



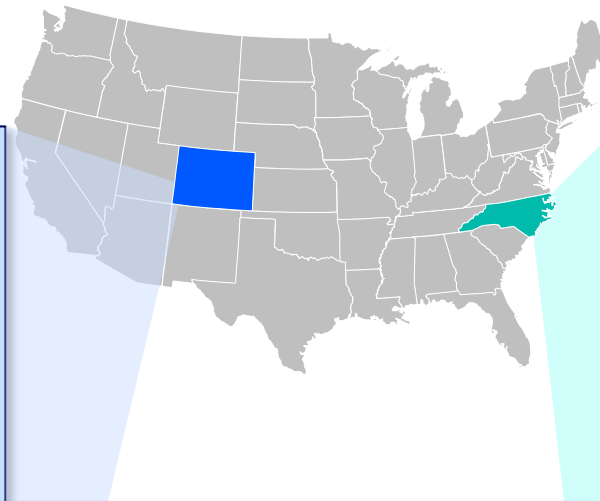
NAATBatt 2025 Member Update

February 18, 2025

James Trevey

Chief Technology Officer





ALD Equipment & Services



Scaled a nanocoating technology for materials called Atomic Armor (Atomic Layer Deposition (ALD))



Materials: high-nickel cathode, graphite, silicon, solid electrolyte, additives, and others



Product Benefits: Longer lifetime, higher energy density, improved safety, lower cost, longer calendar life and first cycle efficiency



Process Benefits: Improved slurry viscosity, reduced moisture/solvent sensitivity, reduced formation and aging

Forge Battery Gigafactory



3 GWh/year Gigafactory in Morrisville, NC, producing best-in-class cylindrical cells using Atomic Armor

Made In America

Produced at Scale in North Carolina

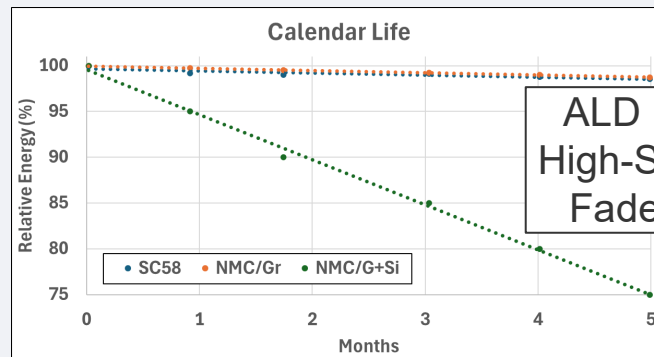
Forge Battery is offering 3 GWh/yr of high-performance cells powered by American innovation. The Forge Nano Atomic Armor™ technology inside the Forge Battery SC58 21700 cell allows us to achieve industry leading energy at a lower weight than the competition.

Sourced In America

US Battery Supply Chain

While Atomic Armor™ differentiates the performance of Forge Battery cells, U.S.-sourced materials are the backbone. Forge Battery products are designed in, manufactured in, and powered by the U.S.

SC58 Cell Performance



ALD Reduces High-Si Capacity Fade by 95%

voltafoundation.org



Investor Base

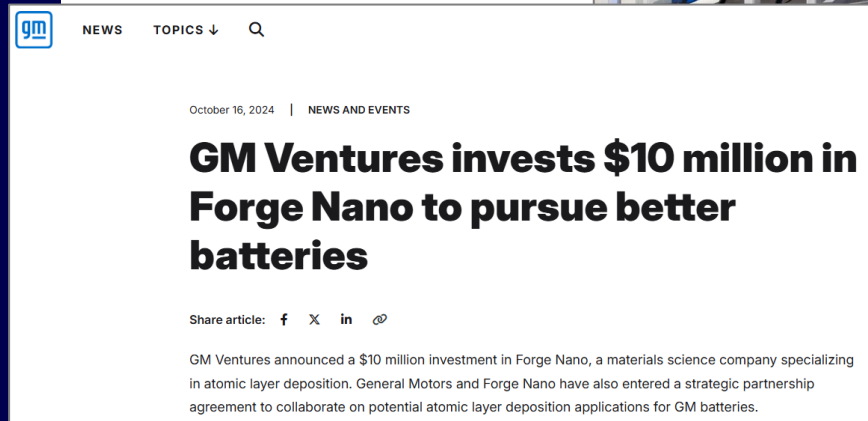
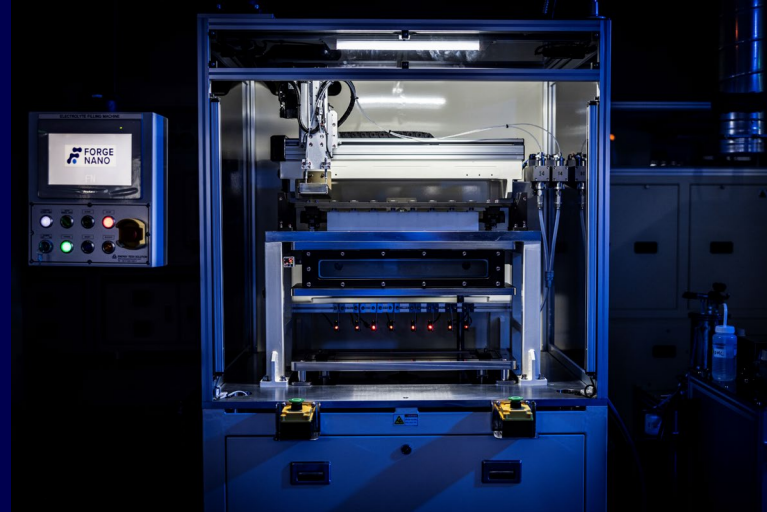


● New battery line

- 1MWh/yr expandable to 10MWh/yr
 - Supporting strategic partners
 - Low-volume production
 - New innovation(s)
- 21700s and 18650s

● Built (2) commercial systems for battery materials

● Investment and strategic partnership from GM



gm NEWS TOPICS ↓ Q

October 16, 2024 | NEWS AND EVENTS

GM Ventures invests \$10 million in Forge Nano to pursue better batteries

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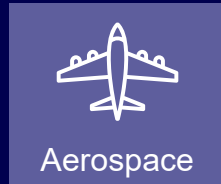
GM Ventures announced a \$10 million investment in Forge Nano, a materials science company specializing in atomic layer deposition. General Motors and Forge Nano have also entered a strategic partnership agreement to collaborate on potential atomic layer deposition applications for GM batteries.

● Founded in 2023
 Located near Raleigh, NC (300k sqft)

● 3GWh/yr Li-ion cell capacity by 2028
 \$100M BIL Winner

● SC58: High-energy 21700 Cell

- 300 Wh/kg and 800 Wh/L
- US Supply Chain



Comparison of Class Leading Energy Cells

Manufacturer	Name	Origin	Supply Chain	Capacity (Min. Ah)	Energy Density (Wh/kg) / (Wh/L)	Weight (g)	Width (mm)
Forge Battery	SC58	USA	USA	5.65	301 / 804	65.5	21.1
Samsung	53G1	Korea	China	5.14	273 / 782	70.5	21.1
LG	M52V	China	China	5.00	282 / 774	70.4	21.1
Panasonic	M	USA	China	5.00	271 / 755	66.9	21.0
LG	M58T	China	China	5.57	285 / 795	73.2	21.5
Samsung	58E	Korea	China	5.33	270 / 756	74.0	21.8

Secure future sourcing and access to IRA tax credits

FB has highest capacity and lowest weight

FB achieves high capacity without forcing redesign



- Contracted the \$100M from DOE
- Finalized all investment required
- Established Technology R&D program with Forge Nano

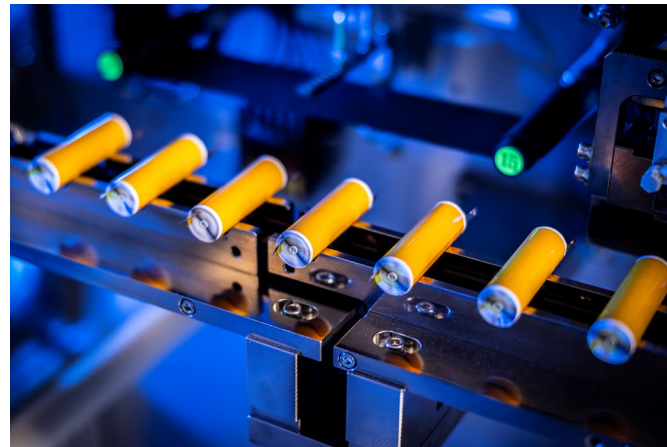


Forge Battery Completes Contract Negotiation to Secure \$100M from U.S. Department of Energy for North Carolina Lithium-Ion Battery Gigafactory

ALD Tool Sales; Battery Material Coating; Service and Spares; IP Licensing



FN MWh Production of Customer Cells; FB New Cell Product Development

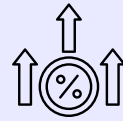


Commercial Scale Cell Production for Underserved Li-Ion Battery Markets





Key Messaging



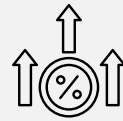
Interests

- Partners for product development and commercialization
- Supplying ALD-coated materials at commercial scale



Opportunities

- Product enhancement (powder or cell)
- Low-volume production (cell)



Interests

- Off-takers for cylindrical US-made US-sourced cells
- Partnerships for growth and/or synergy



Opportunities

- Supply chain integration
- Next-gen development



Thank You!

James Trevey

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Questions?

