

# Solutions for Battery Applications

*Premier™ Slot Coating Equipment for the Production of Lithium Ion Batteries*

Ensure superior performance when you partner with the field's leader in precision slot die equipment and specialists with extensive industry experience.

## Benefits

- **Increase end product safety** with the unmatched flatness and uniform slot gap of a Premier™ slot die
- **Extend product lifespan** with a slot die and positioner custom designed for each application
- **Shorten time required for product changeovers** with a slot die designed for a larger process window, allowing for use of a higher variety of fluids at multiple widths and coat weights
- **Improve end product yields by eliminating the source of product shorts** with a manifold designed to uniformly distribute the coating fluid, based on the fluid's rheology
- **Ease of Use** design requires minimal operator adjustment to obtain repeatable results

Nordson offers converters slot die coating systems that deliver a precise, uniform flow to the web at a constant rate.

Premier Fixed Lip Slot Dies are custom designed for a wide range of processes, including electrode coating, Li-BS slurry coating, separator film, and many more.

At our dedicated facility, experienced technicians use state-of-the-art equipment to custom design and manufacture slot die equipment. The result is uniform coat weight distribution and coating thickness.

No matter what your coating needs are – from laboratory devices to production systems for Lithium Ion battery applications – custom-designed Premier slot coating equipment will increase your production efficiency and provide significant cost savings.



## The Nordson Solution

- **Premier Fixed Lip Slot Die**
  - Coat Weight Uniformity:  $\pm 1-2\%$
  - Adjustable gap and coating width with precision shims
  - Body lip offset for optional shear at substrate interface
- **Premier Die Positioner**
  - Position Repeatability:  $\pm 1.25\mu$
  - Backing Roll TIR:  $2.54\mu$
  - Easily integrated into new or existing production lines
- **Premier Fluid Delivery System**
  - Delivers consistent, non-pulsing fluid for uniform coatings
  - Sanitary connections have no threads to collect residue
  - In-line T-valves offer an easy way to flush system clean
- **Vacuum Chamber and Regenerative Blower**
  - Increases the process window, delivering best results under various conditions