

Introducing
SPECTROMAX_x LMX07
ARC/SPARK OES ANALYZER



**New and improved
speed and performance**

Foundry floor analysis that's generations ahead

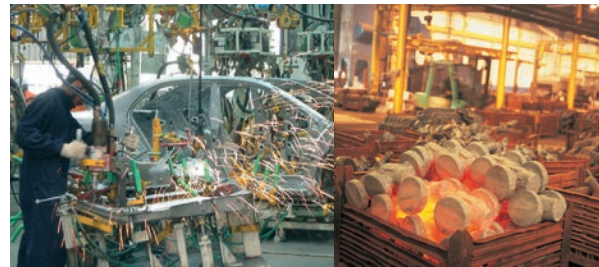
SPECTROMAXx

Foundries demand fast, accurate elemental analysis of metals at numerous points in their workflow, from incoming materials to in-process testing to final quality inspection.

Profitability is a major concern. Without sufficiently accurate analysis, planners end up overbuying: purchasing source materials that are more expensive than necessary from a primary producer. By contrast, with the right analytical solution, a foundry can reach its outgoing quality targets precisely — at minimum upstream cost.

Traceability is another critical consideration. At every step, managers must be able to determine elements in every product, from primary producer to final form. And time always counts. Rapid analysis is vital on today's fast-moving foundry floor.

For over a decade, one instrument has delivered in every analytical area for foundries worldwide.



SPECTROMAXx ARC/SPARK OPTICAL EMISSION SPECTROMETRY (OES) ANALYZER

The new SPECTROMAXx represents the seventh generation of this popular and successful metal analyzer. Based on new technologies adapted from SPECTRO's top-of-the-line SPECTROLAB instrument, SPECTROMAXx has been redesigned for even greater consumables savings and faster measurement time. So this easy-to-use, benchmark analyzer provides greater analytical performance, productivity, and savings than ever before. It's the clear choice for analytical excellence in every foundry application.



LESS GAS CONSUMPTION

The new SPECTROMAXx analyzer starts saving by greatly reducing a significant operational expense. Simply put, it uses lower volumes of costly argon gas without sacrificing analytical performance. Depending on the SPECTROMAXx configuration, consumption cuts range from 18% to 60%!

FASTER MEASUREMENT

Redesigned technology also realizes a 15% to 20% reduction in measurement time. (Examples: iron-based alloys take 3-5 seconds less than with previous models; aluminum alloys, 4 seconds less.) So SPECTROMAXx users get ultra quick information, and react fast to changing process conditions. Results: savings in both time and energy costs.

REDUCED COSTS OF OWNERSHIP

Improvements add up. Those shorter measurement times and features such as a proven argon-saver "sleep" mode both help cut gas consumption and deliver superior cost savings. Additionally, reduced maintenance needs create higher availability, while advanced diagnostics with critical status indicators make any maintenance easier — and prevent expensive unplanned downtime.

SPECTROMAXx

stability for foundry applications

SPECTRO took every opportunity to improve already excellent analytical performance in this new SPECTROMAXx. Standard samples were selected and tested. Source parameters were studied and optimized. Both element selection and calibration ranges were reviewed and updated. Result: analytical performance that's precisely tuned for the foundry world — and its future demands.

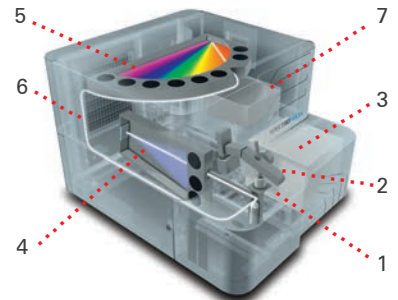
A CHOICE OF CONFIGURATIONS

SPECTROMAXx comes in several configurations for different analytical requirements. Additionally, floor-mounted versions provide ideal operator positioning (with optional matching stand for the instrument's computer). Benchtop models combine easy operation with minimum footprint.

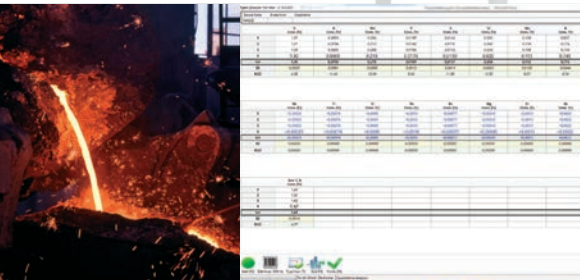


ULTRA-DEPENDABLE DESIGN

An improved air circulation/ventilation system further preserves instrument internals from contamination, and helps ensure reliable operation and accuracy.



1. Spark stand
2. Sample clamp
3. Excitation unit
4. UV optic
5. Air optic
6. Fiber optic connection
7. Electronics & readout



SPEEDY, SIMPLE STANDARDIZATION

With conventional analyzers, standardization demands multiple samples per matrix and 50+ minutes of measurement time for a three-base instrument, plus excessive downtimes and costs. Instead, SPECTROMAXx's proprietary iCAL calibration logic requires just one sample, and takes only 5 minutes for total measurement. Thus iCAL greatly increases instrument availability — and cuts total cost of ownership.

THE STANDARD FOR EASE OF USE

Even for less experienced personnel, SPECTRO's SPARK ANALYZER Pro software takes effortless operation to a new level. Instead of multiple dialog boxes, a simplified operator view presents clear choices via dedicated toolbar buttons. And instead of complicated method development, application profiles are tailored to predetermined user requirements.

THE BENCHMARK OF PERFORMANCE

Accurate results rely on precise calibration. Applying more than 30 years' experience, SPECTRO has finely tuned accuracy over successive SPECTROMAXx models, significantly improving analytical performance again in this latest generation. These improvements are documented via detailed application reports. SPECTRO also continues its investment in certified reference materials. Result: no analytical surprises.



SPECTROMAXx: additional advantages



NEW CARBON IN NODULAR CAST IRON CAPABILITY

SPECTRO Analytical Instruments has developed a new analytical solution that combines the accuracy of the combustion method with the speed and ease-of-use of OES. Incorporated in its SPECTROMAXx systems, this advanced OES technology now makes it possible to precisely detect and analyze samples containing free graphite, with results comparable to those achieved by combustion analysis.

SPECTROMAXx instruments can monitor carbon during the pre-spark phase to detect the presence of free graphite, and select analytical conditions that minimize its effects. This approach also uses a statistical method to detect bad samples automatically.



SUPERIOR SERVICE AND SUPPORT

Users depend on the availability of ensured analysis to maintain the highest possible pace of productivity. So that every analyzer is ready when needed, SPECTRO offers global service and support that many other suppliers can't match, with AMECARE performance services options.

This industry-leading program fields more than 200 service engineers in 50+ countries. These high-value, customized services help deliver optimal performance and the longest possible equipment life. Users can choose proactive performance maintenance, performance upgrades, application solutions, expert consultation, and targeted training.

SPECTRO strives continuously to improve customer support, and now offers global remote monitoring via AMECARE's exclusive M2M program. This revolutionary capability — 24/7 diagnostics and alerts about critical functions — maximizes instrument availability for high-volume, high-productivity analysis.

www.spectro.com

COMPLETE LINE OF METAL ANALYZERS

This next-generation SPECTROMAXx model takes its place among today's most comprehensive suite of advanced stationary metal analyzers. It stands beside SPECTRO's flagship SPECTROLAB, a market leader for ultra-precise analysis, plus the entry-level SPECTROCHECK, offering high performance and dependability at a very competitive low price.

It's complemented as well by SPECTRO's mobile product line, with the SPECTROTEST mobile analyzer, the SPECTRO xSORT XRF handheld analyzer, and the SPECTRO iSORT arc analyzer.

SPECTRO's unparalleled record of technological innovation ensures that users always get the best results in the business with every instrument.



CHINA

AMETEK Commercial
Enterprise (Shanghai) CO., LTD.
Part A, 1st Floor, No.460 North Fute Road
Waigaoqiao Free Trade Zone
200131 Shanghai
Tel.: +86.21.586.851.11
Fax: +86.21.586.609.69
Email: spectro-china.sales@ametek.com



GERMANY

SPECTRO Analytical
Instruments GmbH

Boschstrasse 10, D-47533 Kleve
Tel: +49.2821.892.0
Fax: +49.2821.892.2202
spectro.sales@ametek.com

U.S.A.

SPECTRO Analytical Instruments Inc.
91 McKee Drive
Mahwah, NJ 07430
Tel: +1.800.548.5809
+1.201.642.3000
Fax: +1.201.642.3091
spectro-usa.sales@ametek.com

Subsidiaries: ► **HONG KONG:** Tel. +852.2976.9162, Fax +852.2976.9132, spectro-ap.sales@ametek.com, ► **FRANCE:** Tel +33.1.3068.8970, Fax +33.1.3068.8999, spectro-france.sales@ametek.com, ► **GREAT BRITAIN:** Tel +44.1162.462.950, Fax +44.1162.740.160, spectro-uk.sales@ametek.com, ► **INDIA:** Tel +91.22.6196.8200, Fax +91.22.2836.3613, sales.spectroindia@ametek.com, ► **ITALY:** Tel +39.02.94693.1, Fax +39.02.94693.650, spectro-italy.sales@ametek.com, ► **JAPAN:** Tel +81.3.6809.2405, Fax +81.3.6809.2410, spectro-japan.info@ametek.co.jp, ► **SOUTH AFRICA:** Tel +27.11.979.4241, Fax +27.11.979.3564, spectro-za.sales@ametek.com, ► **SWEDEN:** Tel +46.8.5190.6031, Fax +46.8.5190.6034, spectro-nordic.info@ametek.com.

SPECTRO operates worldwide and is present in more than 50 countries. For SPECTRO near you, please visit www.spectro.com/worldwide

© 2016 AMETEK Inc., all rights reserved, subject to technical modifications • 80902232 • D-16, Rev. 4 • Photos: SPECTRO and thinkstock • Registered trademarks of SPECTRO Analytical Instruments GmbH • SPECTRO: USA (3,645,267); EU (005673694); "SPECTRO": EU (009693763); iCAL: USA (3,189,726), EU (003131919)