

METAL FINISHING

Complete Solutions For Coating Thickness Analysis

Optimise process and quality control for platers, painters and inspectors

Trust the Experts
in Coating Thickness
Measurement &
Thickness Gauging



OXFORD
INSTRUMENTS

The Business of Science®



COATINGS

X-MET8000 series handheld X-ray fluorescence analysers

Total portability and flexibility: take the analyser to the sample

A complete line of coating thickness measurement solutions

Oxford Instruments has been a global leader in coating thickness measurement for over 30 years. Our wide range of coating thickness instruments and contact gauges will meet any coating thickness testing requirements and budget.

Available testing methods for coating thickness include benchtop and handheld X-ray fluorescence (XRF) to magnetic induction and eddy current, to cover the widest range of applications. Our analysers and gauges will help minimise production costs for plating and maximise efficiencies.



Automatic sample size compensation for accurate testing of pipes, rods, wires down to 1 mm diameter, welds, fasteners, turnings, chips, etc.



No need to move large or heavy parts for analysis!
Get results in seconds

Reliable non-destructive analysis



EXPERTISE

Benchtop microspot XRF analysers

Rapid quality control and validation testing of small components and features



Magnetic and eddy current gauges for at-line process control and finished goods testing.



Precisely and non-destructively control your plating process. Analyse up to 4 layers on simple and complex parts.

PROCESS

Maximise profits

Ensure products meet specifications while avoiding costly overplating

Corrosion resistance

Verify the thickness and chemistry of the applied coatings to ensure product functionality and life-span in harsh environmental conditions. Whether you test small fasteners or large assemblies, Oxford Instruments has the right tool for your process.

Anodizing

NiP

Zn

ZnNi



Wear resistance

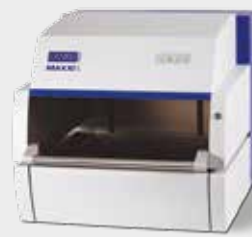
Prevent product failure by ensuring coating thickness and uniformity of critical components operating in abrasive environments. Complex shapes, thin or thick coatings, and finished goods can all be measured.

Cr

TiN

WC

Zr



Benchtop X-ray fluorescence

CONTROL

Test at incoming inspection, at the line and final QC

Where every mil or micron counts



Au

Brass

Ni

Paint

Decorative finish

When the goal is to achieve a flawless finish, quality control throughout the production process is critical. With Oxford Instruments' range of test equipment, you can reliably inspect base materials, test intermediate and top layers

Multi-layer analysis ensures every coating is controlled



Ag

Ceramic

Pt

Sn

High temperature resistance

Surface treatments for parts operating in the most extreme conditions must be controlled within tight tolerances. Ensure coatings specifications are met to prevent product recalls and potentially catastrophic failures.



Handheld X-ray fluorescence



Electromagnetic gauges



PRODUCT

The right solution for your applications

High performance analysers to meet your needs

Where every mil or micron counts, depend on Oxford Instruments to provide the right solution for your application.



	Microspot XRF MAXXI, Eco series, X-Strata	Handheld XRF X-MET8000 series	Eddy/mag CMI series
Typical applications			
Zn / Fe, Cr / Fe	✓	✓	✓
ZnNi / Fe, SnZn / Fe	✓	✓	
Cr / Ni / Cu / ABS	✓		
NiP / Fe	✓	✓	
Zr, Ti, Cr pre-treatments at nm-scale		✓	
Multi-layer analysis	✓		
Large, heavy parts		✓	✓
Anodizing			✓
Paint on metals			✓

Let our team of experts help you select the right tool to test your coatings



SELECTION

Complete solutions for coating thickness analysis

High performance

Versatility

Precision

Multi-layer analysis

Multi-point analysis

Microspot XRF

- Measure features as small as 0.05 mm
- High resolution detector for ultimate precision
- Large analysis chamber option for the testing of bulky parts
- Sturdy industrial design
- Non-destructive analysis, no sample preparation
- Clear pin-point accuracy



Portability

Inspection

Large parts

Handheld XRF

- Ultimate portability, measure samples anywhere
- Rapid alloy identification and coating thickness measurement with a single analyser
- IP54 rating for work in harsh environment
- Easy to use: minimum user training required



Fast

Rugged

Verify

Electromagnetic gauges

- At-line measurements improve production control
- Measure hard-to-reach areas
- Measure metal and organic coatings



The right solution for your applications

Our portfolio



Handheld LIBS analyser
(Laser Induced Breakdown Spectroscopy) for fast scrap metal sorting

Handheld X-ray fluorescence analysers
for fast non-destructive analysis of metals and plastics



Magnetic / eddy current gauges
for coating thickness measurement

X-ray fluorescence analysers
for coating thickness measurement, materials analysis, process control and quality assurance



Optical emission spectrometers
for analysis of alloyed and trace elements, nitrogen analysis in duplex steels

OiService

Our global network of service hubs provides a full range of technical support:

- Telephone help-desk
- On-line diagnostic
- Rental instrument
- Maintenance
- Training
- Extended warranty
- Consumables and accessories
- Repair service

Please ask about details of our comprehensive range of products or visit our website at:

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