

PARTNERSHIPS FOR MULTILAYER COATING ENERGY STORAGE PRODUCTS

Whether developing or manufacturing components for batteries, supercapacitors or fuel cells, Carestream can add value to your energy storage systems.

By enabling the addition of multiple coated layers without additional passes through the coating machine, our simultaneous, multilayer coating process helps partners overcome the common roadblocks of bringing battery and energy storage technologies to market. Partners leverage our precision coating expertise and analytical lab, small-scale pilot and production coater assets to reduce up-front investment costs and efficiently scale-up energy storage products to commercialization – resulting in improved performance and reduced cost of battery products.

Energy Storage Coating and Casting Capabilities:

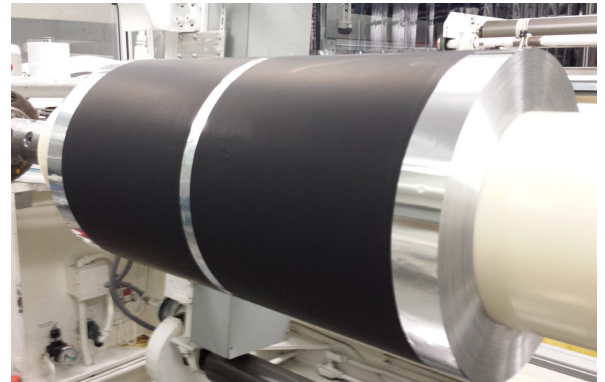
- Simultaneous, multilayer coating
- On-site mixing of the slurries and solutions
- High viscosity particle filled slurries in NMP and water
- Precision lane coating
- Solution cast films and membranes
- Thickness uniformity of $\pm 1\%$ to 5%
- Handling of thin foils
- Long dryer / ovens
- Lamination
- Slitting
- Small-scale pilot
- Analytical lab
- 100% automated optical inspection
- Process modeling

Process Development Advantages:

- Partnership with industry-leading consultant Polaris Battery Labs
- Experience with multiple applications in the energy storage market
- Product development and commercialization expertise

Custom Energy Storage Product Expertise:

- Casting electrode materials
- Casting and coating separators and membranes
- Primed foils for specific electrode chemistries
- Fuel cell membrane electrode assemblies (MEAs)



ABOUT CARESTREAM

Precision Multilayer Coating Partnerships

Building on more than 100 years of precision multilayer coating leadership, Carestream applies aqueous and solvent coating proficiency at bench, pilot and production-scale manufacturing for optimal product design, technology integration and manufacturability. Partners leverage Carestream's coating expertise, manufacturing assets and new product commercialization processes to develop precision-coated and cast film applications for a wide range of energy storage, display, medical, optical, electronic and other advanced materials products. Carestream actively seeks growth partnerships, which combine customer product IP and market channels with its high-speed roll-to-roll processing, quality systems and worldwide presence to bring new products through commercialization quickly and efficiently.

For more information, contact **541.831.7374** or **info@tollcoating.com** to learn how a Carestream partnership can increase your energy storage success.