

FOUNDRY-MASTER UV

Metal Analysis – fast, easy and precise

- Analysis of all metals and alloys
- Jet-Stream Technology
- Low argon consumption
- Precise analysis including material identification
- Easy-access spark stand

High performance spectrometer

The **FOUNDRY-MASTER** UV is a reliable, precise laboratory spectrometer for the qualitative and quantitative element analysis of metallic samples. The instrument is designed for stationary use as a benchtop unit. The instrument is well established with hundreds of customers worldwide opting for its high performance qualities and practical features.

The instrument is based Optical Emission Spectroscopy (OES), the analysing method favoured by most metal producing and processing companies. The digital source (spark generator) is controlled via the external Windows® PC and offers ideal excitation parameters for the most diverse alloys.

The high-resolution Multi-CCD Optics utilises a traditional, robust, vacuum technology chamber, rather than eccentric ways of removing harmful atmosphere from the optic. The optic range covers the complete wavelength range of 160 nm to 800 nm.

Low operating costs and easy maintenance

The rugged and approved vacuum technology is essentially maintenance-free and has significantly lower operating costs than alternative inert gas purged systems. The sample stand, open on three sides, offers the ability to measure almost any size or shape of sample, particularly large sample geometries.



The unique design needs less cleaning than comparable systems, giving much longer operational time.

The cleaning process is fast and instrument recovery efficient due to pre-aligned parts and quick connectors. Thanks to our unique Jet-Stream Technology within the sample stand **FOUNDRY-MASTER** UV can analyse most complex shapes with irregular sample geometrics, including wires.

Argon consumption is reduced to a minimum, saving a considerable amount of operating expenses. Additionally, the sample does not need to completely seal the spark stand opening. Tubes, bars and even wires can be directly analysed, using only one universal adapter. This is a major operational advantage and strongly reduces the sample preparation time.

Easily upgradable OES analyser

The **FOUNDRY-MASTER** UV can be upgraded with new calibration modules at any time and without expensive and time-consuming modifications. Low argon consumption thanks to optimisation of argon flush and use of vacuum technology. Analysis of all common metals and their alloys.



Spark for foundries and metal producers

- Easy to use, even for untrained operators
- Maintenance free vacuum technology



Technical Data		Solid State Source
Height	368 mm (14,5")	Computer controlled parameters
Width	889 mm (35,0")	
Depth	635 mm (25,0")	Frequency 100 – 400 Hz
Weight	70 kg (154,3 lbs)	Voltage 300 – 500 V
Mains Power	230-110 VAC (50/60 Hz)	High Energy Pre Spark HEPS
Operating Mode	600 W	Readout System
Standby Mode	50 W	External PC-Workstation incorporating up-to-date technology
Vacuum System		Options
Direct-path optical spark-stand		Wire-adapter set
Low-noise vacuum pump		Sample preparation devices
Shut-off-valve for easy replacement of the optical window		Spare parts kit
		Consumables kit
Optical System		Typical Applications
Multi CCD optical-system with Paschen-range Mount		Analytical mode / identification
Resolution CCD	9 pm	Majority of metals and their alloys
Reciprocal dispersion	0,9 nm/mm (1st order)	Fe- alloys Cast-iron alloys
Focal length	350 mm	Al: alloys, cast alloys...
Holographic grating	3000 g/mm	Cu: bronze, brass, Cu – Ni,...
Wavelength	160 – 800 nm	Ni: hastelloy ~ inconel ~ monel,...
		Ti: ti pure . Ti.6 - 4 ~ Ti.8-Mn...
		Mg-, Zn - alloys, solders and more...

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 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/oes for more information

www.oxford-instruments.com

This publication is the copyright of Oxford Instruments plc 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 regarded as the 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 trademarks and registrations. © Oxford Instruments plc, 2010. All rights reserved. Part no: OIIA/068/C/1110



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



The Business of Science®