

E-PREP | ELECTRODE PREPARATION SYSTEM

Automate Your Electrode Preparation for Superior Battery Research



The Electrode Preparation System (E-PREP) from Cellerate offers a fully automated solution for cutting, weighing, and measuring electrodes for coin cells and small pouch cells with unparalleled precision.

Developed in collaboration with the Centre for Process Innovation (CPI), the E-PREP System streamlines your workflow, from material preparation to cell assembly, reducing manual handling and ensuring consistent, high-quality results every time.

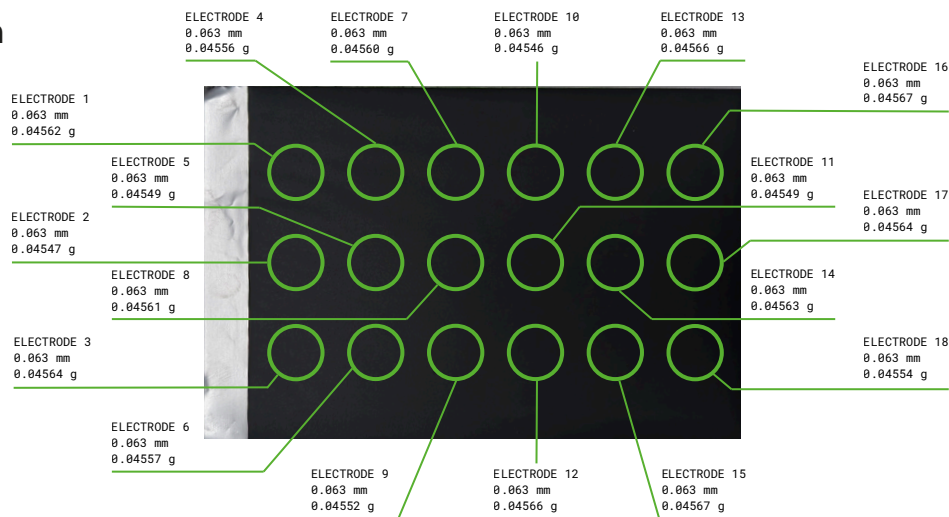
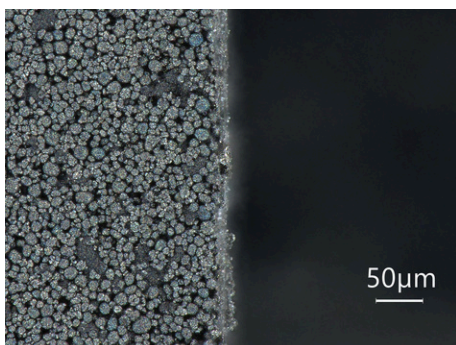
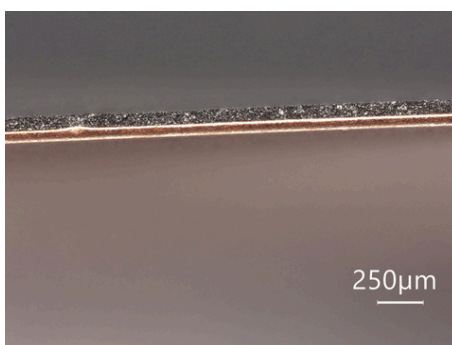
Maximise Efficiency: Reduce repetitive manual work and free skilled staff to focus on higher-value research.

Improve Data Quality: Consistent, automated sample preparation reduces operator variability and improves confidence in results.

Simplify Data Handling: Automatically capture and organise electrode data for easier traceability, analysis, and reporting.

Clear, Traceable Data

Measurement data is automatically linked to each electrode and its tray position, making results easy to review, compare, and export.



Perfect Punching

EDM-machined cutting dies prevent cracking, tearing, or delamination of electrode coatings, reducing edge effects and variability between cells.

E-PREP | TECHNICAL SPECIFICATIONS

Throughput	Up to 60 electrodes per hour
Punching	Cut Geometry: Up to 20 mm diameter discs (alternative systems available for rectangular cells) Tool: Interchangeable, EDM-manufactured cutting die
Thickness Measurement	Resolution: 1 µm Accuracy: ± 1 µm Repeatability: ± 1 µm
Weighing	Resolution: 0.01 mg Accuracy: ± 0.1% Repeatability: ± 0.5%
Optional Modules	Autoloader: Allows for automatic loading of up to 20 electrode sheets Autoloader with Resistivity Measurement: Allows for the automatic loading and resistivity measurements of up to 20 electrode sheets



CELLERATE

Cellerate Limited, Store Street, Manchester, M1 2WD
www.cellerate.co.uk | +44 (0) 161 521 9498