

OES

FOUNDRY-MASTER Xpert

The new benchmark for benchtop OES instruments



The new level in OES technology!



The Business of Science®



FOUNDRY-MASTER Xpert

The new benchmark for benchtop OES instruments

With the experience of experts the new **FOUNDRY-MASTER Xpert** is engineered to set the new benchmark for benchtop OES metal analysers.

It delivers high accuracy in analytical results, assures precise identification of materials and covers even critical elements like Pb, Se and La with low levels of detection. There is no need to make any compromises between element selection and wavelength range.

The **FOUNDRY-MASTER Xpert** is the ideal cost-effective solution for all metal processing industries. There is virtually no restriction on the element selection. The highest levels of accuracy and precision of the analytical results and a powerful yet easy-to-use software package mean that almost every application is covered. As a result, the cost of ownership is the lowest available on the market.

Unbeatably
low ownership
costs!



Product highlights

Highest analytical performance using robust yet reliable technology

- New CCD readout design allows the use of OI's Dynamic Integration Algorithm (DIA) providing **superior precision** of the results
- High-resolution Multi-CCD optics for **the best spectral line separation**
- Widest spectral range from 130 to 800 nm covering nearly **all interesting elements for any metal material including nitrogen in steel**
- New digital spark generator with optimised discharge parameters for atomic lines, **lowering detection limits** of a wide range of elements
- Excellent **long-term stability** ensured by peak position alignment (PPA)
- Vacuum optical system for the best **transparency of low wavelength for the best light transparency of low wavelength**
- **Contamination free** due to oil trap and oil mist filter
- External PC workstation incorporating the latest technology



Solid, robust technology and compact design allow continuous use in any location, in the lab or on-site, even in rugged conditions.



OES

We put the spark in Spectrometry

Reliable, repeatable, flexible analysis for spark foundries and metal producers



Typical Applications

- Analytical mode / identification
- Majority of metals and their alloys
- Fe alloys, Cast-iron alloys
- Al: alloys, cast alloys...
- Cu: bronze, brass, Cu – Ni,...
- Ni: hastelloy ~ inconel ~ monel,...
- Ti: Ti pure, Ti.6-4 ~ Ti.8-Mn...
- Mg-, Zn - alloys, solders and more...

Vacuum optical system

The advantages of a vacuum system are especially proved when measuring on wavelengths below 200 nm:

- We obtain highest transparency for the UV light
- Thanks to stable conditions, there are no peak shifts caused by possible ambient pressure changes
- We avoid both extra argon consumption purged to the optical system and contamination caused by the impurities in the purge gas

The **FOUNDRY-MASTER** Xpert has our proven and robust vacuum OES technology. This enables low maintenance needs: lens and window assembly can be accessed and cleaned easily. There is no oil contamination.

The new spark generator – lower detection limits

Beside the optical system, the new digitally controlled spark generator is a masterpiece of power electronics which enhances the **FOUNDRY-MASTER** Xpert to the next level of stationary OES Spectrometers.

Its stability and wide selection of different excitation parameters ensure the emission of light with the best signal-to-noise ratio, leading to lowest detection limits.



Vacuum lens assembly

Oxford Instruments Industrial Analysis

For more information please email: industrial@oxinst.com

UK

High Wycombe
Tel: +44 (0) 1494 442255

China

Shanghai
Tel: +86 21 6073 2929

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

www.oxford-instruments.com/oes 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, 2011. All rights reserved. Part no: OIIA/084/0411



As part of Oxford Instruments' environmental policy this brochure has been printed on FSC paper



The Business of Science®