AZtecBattery

Automated Running

• Combine up to 4 Ultim® Max detectors for the ultimate in throughput

Dedicated, Flexible & Fast Li-ion Battery Powder Inspection in the SEM

AZtecBattery

• Optimised for the analysis of battery materials
• Pre-set classification to identify common contaminants including both magnetic and non-magnetic metallic particles
• Custom reporting showing key contaminant details including type and size distribution

Certainty

• Imaging based approach allows direct measurement of particle morphology and composition to help in discovering source
• Record the right morphology from large particles that break field boundaries with particle reconstruction

AZtecLive Software

AZtecBattery is part of the AZtecLive NanoAnalysis suite which is equipped with several navigators designed to help take you through your analysis tasks step by step and ensure all users achieve the same high-quality results every time.

Live | Mapping | Point&ID | LineScan | Feature

Real-Time Chemical Analysis

AZtecLive with Ultim Max or Xplore detectors delivers a system solution that takes the EDS technique from the static to the dynamic with real-time chemical analysis.

Accurate and Repeatable

Even a novice user can achieve expert results consistently.

• Advanced TruQ® spectrum processing technology ensures that peaks are automatically identified and labelled, enabling even inexperienced users to achieve reliable sample and feature determination

AZtecBattery Software

Identify common contaminants with dedicated classification
Acquisition settings optimised for finding contaminants
Custom step notes to guide users through the analysis process
Reconstruction of particles to ensure true morphology measurements
Morphology filtering of particles to save time by only acquiring those of interest
TruQ for accuracy and reliability in element identification and quantification
Live chemical imaging

Hardware - Ultim Max with X4 electronics
Detector: Ultim Max
Sensor size: 40 mm² to 170 mm²
Detection range: Be(4) to (Cr)98
Resolution: Mn Kα <127 eV
F Kα <64 eV
C Kα <56 eV
Max. input count rate: >1,000,000 cps
Quantitative count rate: >400,000 cps
Controller: X4 (4 Detectors, 4 images)

Hardware - Xplore/XploreCompact with X1 electronics
Detector: Xplore and Xplore Compact
Xplore sensor size: 15 mm² and 30 mm²
XploreCompact sensor size: 30 mm²
Detection range: Bi(5) to (Cr)98
Resolution: Mn Kα <127 eV
<129 eV @ 100,000 cps
Max. input count rate: >1,000,000 cps
Quantitative count rate: >100,000 cps
In-field repairable: Yes
Controller: X1 (1 Detector, 2 images)

Reporting

A custom Battery reporting template is included to present the results that you need in the way that you need them.

Step Notes & Profiles

AZtecBattery includes integrated step notes in every step of the interface to guide the user through the analysis process.

• Step notes can be adjusted and customised to your own requirements
• All settings, step notes and classifications are stored as part of a user profile which can be copied from site to site to ensure consistent analysis regimes

Automated Running

Maximise SEM usage by automatically running multiple samples unattended.

• Batch run management makes setting up multiple runs quick and easy. Compare a spectrum with a previously acquired spectrum even during acquisition
• Utilise layouts for fast run area definition

Visit nano.oxinst.com/AZtecBattery