ppm ~ 99.99%**
The detection time	**1 〜60 seconds (one second report results)**
A built-in system	**GPS, WIFI, Bluetooth**
Power Supply	**Rechargeable lithium battery, standard is 9000mAh, sustainable work up to 12 hours; optional is 27000mAh superbattery with wide voltage 110V ~ 220V universal adapter for recharging power supply**
Detection Objective	**Solid, liquid, powder**
Detector	**SDD detector or Fast-SDD detector (optional)**
Detector resolution	**Minimum can reach 128eV**
The excitation source	**50KV/200uA- silver target end window integrated miniature X-ray tube and high voltage power supply**
Collimator and filter	**Collimator diameters are 4.0mm and 2.0mm, 6 kinds of filters with automatic switching functions**
Video system	**500W pixel high resolution camera**
Display screen	**Brand new 5 inch semi-reflecting and semi-transmitting LCD touch screen, its resolution is 1080*720.**
Detection limit	**The minimum detection limits at 1 ~ 500 ppm**
Safety	**Multiple safety protection, no tests, no radiation, radiation levels at work are far below the international safety standards, and has no sample telemetry, automatic -turn -off X-Ray tube function. Standard radiation shields, thickened instrument's alloy testing wally test instrument**
Specialty	**Environmental Soil Heavy metal analytical software, and intellectualized one key testing.**
Convenience of application	**No need to select curves, intellectualized one- key-selecting will select the best matching curve**
Data transmission	**Digital multi-channel technology, SPI data transmission, quick analysis, the high count rate; waterproof mini USB, and can be connected with a desktop computer**
Operating ambient humidity	**≤90%**
Operating environmental temperature	**-20°C~+50°C**
Instrument dimension	**244mm (Length) x 90mm (Width) x330mm (Height)**
Instrument weight	**1.7Kg**
Intelligent warning signalslndicator system	**Green light means power on, red flushing means testing and yellow flushing means the errors**
Accessories	**Three-military-protection-box is compression, waterproof and shock absorption.**
	Two lithium battery and charger, PDA accessories, radiation shield.
	Universal charger and car charger, 4G SD memory card and card reader
Optional accessories: the large battery, seat type test support, Bluetooth printer, mill, manual pressure machine, and different meshes of sieves	

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Exclusive Accessories