

**SPECTRO**

**AMETEK**  
MATERIALS ANALYSIS DIVISION

Introducing  
**SPECTROMAX<sup>x</sup> LMX08**  
with iCAL 2.0  
ARC/SPARK OES ANALYZER



**Even faster speed.  
Even better performance.  
Even greater intelligence.**

# More intelligent analysis for material control

## SPECTROMAXx with iCAL 2.0

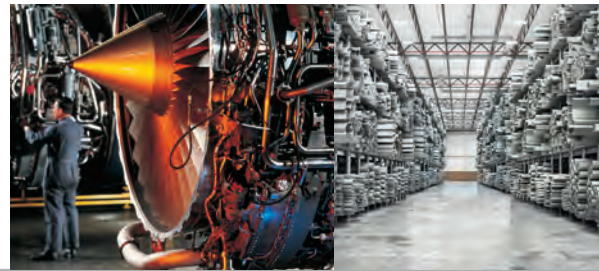
Manufacturing plants demand advanced elemental analysis of metals, from incoming materials to in-process testing to final inspection for outgoing quality.

Speed is a vital concern. Most analyzers still require multiple standardization samples for each metal matrix. To match today's higher line speeds, processors must seek out new analyzers that greatly reduce required samples and total measurement times.

Results reliability is also critical for your success. Inconsistent analysis leads to off-spec batches and expensive rework.

Costs — particularly consumables costs — are important as well. An ideal analyzer minimizes gas consumption without sacrificing analytical performance.

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



### SPECTROMAXx ARC/SPARK OPTICAL EMISSION SPECTROMETRY ANALYZER

SPECTROMAXx is likely the world's best-selling arc/spark OES instrument — with more than 13,000 installed! The new SPECTROMAXx represents the eighth generation of this industry-leading metal analyzer. With technologies adapted from SPECTRO's top-of-the-line SPECTROLAB, SPECTROMAXx delivers even faster measurement times and significant consumables savings. So it provides greater productivity, analytical performance, ease of use, and cost-effectiveness than ever before.

#### OUTSTANDING SPEED

The new SPECTROMAXx analyzer achieves record-setting speed. Optimized spark parameters allow a 12% reduction in measurement times. (Example: low-alloy steel takes 3 seconds less than with previous models.) So users get ultrafast information, and can react rapidly to changing process conditions. Results: outstanding savings in both time and energy costs.

#### LOW GAS CONSUMPTION

SPECTROMAXx starts saving by greatly reducing a significant operational expense, compared to many previous models. It minimizes the use of costly argon gas — without sacrificing analytical performance.

#### 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.

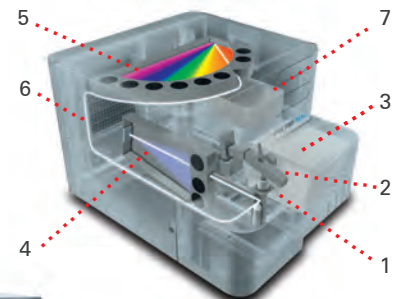


# SPECTROMAXx

## reliability for incoming and outgoing material control

### ULTRA-DEPENDABLE DESIGN

A proven air circulation/ventilation system 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

SPECTRO has always taken every opportunity to improve already excellent analytical performance. Standard samples are carefully selected and tested. Source parameters are studied and optimized. Result: reliable analytical performance that's precisely tuned for incoming and outgoing material control — today and tomorrow.

### 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.



### FAST, SIMPLE STANDARDIZATION WITH iCAL 2.0

With conventional analyzers, standardization can take 30+ minutes, demand multiple samples, and require reruns whenever site conditions change. By contrast, in most cases SPECTRO's proprietary iCAL 2.0 calibration logic needs only 5 minutes and a single sample per day. Plus it automatically compensates for most changes in environmental temperature or pressure. So SPECTROMAXx delivers outstanding stability, productivity, and savings, time after time.

### 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 40 years' experience, SPECTRO has finely tuned accuracy over successive SPECTROMAXx models, significantly improving analytical performance again and again. These improvements are documented via detailed application reports. SPECTRO also continues its investment in certified reference materials. Result: no analytical surprises.



# SPECTROMAXx: additional advantages



## ADAPTERS FOR VARYING NEEDS

Material control presents a wide range of analysis requirements. Two specific challenges: adjusting to samples' differing shapes and sizes, and optimizing positioning on the spark stand. Fortunately, SPECTROMAXx's adapter kit offers a variety of flexible, easy-to-use solutions.



Small Parts Adapter Kit



Adapter for wires with a diameter of 1-3 mm



Adapter for wires/screws or small parts with a diameter of 3-10 mm



Adapter for small pieces



## SUPERIOR SERVICE AND SUPPORT

Managers can 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](http://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 SPECTROPORT portable metal analyzer.

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



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