

## Flyer OES 001

### Q2 ION

- Ultra-Compact Spark-OES Metals Analyzer

Bruker Elemental's all-new spark spectrometer Q2 ION elevates metals analysis to new levels of simplicity and ease-of-use. Today 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 small- and medium-size businesses.

Q2 ION analyzes all major alloying elements in applications such as ferrous alloys, aluminium, copper, and many more. It perfectly fits the require-

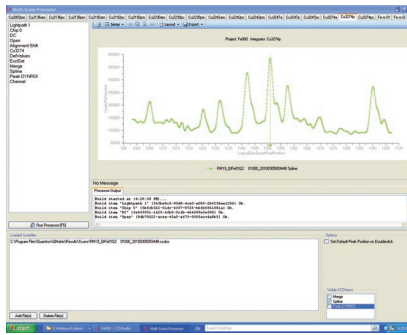
ments of foundries, metal processing plants, fabricators, quality control departments, warehouses, metal recyclers, and even inspection companies.

#### **Q2 ION - Metals Analysis Made Easy**

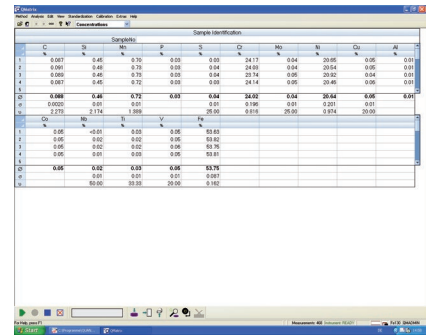
Its design makes Q2 ION ultra light (less than 44 lbs/20 kg) so it can easily be handcarried even to a nearby site for analysis. An optional case is also available. Despite its low weight, it is suitable for applications in rugged environments. Q2 ION also defines new standards in ease-of-use. Place 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. Active 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.



Detector with ClearSpectrumTechnology



Typical Analysis Screen

## Technical Specifications

<b>Patented Optical System</b>	<ul style="list-style-type: none"> <li>Un-coated CCD detector with lowest dark current</li> <li>Flat field grating</li> <li>Full spectrum coverage: 170 - 411 nm (685 nm)</li> <li>Resolution: 30 pm</li> <li>Argon purged for best transparency</li> <li>ClearSpectrum® technology for advanced spectra deconvolution</li> <li>Active Ambient Compensation (AAC) for operation between 10 and 45°C (50 and 113°F)</li> </ul>
<b>Analytical Solution Packages (ASPs)</b>	<ul style="list-style-type: none"> <li>Different matrix calibration packages available</li> <li>ASPs cover all major elements and alloy groups</li> <li>Upgradable for future expansion</li> </ul>
<b>Source Generator</b>	<ul style="list-style-type: none"> <li>Maintenance-free, two phase PWM generator</li> <li>Frequency 50 to 1000 Hz</li> <li>Spark and arc-like discharges from 10 µs to 2 ms</li> </ul>
<b>Sparkstand</b>	<ul style="list-style-type: none"> <li>Nearly maintenance-free</li> <li>Argon consumption 2.5 l/min. during measurement</li> <li>Argon quality 4.8 specified for spectrometry or better</li> </ul>
<b>Software</b>	<ul style="list-style-type: none"> <li>Intuitive Windows® based software for simple routine operation</li> <li>Various user levels for secure and task-specific operations</li> <li>Functions for qualitative and quantitative analysis</li> <li>Elemental Suite Software including analysis database and interfaces to Office software</li> <li>Grade Library functions</li> </ul>
<b>Electrical Data</b>	<ul style="list-style-type: none"> <li>100 to 240 V (50/60 Hz)</li> <li>200 W during measurement, 50 W during standby</li> <li>16 A (240 V) or 25 A (100 V) slow blow fuse</li> </ul>
<b>Dimensions and Weight</b>	<ul style="list-style-type: none"> <li>Width 440 mm (17 in.)</li> <li>Height 220 mm (9 in.)</li> <li>Depth 390 mm (15 in.)</li> <li>Weight ~ 19 kg (~ 42 lbs.)</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Temperature 0 - 45°C (50 -113°F)</li> <li>Humidity 10- 90 % no condensation</li> </ul>
<b>Options</b>	<ul style="list-style-type: none"> <li>Wire adapter, tube adapter</li> <li>Sample preparation</li> <li>Carrying case</li> <li>Notebook, Desktop, or All-in-One Touch PC</li> </ul>

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