

thermo scientific



Thermo Scientific ARL easySpark

Optical Emission Spectrometer

Maximize productivity with reliable metals analysis

Iron and steel • Non-ferrous metals and alloys

ThermoFisher
SCIENTIFIC

ARL easySpark

Quality is our standard

For over 80 years, our company has set the standards for Optical Emission Spectrometry (OES) spectrometers. Performance, stability, reliability and robustness have been the key attributes of our instruments. The Thermo Scientific™ ARL easySpark™ bench-top metals analyzer continues this tradition of quality, bringing an easy to use, reliable and affordable analytical solution that fulfills the needs of foundries, metal processors and other metallurgical industries and laboratories.

Reliability, your guarantee for quality and productivity

The reliability of an OES instrument is essential for quality and productivity improvements in a metallurgical operation, because of its most efficient and critical use in different types of analyses along the workflow, e.g.:

- Quality control or sorting of incoming/outgoing materials
- In-process production control
- Quality control of finished or semi-finished products

Element coverage, accuracy, precision and stability are the foundations of a reliable OES analyzer. Wide element coverage allows the determination of all the elements that one needs. Accuracy provides the assurance that materials comply with the norms and quality standards. Precision signifies trust-worthy and dependable results with minimal number of measurements.

Finally, stability ensures lifetime performance with minimal maintenance and recalibration operations. These key figures of merit of an OES instrument are as important as the overall cost of ownership in order to produce reliable analyses and to reach the ultimate objectives of quality and productivity, e.g.:

- Minimize cost of non-quality (customer complaints, scrapping...)
- Reduce expensive over-quality (minimize costly elements, optimize sourced materials...)
- Avoid costly outsourced analyses



Easy, safe and economic, yet powerful

The optics and the main modules of the ARL easySpark have been designed to achieve the same level of quality, performance, reliability and robustness generally obtained with bigger OES instruments.

The ARL easyspark reinforces the positioning of your company as a modern company with analytical credibility.

ARL easySpark

The ARL easySpark has all the features and attributes to make it a reliable OES instrument. It is delivered as a turn-key solution, fully calibrated in our factory and thoroughly tested for performance, accuracy and quality before delivery. It also has all the tools necessary to guarantee an easy installation, easy operation and easy maintenance. The ARL easySpark provides the enhanced benefits needed for the determination of all elements in all types of metals, such as iron and steel, aluminum and its alloys, bronze, brass and more. It brings all the advantages of the CCD technology without compromise on analytical performance.

- The optic is carefully isolated from the surrounding environment and controlled in temperature to ensure optimum stability
- The compact version of the patented Thermo Scientific IntelliSource is a current-controlled spark source (CCS). It generates highly repeatable and perfectly tailored sparks which allow the most efficient and repeatable sample surface preparation, material ablation, atomic excitation and the resulting light emission, in order to ensure superior performance and accuracy in any metal matrix.

- The spark stand brings important benefits:
 - Unique Safe Open Stand to guarantee high user security
 - Low argon consumption thanks to optimized design and advanced Smart Argon Management (SAM) software module
 - Minimum maintenance and tool free stand dismantling
 - Robust, wear-resistant analysis table
- The unique and exclusive optical design provides optimal element coverage, spectral resolution and performance, as well as unparalleled stability even in the harsh conditions of a production floor thanks to e.g.:
 - Patented entrance optics for superior light collection and grating illumination
 - High performance spectrometer based on multi-grating/CCD technology
 - Exclusive UV resistant Peltier cooled CCD detector

Spark optical emission spectrometry (OES)

OES is the most widely used and well established technique for elemental analysis of solid metal samples. Our spectrometers excel in every aspect of this type of analysis:

- Fast elemental analysis
- Determination of all necessary elements from ppm to percent
- Outstanding accuracy, precision and stability
- Simple installation, operation and maintenance
- Low capital investment and overall operating costs.



