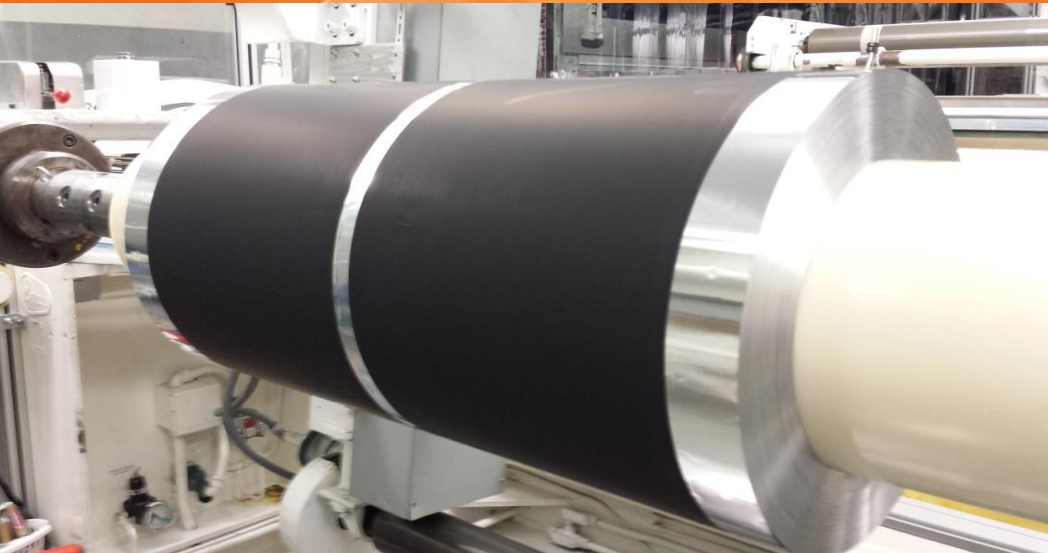


Simultaneous Multilayer Slide Coating for Batteries



Enabling higher performance at
reduced cost through processing
innovation

Carestream

Carestream

Dynamic company leveraging 100+ years of innovation and coating leadership

Established in 2007 when Onex Corporation acquired Kodak's Health Group

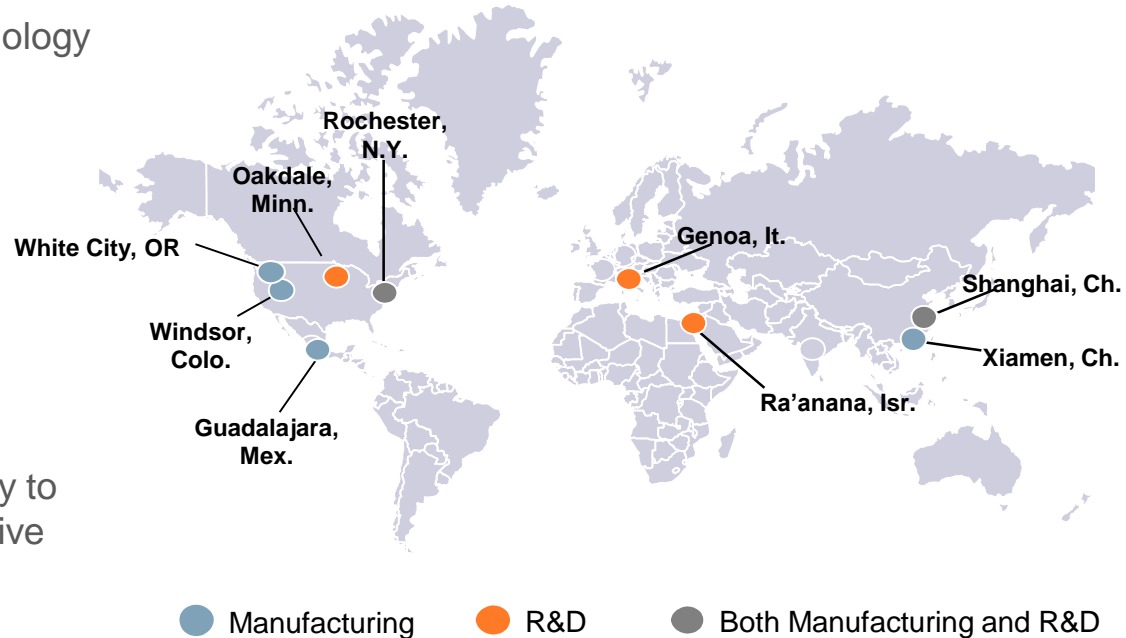
- \$1.5B sales
- > 5,000 employees
- Over 840 patents for innovative technology
- Doing business in 170 countries

World leader in Medical Imaging

- Media (X-ray Film)
- Hardware Systems
- Software Systems

LIB Technology Partnerships

- Applying multilayer coating technology to enable partnerships that bring disruptive LIB products to market



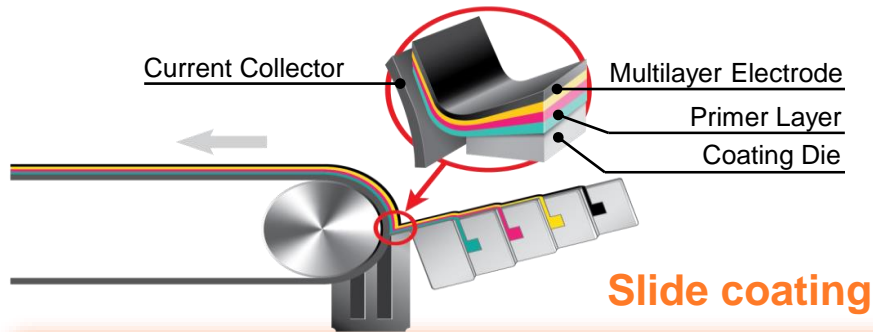
Multilayer Slide Coating Value Proposition

Multilayer Slide Coating (MLSC) can improve performance and reduce cost

- Enables ≥ 2 layers without additional cost (no additional coating passes required)
- Enables design freedom to improve performance via additional layers
- Enables lower coating cost because slide coating line speed is faster than slot die coating

Carestream has differentiated Slide Coating capability that is applicable to batteries

- Able to coat organic solvent formulations (in addition to aqueous)
- Able to coat particle filled dispersions in the realm of battery slurry viscosities



Multilayer Approach	Energy Density	Charge Rate	Cycle Life	Safety	Cost
Porosity Gradient	✓	✓	✓		✓
LFP/NMC Cathode	✓			✓	✓
Carbon Primer	✓	✓	✓	✓	✓

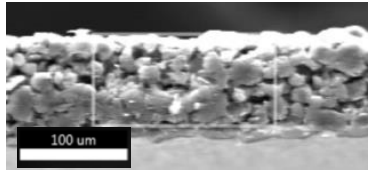
Enabling Higher Performance at Reduced Cost Through Process Innovation

Two Discrete Anode Layers with Dual Slot Die

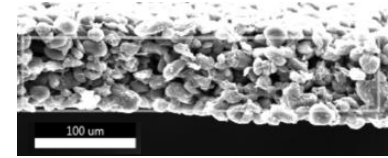
Anode SEM Images



Initial Results

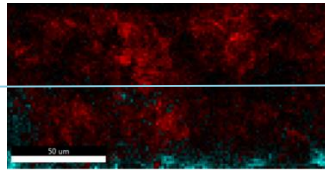


Final Results



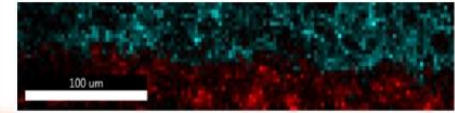
Elemental Analysis of Tracers

Significant Mixing

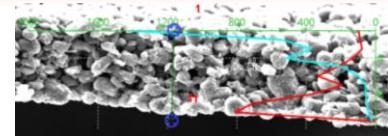
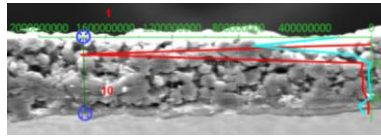


Layer 2
Layer 1

Discrete Layers



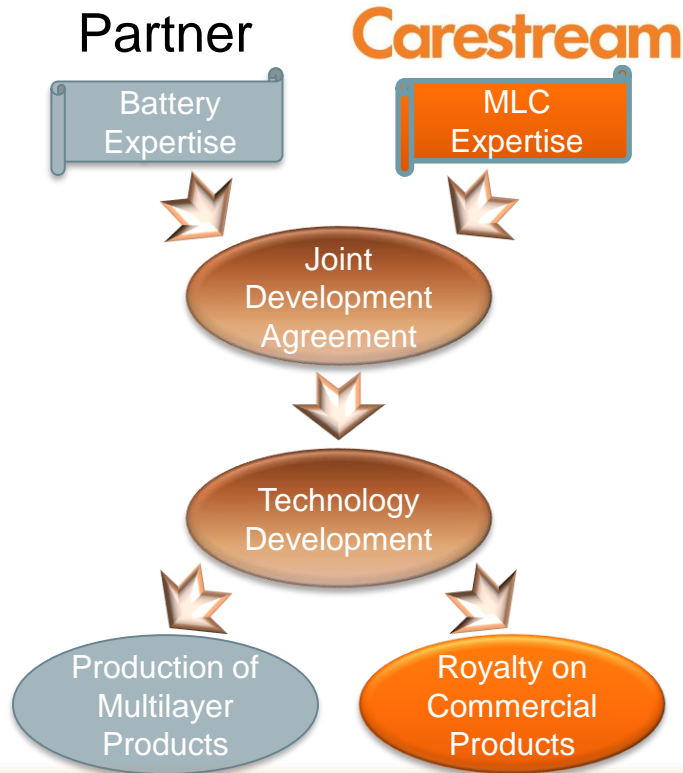
Intermixing Analysis
(Method under development)



Anode Porosity Gradient Details:

- Typical anode formulation – with “tracer” materials to identify the independent layers
- Viscosity: 3,000 to 5,000 mPa-s
- Coat Weight: 60 g/m² (for each layer)
- Coating Width: 100 mm
- Copper Foil Width: 250 mm

Partnership Strategy



What

- Partner expertise in battery technology
- Carestream expertise in multilayer coating technology
- Combine to bring significant value to both companies through performance improvements at reduced manufacturing costs

How

- Enter into a JDA to create a technology package that includes IP, trade secrets, and know-how
- Tech development done jointly to combine critical expertise, reduce costs and drive speed
- Partner utilize the technology to enable production of multilayer products on Partner's assets
- Options for pilot or full scale production, and technology transfer from Carestream

IP

- Shared IP related to stack design, chemistry and formulation required to enable multilayer coating will result from the JDA

Alternatives – Carestream is open to other approaches and business models

The Value of Carestream Battery Partnership

Enables first to market for disruptive MLC products that drive market share

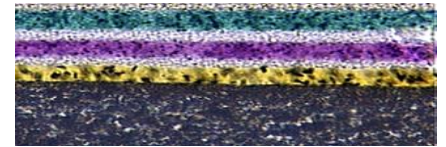
- The value is recognized and battery manufacturers are pursuing MLC
- No battery manufacturers are capable of slide coating (to our knowledge)
- Slide coating can offer differentiated product performance **and** cost
- Carestream offers decades of solvent slide coating expertise that no one else has
- Only through a collaborative partnership can this value be achieved

Carestream delivers Trade Secrets

- Stack design
- Slurry design
- Process design
- Process management

Enables

MLSC Products



Carestream delivers Know How

- Standard Operating Procedures
- Troubleshooting Guides
- Corrective Action Guides
- Quality Systems

≥ 2X Delivery Speed

Commercialization

High Quality

High Yields

High Productivity

Carestream

Energy Storage Coatings and Technologies

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