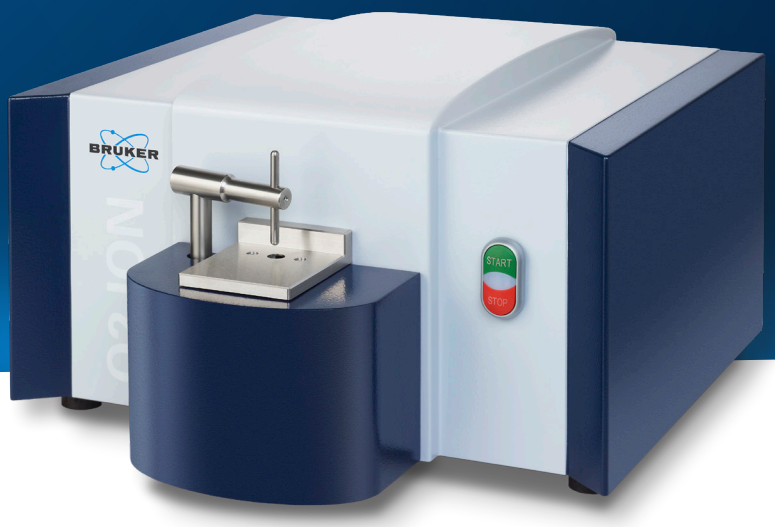

OES

Q2 ION

Ultra-Compact Spark-OES Metals Analyzer

Bruker's spark spectrometer Q2 ION elevates metals analysis to new levels of simplicity and ease-of-use. The Q2 ION is the smallest and lightest ultra-compact spark emission spectrometer for metals analysis available. It is a versatile multi-matrix system for comprehensive incoming material inspection and quality assurance of metal alloys. Its affordable price and low operational costs make it the ideal tool for a small- and medium-size business.

The Q2 ION analyzes all major alloying elements in applications such as ferrous alloys, aluminium, copper, and many more.
It perfectly fits the requirements of foundries, metal processing plants, fabricators, quality control departments, warehouses, metal recyclers, and even inspection companies.

Q2 ION – Metals analysis made easy

Its design makes the Q2 ION ultra light so it can easily be handcarried even to a nearby site for analysis. An optional case is also available. Despite its low weight, it is suitable for applications in rugged environments.

Q2 ION also defines new standards in ease-of-use. Place your sample onto the spark stand and press the start button. In less than thirty seconds you get the complete elemental composition of your metal.

Q2 ION – Patented optical system

The new patented flat field CCD optics is a masterpiece of optics design and mechanical engineering. Automatic Ambient Compensation (AAC™) provides maximum stability in a temperature range between 10 and 45 °C (50 and 113 °F). The high-definition CCD detector together with well-proven ClearSpectrum technology provide best-in-class analytical performance.

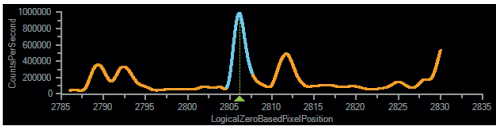

Figure 1
Detector with ClearSpectrum technology

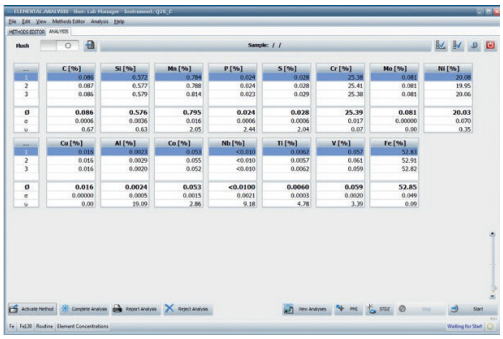

Figure 2
Typical Analysis Screen

Technical Data	
Optical System	Un-coated CCD detector with lowest dark current; Flat field grating; Argon purged for best transparency; ClearSpectrum technology for advanced spectra deconvolution; Automatic Ambient Compensation (AAC™) for operation between 10 and 45 °C (50 and 113 °F)
Source Generator	Maintenance-free, two phase PWM generator; Frequency 50 to 1000 Hz; Spark and arc-like discharges from 10 µs to 2 ms
Sparkstand	Nearly maintenance-free; Low Argon consumption during measurement; Argon quality 4.8 specified for spectrometry or better
ELEMENTAL.SUITE	Intuitive Windows® based software for simple routine operation; Various user levels for secure and task-specific operations; ELEMENTAL.SUITE software including analysis database, powerfull Analysis Viewer, flexible export and reporting, and internal grade library
Analytical Solution Packages (ASPs)	Different matrix calibration packages available ASPs cover all major elements and alloy groups
Electrical Data	100 to 240 V (50/60 Hz); 200 W during measurement, 50 W during standby; 16 A (240 V) or 25 A (100 V) slow blow fuse
Dimensions &Weight	Width 440 mm (17 inch); Height 220 mm (9 inch); Depth 390 mm (15 inch); Weight ~ 19 kg (~ 42 lbs)
Environmental Range	Temperature 10 - 45 °C (50 - 113 °F); Humidity 10 - 90%, no condensation
Options	Wire adapter, tube adapter Carrying case Notebook or Desktop PC

Bruker AXS is continually improving its products and reserves the right to change specifications without notice.
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Bruker AXS
info.baxs@bruker.com

Worldwide offices
bruker.com/offices

Online information
bruker.com/q2ion

bruker.com