

# X-MET® for PMI

## Fast Grade ID, even aluminium!

PMI • QC/QA • FAC • Aerospace • Automotive

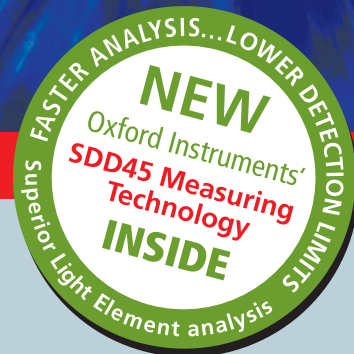
**X-MET5000 and X-MET5100 energy dispersive X-ray fluorescence (XRF) analyzers, with traceable Empirical Calibration assure unparalleled speed and measurement capability for real-time results that can be trusted. Both instruments are highly productive mobile testing tools for Positive Material Identification (PMI) and material quality assurance testing.**

The **X-MET5100**, with its powerful Light Element capability combined with the non-destructive nature of the XRF technique, is an invaluable tool for the aerospace industry where finished or sensitive samples need to be analyzed and Light Elements such as Mg, Al, Si & P need to be determined.

Challenging trace element analysis, such as FAC inspection in the nuclear power industry and the QC of microalloyed steels in automotive manufacture, can be performed in just one second!



6061 / 6063  
ID in  
seconds!



Top of the range **X-MET5100** combines Oxford Instruments' groundbreaking Silicon Drift Detector (SDD) with a powerful 45kV X-ray tube.

This cutting edge technology delivers a five times faster measurement speed, much better detection limits and significant accuracy improvement over conventional systems.

Isn't it time you used **X-MET** to improve *your* productivity?

## Worldwide Technology Leader



*The Business of Science®*

# High speed PMI and Quality Control/Assurance with the X-MET series



## X-MET5000 – Reliable material verification

- Reliable identification of a wide range of alloy grades
- Identification of close grades such as 304/321 or Grade CPTi/Ti-7 in less than 5 seconds
- Traceable Empirical Calibration to certified reference materials
- Withstands test piece surface temperatures up to 400°C
- Totally non-destructive testing

## What's more, X-MET5100 provides:

- Unparalleled speed: complete alloy analysis and grade ID in just one second
- Revolutionary Light Element analysis (Al, Mg, Si, P) without awkward vacuum pumps or helium bottles
- Invaluable tool for aluminium measurement and analysis of alloys which may contain large amounts of light elements (Al, Mg, Si, P).

Analyze large or small sample structures like bolts, thin tubes or honeycomb in seconds – just point and shoot!

- The X-MET series compensates for the shape of a sample
- Inspect pipes and welds for corrosion resistance conformity and pressure equipment for alloy composition
- Wires of less than 1mm diameter can be identified in seconds





## Rugged and reliable tool for fast, reliable Grade ID

- Withstands all weather conditions and rough treatment
- IP54 (NEMA 3) approved. Superior dust and moisture protection
- High-strength environmentally sealed housing
- Long battery operating time, charge indicator on battery and user interface

## Just point and shoot

- Analyze known and unknown samples
- Inspect pipes and welds for corrosion resistance conformity and pressure equipment for alloy composition
- Wires down to 1mm diameter can be identified in seconds
- The **X-MET** compensates for all sizes and forms of samples

## Extensive and open grade library

The **X-MET** allows easy editing of the grade libraries, including the addition of new alloys and naming of alloys. The grade library contains:

- Nickel Alloys
- Stainless Steels
- Cobalt Alloys
- Low Alloy Steel
- Tool Steels
- Copper Alloys
- Titanium Alloys
- Zirconium Alloys
- Aluminium Alloys

The **X-MET** is capable of storing thousands of different grades and it is easy to add new elements or to create a custom library.





## Three modes of operation

### Choice of analysis modes

- Traceable Empirical Calibrations for optimized accuracy
- Additional custom calibrations can be created with optional PC software package
- Fundamental Parameter Calculations when standards are not available
- Universal calibration that can measure over 30 elements between CI-U
- Pass / fail mode when only a small range of materials need to be identified
- User programmable pass /fail and alarm

## Easy and reliable

- Short learning curve
- User interface in >10 languages
- Easy data storage and reporting
- PDA based technology for flexibility and simplicity
- CE, cCSAus certified

## Proven design based on over 35 years experience in the field of portable hand-held XRF analyzers



## Oxford Instruments Industrial Analysis

### UK

Halifax Road, High Wycombe  
Bucks, HP12 3SE England  
Tel: +44 (0) 1494 442255  
Fax: +44 (0) 1494 461033  
Email: analytical@oxinst.com

### China

Beijing  
Tel: +86 10 6518 8160/1/2  
Fax: +86 10 6518 8155  
Email: info@oichina.cn

### Finland

Espoo  
Tel: +358 9 329 411  
Fax: +358 9 3294 1300  
Email: FI-Espoo\_Info@oxinst.com

### Germany

Uedem  
Tel: +49 (0) 2825 93 83 -0  
Fax: +49 (0) 2825 93 83 -100  
Email: DE-Uedem\_Info@oxinst.com

### Japan

Tokyo  
Tel: +81 (0) 3 5245 3591  
Fax: +81 (0) 3 5245 4466/4477  
Email: oikkma@oxinst.co.jp

### Latin America

Clearwater FL  
Tel: +1 727 538 7702  
Fax +1 727 538 4205  
Email: oxford@gate.net

### Singapore

Tel: +65 6337 6848  
Fax: +65 6337 6286  
Email: asiasales@oxinst.com

### North America

Elk Grove Village IL  
Tel: +1 847 439 4404  
Fax: +1 847 439 4425  
Email: sales@msys.oxinst.com

[www.oxford-instruments.com](http://www.oxford-instruments.com)

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