

# OES

## FOUNDRY-MASTER COMPACT

Lower costs and higher quality with this high performance optical emission spectrometer

performance  
reliability  
accuracy



*The Business of Science®*



# FOUNDRY-MASTER COMPACT

- Ideal for the routine analysis of non-ferrous metals and alloys such as red metals and light metals (Al, Mg, Cu)
- Consistently delivering the best price performance



Optical Emission Spectroscopy (OES) has for many years been the most accurate and reliable technique for producing qualitative and quantitative analysis of materials composition. It works by exciting atoms with energy that comes from a spark formed between the sample and electrode. The energy of the spark causes the electrons in the sample to emit light which is converted into a spectral pattern. By measuring the intensity of the peaks in this spectrum, Oxford Instruments' OES analysers can

produce materials composition analysis results with uncompromising accuracy.

The Oxford Instruments **FOUNDRY-MASTER COMPACT** is a high performance bench-top optical emission spectrometer for process-control and the chemical analysis of metals. The compact design allows you to remain as close to the production line as you need.

The **FOUNDRY-MASTER COMPACT** is a modern spark emission spectrometer and is the winning choice with its excellent price-performance ratio.



## Product highlights

- Unique Jet-Stream technology improving analysis accuracy on irregular shaped samples
- High resolution Multi-CCD Optic for best spectral line separation
- Air flushed optics meaning reduced costs on expensive gases
- Reliable results with high repeatability
- Solid robust design for use in rugged conditions
- Compact chassis, taking up minimal space
- Fast and simple to use
- Superb easy to use and flexible software
- Great value with fast return on investment
- Easy-access spark stand for positioning test samples

# Easy to use, low cost to own, giving accurate results year after year

## Based on the proven and successful **FOUNDRY-MASTER** the 'compact' model offers some carefully thought out simplifications and improvements

The **FOUNDRY-MASTER COMPACT** is the ideal cost-effective solution for a range of analytical applications where good repeatability and high levels of accuracy are required. It does not require a vacuum optical system due to the analysis technique employed, making it easier to use, more reliable and improving sample testing speed and throughput.

Additionally the instrument does not require any complicated or expensive gas flushing for its high-resolution Multi-CCD Optic, making it far less costly to maintain and run. The pure simplicity of the **FOUNDRY-MASTER COMPACT** is based around the 'air' flushed optics which provides measurement capability at wavelengths above 185 nm.

## Easy access test platform in rugged environments

As with the standard **FOUNDRY-MASTER**, small or large samples can be placed on the open spark stand and can be analysed quickly and easily. Small objects, curved items, tube and wire samples can all be easily analysed, because the instrument offers the unique Jet-Stream Technology. Irregular sample geometries can be measured with a single universal adapter.

The digital source (spark generator) is controlled via an external Windows™ PC and provides the ideal excitation parameters for a wide range of diverse alloys. Renowned for its user-friendly graphical user interface, our unique software offers the ultimate flexible experience allowing you to tailor the analysis parameters to meet your changing needs.

The **FOUNDRY-MASTER COMPACT**'s real strengths are in its proven robust reliability, its flexibility and its long-life accuracy without compromise, protecting your investment and offering peace of mind over many years.

Its compact design requires minimal space and will work reliably in any location.

- Analytical mode/identification
- Non-ferrous metals and their alloys
- Al: wrought alloys, casting alloys...
- Cu: bronze, brass, cupronickel...
- Ti: Pure Ti (Ti-6-4 ~ Ti-8-Mn)
- Mg-, Zn-alloys, solders...



The externally located Windows™ Personal Computer running Windows XP™ manages the control and measurement processing. It is designed to provide you with a powerful computational tool for calculating and analysing results and a system on which to store test results and create test reports.



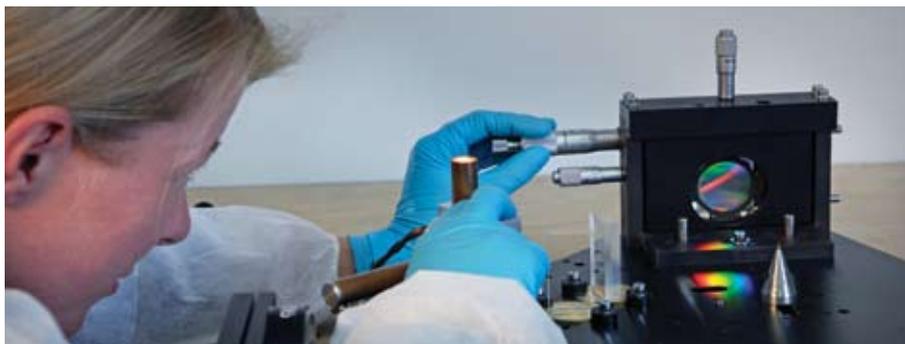
# OIES

## We put the spark in Spectrometry

### Oxford Instruments Industrial Analysis

The mobile, battery operated **PMI-MASTER PRO**, **TEST-MASTER PRO** and **ARC-MET8000** enable accurate, stable and fast analysis results for different alloy applications.

The **FOUNDRY-MASTER PRO**, **FOUNDRY-MASTER UV** and **FOUNDRY-MASTER COMPACT** are stationary optical emission spectrometers for process-control and the chemical analysis of metals capable of delivering high analytical flexibility. These compact instruments can distinguish nearly all elements in all metals. Steel and cast iron can be precisely and quickly analysed for all commonly found elements, such as C, P, S, Cr, Al, Cu, Ni, Ti, Co, Pb, Sn, Zn, N or Mg and many more. Please contact us to discuss your precise requirements.



Oxford Instruments' high technology analysers and systems are used across a wide range of applications in many markets including quality control, elemental analysis, compliance testing, scrap metal recycling and coating thickness measurement.

Wherever the key global issues of energy conservation, protection of the environment, national and personal security and health are being addressed, our products can be found.

Core technologies include Optical Emission Spectroscopy (OES); X-ray Fluorescence (XRF); Nuclear Magnetic Resonance (NMR) and Energy and Wavelength Dispersive Microanalysis.

#### Oxford Instruments Industrial Analysis

For more information please email: [industrial@oxinst.com](mailto:industrial@oxinst.com)

##### UK

High Wycombe  
Tel: +44 (0) 1494 442255

##### China

Shanghai  
Tel: +86 21 6132 9688

##### Finland

Espoo  
Tel: +358 9 329 411

##### Germany

Udem  
Tel: +49 (0) 2825 93 83 -0

##### Latin America

Concord MA  
Tel: +1 978 369 9933 Ext. 220

##### Singapore

Tel: +65 6337 6848

##### North America

Concord MA  
TOLLFREE: +1 800 447 4717  
Tel: +1 978 369 9933

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

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

Oxford Instruments, at High Wycombe, UK, operates Quality Management Systems approved to the requirements of BS EN ISO 9001. This publication is the copyright of Oxford Instruments Analytical Limited and provides outline information only which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or be regarded as a representation relating to the products or services concerned. Oxford Instruments' policy is one of continued improvement. The company reserves the right to alter, without notice, the specification, design or conditions of supply of any product or service. Oxford Instruments acknowledges all trade marks and registrations. © Oxford Instruments Analytical Ltd, 2009. All rights reserved. Part no: OIIA/030/B/1109



*The Business of Science®*