

# ELLEX

## X-MET7000 Series

The flexible analytical solution for a wide range of industries

New look, new feel, new fast user interface, new reporting power



The analysis behind your success



*The Business of Science®*



# X-MET7000 Series

Why compromise? Choose Oxford Instruments



The **NEW X-MET7000** and **X-MET7500** handheld energy dispersive X-ray fluorescence (EDXRF) analysers are designed with your needs in mind, for your environment. These rugged and rapid multi-element analysers provide you with the exceptional level of analytical performance for which Oxford Instruments has been known for more than 50 years.

Packed with top-of-the-range features, a new user-friendly software, powerful reporting tools, and the longest battery life on the market, the **NEW X-MET7000** series from Oxford Instruments offers flexibility for a wide range of analysis and inspection requirements.

The **X-MET7000** is a cost-effective tool for simple applications such as the analysis of:

- Lead in paint and strontium in drywall screening in home inspection
- Toxic elements (e.g. arsenic) in scrap wood
- Gold content (karat) in jewellery, etc.

The **X-MET7000** includes Oxford Instruments' X-ray tube and PIN-diode detector, enabling the determination of elements from Chlorine (Cl) to Uranium (U).

The **X-MET7500** delivers fast and accurate analysis of the widest variety of materials, including light elements (from magnesium) and trace elements analysis.

The **X-MET7500** is the ideal tool for:

- Screening products for WEEE, RoHS, or ELV compliance
- Contaminants in soil
- Tramp elements in jewellery, etc.

The **X-MET7500** includes Oxford Instruments' X-ray tube and Silicon-drift detector (SDD) for total flexibility.

# 'Point and shoot' with powerful results

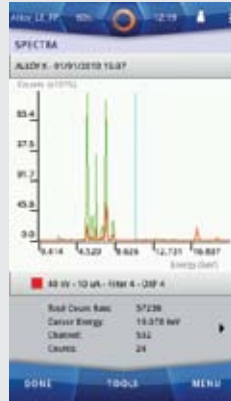
The top performer just got better!



Average measurement



Main menu



Spectrum



## Ease of use – maximum productivity

### NEW icon driven user interface with large touch screen

- Fast and easy to use, minimal training required, intuitive
- Large, clear functional icons for easy operation, even with gloves on
- Large grade display with closest match information
- See your analysis results more clearly on the largest screen on the market (4.3")
- Bright, high contrast, advanced Blanview® LCD touch screen for optimal viewing even in direct sunlight
- Results screen can be customised by user to suit individual requirements and display elements of interest only and/or Pass/Fail messages
- User interface available in 13 languages

### NEW enhanced data download reporting flexibility

- The **X-MET** can store up to 100,000 results including the spectra
- Download results and reports directly on USB memory stick, or onto PC using a USB cable
- Create customised analysis reports with new Report Generator software
- Secured PDF report format for ultimate data security – no possibility to tamper with the results
- **X-MET** remote software runs in a web browser window: no special software installations are required
- Advanced data transfer options and reporting software are all included as standard



# Designed for your environment



## Non-destructive analysis of precious metal jewellery

Fastest and easiest analysis method available for analysis of precious metals, from raw materials to finished jewellery.

- Verify the value of gold (Au) and other precious metals content in seconds
- Results displayed both in weight % and karat
- Accurate and reliable analysis of Au, Ag, Pd, Pt, Ir etc.
- Analysis of impurities and toxic elements such as cadmium (Cd) and lead (Pb)
- Analyse large bars or small objects
- Non-destructive analysis: no scuffing or grinding of sample, no material loss
- No chemicals needed
- Maximise profits through smarter buying and selling

Element	Wt%	ppm	Unit
Au	58.08	6.394	58.89-57.29
Cu	26.92	6.795	
Ag	16.16	6.275	

## X-MET7000 Series

- **X-MET7000** is the ideal tool for the rapid verification of jewellery value and authenticity
- **X-MET7500** provides additional analytical flexibility, and the higher performance needed to determine low levels of impurities

## On-site screening of contaminants in soil

The use of handheld XRF for on-site soil screening reduces the need for off-site laboratory analyses, and therefore costs, and enables quick decision making.

- Accurate determination of heavy metals and other toxic elements in seconds
- Rapid analysis for quick remediation decisions
- Clear Pass/Fail messages with user-defined limits
- Full GPS integration for combining analysis data with location coordinates, enabling site mapping
- Analysis of soil directly on the ground or in sample bags
- Laboratory quality results with little sample preparation and analysis in the optional benchtop stand



# Rapid, rugged and robust

More than 50 years  
experience  
in designing  
customer focused  
XRF solutions



## Screening of scrap wood

The **X-MET7000** Series enables the rapid screening of scrap wood, identifying wood treated with hazardous chemicals such as CCA (copper, chromium, arsenic), and enabling a rapid decision for its disposal.

- Optimised Fundamental Parameters (FP) calibration for CCA in treated wood
- Determination of over 20 elements in seconds

## Built to last

Rugged design that withstands the harshest environments and weather conditions:

- Impact-resistant plastic housing with environmental sealing
- IP54 compliant (equivalent to NEMA 3) for superior protection against dust and water
- Fitted with rubber bumpers around the screen, sides of the analyser nose, and battery, to provide protection against shocks and to prevent slipping from uneven surfaces (e.g. pipes)
- Up to 10–12 hours battery life: operate for over a day on a single battery charge
- From extreme heat to freezing cold, **X-MET** always delivers the highest levels of performance

## Great ergonomics and comprehensive range of accessories for flexibility and high productivity

- Light and compact, yet rugged design (weight < 1.8 kg)
- Convenient and comfortable handle grip
- Accurate and reliable trigger
- Optimised display position for easy viewing in all weather conditions and measuring angles
- Holster for simple transportation and protection when on site, leaving your hands free



**X-MET7000** Series

# With the flexibility you need – ready to go!



## Home inspection

Totally non-destructive and simple 'point and shoot' analysis make the **X-MET7000 Series** the tool of choice for home inspection. On-site screening reduces the number of samples that need to be sent to a laboratory, saving time and money. Long life Li-ion batteries ensure full-day operation and maximum productivity.

## Drywall analysis

- Optimised Fundamental Parameters calibration provides highly accurate results for strontium (Sr) down to ppm levels
- Analysis of other markers indicate the potential presence of hazardous drywall
- Low sulfur (S) analysis (**X-MET7500** only)



## Lead (Pb) in paint screening

- Reliable Pb content analysis in seconds, even at low levels (limit of detection below 10  $\mu\text{g}/\text{cm}^2$ )
- Empirical calibration using NIST certified reference materials ensures results accuracy and traceability
- No radioisotope source: X-ray tube-based analyser for ease of use, minimum maintenance, low cost of ownership, and long-term results stability

## Restricted elements and raw materials in consumer products

Rapid, non-destructive screening of toys and other consumer products for lead and other contaminants according to legislation (e.g. CPSIA Act of 2008).

- Determination of lead (Pb) and other restricted elements (Sb, Ba, Hg, Se, Cd, As, Cr...) in plastic goods and raw materials
- Analysis of Pb, Ni, Cd, etc. in jewellery
- Analysis of Cd, Pb and Hg in packaging material



- Create customised analysis reports with new Report Generator software
- Secured PDF report format for ultimate data security – no possibility to tamper with the results

MEASUREMENT REPORT XMET7500										
Name	Class			Date	Time			Duration		
C-276	1 Alloy LE Mode			07/02/2012	10:48:49			30.5 s		
Element	Al %	Si %	Ti %	Cr %	Mn %	Fe %	Co %	Ni %	Cu %	Nb %
C-276	0.48	0.01	0.05	16.06	0.41	5.00	0.23	58.66	0.16	0.01
C-276	0.34	0.00	0.06	15.82	0.38	4.96	0.21	58.65	0.18	0.01
C-276	0.88	0.03	0.04	16.09	0.38	5.02	0.22	58.65	0.19	0.01
C-276	0.56	0.01	0.05	15.97	0.33	5.05	0.23	58.73	0.14	0.01
C-276	0.44	0.00	0.03	15.73	0.39	4.93	0.20	58.59	0.14	0.02
Average	0.54	0.00	0.05	15.94	0.38	4.99	0.22	58.66	0.16	0.01
STD	0.185	0.013	0.011	0.137	0.027	0.040	0.010	0.044	0.020	0.004
Element	Mo %	Ta %	W %							
C-276	15.37	0.04	3.73							
C-276	15.41	0.06	3.66							
C-276	15.41	0.02	3.56							
C-276	15.41	0.03	3.44							
C-276	15.49	0.06	3.53							
Average	15.42	0.04	3.58							
STD	0.040	0.015	0.101							
Reference:										

Result report



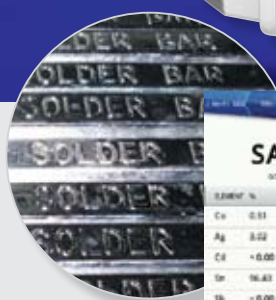
Screen hazardous elements from plastics and metals

# Results you can trust

## X-MET7500 for WEEE, RoHS and ELV compliance screening

With optimised calibrations for the determination of restricted elements in metals and plastics, the **X-MET7500** analyser provides fast, reliable and non-destructive analysis of raw materials and finished products.

- Automatic selection of calibration for best results accuracy: no need to choose between plastics or metals methods, simply point and shoot!
- Determination of Cr, Pb, Hg, Br and Cd as per IEC method 62321
- Verify lead (Pb) content in solder in high-reliability components
- Measure all sample types including plastic housings, cables, solder material, fasteners and electronic components
- Fast and reliable inspection of plastic and metal raw materials
- Pass/Fail messages with user-defined limits for simple and fast screening



SAC305			
Element	%	mg	Unit
Cu	0.01	0.026	0.40-0.60
Ag	0.02	0.059	2.80-3.20
Cd	+0.00	0.015	
Cr	0.00	0.000	0.00-0.01
Pb	0.04	0.006	0.05
Si	+0.00	0.004	

## Use Oxford Instruments' genuine accessories to boost productivity even further

- Turn **X-MET7000** series into a 'closed beam' laboratory unit in a matter of seconds with optional benchtop stand
- Two 'fail to safe' interlocks and visible "X-rays on" lights for maximum safety when measuring samples of small size or low density material. Ideal for measuring small jewellery such as rings, earrings or similar
- Light Radiation Shield provides extra protection for the operator when measuring large low density items which might scatter X-rays. Useful especially for measuring sheets of plastic, aluminium or magnesium alloys, large PCBs or treated wood
- Wireless Barcode scanner for easy data input of the samples
- Portable Bluetooth® printer for easy printing of the results. Prints the screen capture directly to paper or labels



# OiService® Worldwide Service and Support

## Support delivering confidence and protecting your investment

Oxford Instruments Customer Service recognises there are many decisions to make when choosing the right product and company with which to partner. It is not just about superb instrument functionality or the rugged design of the analyser. The OiService teams are aware of the necessity to demonstrate our depth of knowledge, skills, experience and expertise with regard to supporting our customers.

Oxford Instruments offer a range of support packages that provide you with the level of service you require:

- Extended warranty contracts
- Tailored service support contracts
- World class training academy
- Technical help desk support
- Genuine approved Oxford Instruments spare parts
- Consumable products
- Service repair at OiService facility

Please ask about details of our comprehensive range of products or visit our website at: [www.oxford-instruments.com/ia-customerservice](http://www.oxford-instruments.com/ia-customerservice)



visit [www.oxford-instruments.com/x-met7000](http://www.oxford-instruments.com/x-met7000) for more information

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