

PMI

X-MET7000 Series

Why compromise? Choose Oxford Instruments

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



Rapid / Rugged / Reliable

OXFORD
INSTRUMENTS

The Business of Science®



PMM

X-MET7000 Series

Designed for your environment



Analysis you can trust

- Quality control and assurance of **micro alloyed steels**
- Accurate aluminium and magnesium alloy analysis
- **Trace element** analysis
- Low Chromium analysis, **FAC** (flow accelerated corrosion) inspection
- Inspect pipes and welds for corrosion resistance conformity
- **Wires** down to 1 mm diameter can be identified in only seconds
- Measure **hot surfaces** up to 400 °C (**X-MET7000** only)

Oxford Instruments' **NEW X-MET7000** and **X-MET7500** handheld energy dispersive X-ray fluorescence (EDXRF) analysers provide both ease of use and analytical results of unsurpassed accuracy. The **NEW X-METs** provide the highest levels of confidence in even the most demanding applications. Positive material identification, quality control and assurance, and trace element analysis can all be completed in seconds.

The **X-MET7000** is the cost-effective choice for routine quality control and quality assurance when determining elements from Chlorine (Cl) to Uranium (U). The **X-MET7000** includes Oxford Instruments' X-ray tube and PIN-diode detector.

The **X-MET7500** delivers the highest performance and flexibility for the rapid analysis of the widest variety of materials, from parts per million (ppm) to percent (%) concentration levels. Its light element (Magnesium to Sulfur) analysis capability ensures the correct grading of magnesium and aluminium alloys. Performance is ensured without need for expensive and bulky helium or vacuum attachments. The **X-MET7500** includes Oxford Instruments' X-ray tube and Silicon-drift detector (SDD).

Proven 'point and shoot' simplicity: Verification in seconds...

Rapid and accurate analysis

- Totally non-destructive testing
- Easy to learn and fast to use
- Correct grading in seconds!
- Automatic selection of Empirical and Fundamental Parameters calibrations for the highest confidence in your results
- Analysis of elements from Chlorine (Cl) to Uranium (U) with **X-MET7000** and from Magnesium (Mg) to Uranium (U) with **X-MET7500**
- High speed averaging for effortless batch evaluation
- Automatic compensation for varying sample shapes and sizes, enabling the reliable analysis of pipes, rods, wires, welds, fasteners, chips, turnings...



Extensive grade library

X-MET7000 Series' extensive grade library ensures the correct grade is always displayed. Users can modify and add new grades to the library, such as manufacturer or location specific grades.

Empirical calibrations are derived by measuring certified reference materials, and provide traceability for an unbeatable confidence in results.

The pre-loaded grade library includes:

- Nickel alloys
- Stainless steels
- Copper alloys
- Aluminium alloys
- Cobalt alloys
- Low alloy steels
- Tool steels
- Titanium alloys
- Zirconium alloys

A selection of grade libraries is available:

AISI, DIN, JIS...

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

Advanced analytical capability

Rugged, reliable, designed with you in mind



Quality control and safety assurance in energy production plants, refineries, and other manufacturing processes

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

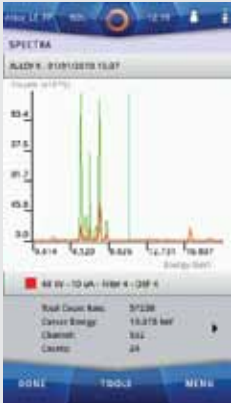
Great ergonomics and comprehensive range of accessories for flexibility and high productivity

- 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
- Benchtop stand for accurate, repeatable and safe analysis of small or irregular-shape samples
- Holster for simple transportation and protection of **X-MET** when climbing ladders or on the work site, leaving your hands free
- Weld beam adapter for the measurement of welds, narrow objects, wires, etc. (available for **X-MET7000** only)



See the results clearly!

More than 50 years
experience
in designing
customer focused
XRF solutions

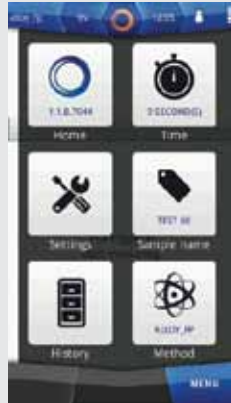


Spectra

TEST
SS316
MEASURING IN PROGRESS... 7%

| ELEMENT | % | UNIT |
|---------|-------|---------------------|
| Si | 0.34 | 0.119 |
| S | 0.15 | 0.021 |
| Ti | 0.17 | 0.035 - 0.20 |
| V | 0.07 | 0.023 |
| Cr | 17.12 | 0.180 10.00 - 18.00 |
| Mn | 1.83 | 0.126 - 2.00 |
| Fe | 67.43 | 0.228 60.00 - 80.00 |
| Co | 0.06 | 0.004 |
| Ni | 10.18 | 0.136 10.00 - 14.00 |

Measurement results



Main menu



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



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.

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- Consumable products
- Service repair at OiService facility

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