

OES

FOUNDRY-MASTER Pro

Laboratory metals analyser



OXFORD
INSTRUMENTS

The Business of Science®



FOUNDRY-MASTER Pro

Uncompromised analytical performance

Reliable process and quality control

Seamless quality control is essential for any metalworking, starting with tramp element analysis for scrap, inspection of incoming materials, goods issue and melt process control.

The **FOUNDRY-MASTER Pro** is the ideal solution for metal producing and processing industries who are looking for wide wavelength range and precise elements identification. This optical emission spectrometer (OES) works with a vacuum optics for low argon consumption and minimising the operating costs.

GRADE Database included

The largest metals database for fast and easy grade identification is already installed. It offers more than 10 million records for over 320,000 materials from 69 countries and standards. You can update your instrument's grade database with a few clicks – no time consuming research in norms and grade catalogues.



Highlights

- Superior low Carbon and Nitrogen measurement performance
- Excellent long-term stability and minimum detection limits
- Wide 130 – 780 nm wavelength range covers all elements
- Sample stand accessible from three sides
- Vacuum optics for low argon consumption and minimal costs
- Minimal and cost effective maintenance
- Continuous use, even in rugged conditions
- New analytical method for the determination of soluble and insoluble Aluminium in low alloyed steels

Typical applications

- Steel, cast iron and high alloyed steels
- Non-ferrous metals and their alloys
- Al: wrought alloys, casting alloys, etc.
- Cu: Bronze, Brass, Cupronickel, etc.
- Mg, Zn alloys, solders
- Nitrogen in steel
- Phosphorus in Aluminium
- Ultra low Carbon analysis
- Improved LODs for Pb, Si, Sn, etc.
- Trace elements such as Se, La, Te, etc.

Excellent long-term stability...

...and minimum detection limits

Ease of use and simplicity

The intuitive user interface and numerous customer-driven features make analysis work easy and simple. Just place the sample on the sample stand, start the measurement and read the result.

The **FOUNDRY-MASTER Pro** generates quantitative analysis of materials. The results are displayed on screen and can be stored in an internal database for material validation purposes or exported to an external PC with productivity tools, such as SPC software packages. Tailormade certificates can easily be created and printed.

The factory calibration of the **FOUNDRY-MASTER Pro** is based on certified reference materials. In addition, the operating software allows the calibration and element ranges to be expanded with customer samples, even very specific calibration needs can be met.



Sample adapters

Unique sample stand

The spark stand is accessible from three sides, suitable for samples with complex and irregular shapes and sizes. Even wires as thin as 1 mm can be accurately measured with the adapter.

Industries

- Metallurgical manufacturing
- Steel plants
- Academia
- Foundries (ferrous, non-ferrous)
- Commercial laboratories



All accessories
and maintenance
tools organised in
compartments

OIES

Technical specifications

Height / width / depth	1140 mm	730 mm	850 mm
Weight	180 kg		
Power	90 / 250 VAC, 50 / 60 Hz		
Consumption max.	700 W		
Consumption standby	50 W (100 W source on)		

Optical System

Rowland circle	Paschen-Runge mounting
High resolution Multi-CCD	Optimised pixel resolution
Wavelength range	130 - 780 nm
Focus	350 mm

Solid State Source

Computer controlled parameters

Frequency	80 - 500 Hz
Voltage	250 - 500 V
	High Energy Pre Spark (HEPS)

Readout System

External PC workstation with up-to-date technology,
Microsoft® Windows® user interface

Options

Adapters	Sample preparation devices
Spare parts kit	Consumables kit

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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