

## GLOSSARY OF TECHNICAL TERMS

*This glossary of technical terms contains explanations of certain technical terms used in this document. As such, these terms and their meanings may not correspond to standard industry meanings or usage of these terms.*

“ADCC”	Atomic Deposition Current Collectors, a type of next-generation battery component produced by applying ultra-thin metal coatings through atomic deposition to improve energy density, safety and reduce metal consumption
“AI-ADCC”	Aluminum Atomic Deposition Current Collectors, a type of current collectors for cathodes used in advanced batteries, consisting of a polymer substrate coated with a thin layer of aluminum on each side via atomic deposition process
“AI-FICC”	Aluminum Functional Interface Current Collectors, a type of aluminum current collectors for cathodes used in advanced batteries, featuring functional interface coating on aluminum foil to improve adhesion, conductivity and overall electrochemical performance
“APQP”	Advanced Product Quality Planning, a structured procedure for defining and establishing the necessary steps to ensure a product satisfies customer requirements
“Aqueous Coating Line”	a coating system that uses water-based solutions for deposition, employing precision tension control and multi-stage process monitoring for uniform layer application
“Atomic Deposition”	an advanced thin-film deposition technique that applies materials, one atomic layer at a time, to achieve precise thickness and superior uniformity
“Automated Defect Detection”	a system that uses sensors and often AI-powered visual inspection to automatically identify imperfections or defects in a product during manufacturing
“BICC”	Bipolar Current Collector, a specialized component used in bipolar battery systems to enable a fully series-connected structure, improving fast-charging, discharging performance and energy density
“BOPET”	Biaxially Oriented Polyethylene Terephthalate, which is PET film stretched in two directions for improved strength, dimensional stability, and barrier properties; widely used in packaging, insulation, and new energy applications
“CAGR”	compound annual growth rate
“Calendaring”	a process in battery manufacturing where electrode materials are compressed to achieve optimal density and thickness

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“Coating”	a process in which a carbon layer is applied to the current collector surface to enhance electrical conductivity and interfacial stability
“composite current collectors”	current collectors that typically adopt a metal-polymer-metal sandwich structure and integrate circuit-blocking and flame-retardant layers to improve safety while lowering cell cost by reducing metal usage
“Cu-ADCC”	Copper Atomic Deposition Current Collectors, a type of current collectors for the anodes used in advanced batteries, consisting of a polymer substrate coated with a thin layer of copper on each side via atomic deposition process
“Cu-FICC”	Copper Functional Interface Current Collectors, a type of copper current collectors for the anodes used in advanced batteries, featuring a functional interface coating on copper foil to enhance adhesion, conductivity and overall electrochemical performance
“Dry Electrode Current Collectors”	a coated current collector product designed to support solvent-free, high-loading electrode manufacturing processes by replacing conventional binders, improving adhesion and enabling environmentally friendly production
“Dry Electrode Process”	a solvent-free electrode manufacturing method that offers environmental benefits, lower production costs and improved battery performance compared to wet-coating
“Electrochemical Deposition Units”	equipment that utilizes an electric current to reduce dissolved metal cations, forming a coherent metal deposition on an electrode or substrate
“Electroplating”	an electrochemical process that uses an electric current to reduce dissolved metal cations so that they form a coherent metal deposition on an electrode
“EV” or “EVs”	electric vehicle or electric vehicles, powered by electricity, typically using rechargeable batteries and electric motors instead of an internal combustion engine
“Evaporation Deposition Technology”	a coating process that utilizes advanced vapor guidance systems and closed-loop control to vaporize a solid material which then condenses onto a substrate to form a thin film
“FICC”	Functional Interface Current Collectors, which feature nano-carbon coatings to improve conductivity, adhesion and electrochemical stability at the electrode interface
“g/sq.m.”	grams per square meter, a unit of areal density used to measure the mass of a material per unit area
“IATF 16949”	an international quality management standard specifically for the automotive industry, mandating comprehensive evaluations of suppliers’ processes and quality systems

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"IPQC"	In-Process Quality Control, a system of checkpoints and inspections implemented at critical stages during the manufacturing process to monitor quality
"ISCC"	Interfacial Safety Current Collectors, a type of current collector used in advanced batteries featuring an interfacial safety coating designed to improve thermal stability, prevent short circuits and enhance overall safety performance
"ISO"	International Organization for Standardization, an independent, non-governmental organization that develops and publishes international standards
"ISO 14001"	Environmental Management Systems-Requirements with Guidance for Use, a standard for environmental management systems published by the ISO
"lithium-ion battery"	a rechargeable battery technology that uses lithium-ion as the primary charge carriers
"Magnetron Sputtering"	a physical vapor deposition process that uses magnetic fields to control plasma and sputter target material, creating uniform thin-film deposition on substrates
"Magnetron Sputtering Systems"	physical vapor deposition equipment that uses magnetic fields to control plasma for high-precision, uniform metal layer formation on substrates
"mm"	millimeter
"MPa"	megapascal, a unit of pressure or stress equal to one million pascals, used to quantify the tensile strength of materials
"N/m"	newtons per meter, a unit of force per unit length, used to measure the adhesion or peel strength between material layers
"nm"	nanometer
"physical vapor deposition" or "PVD"	a deposition process that physically vaporizes a solid material into a vapor which then condenses onto a substrate to form a thin film
"Polymer Substrate"	a base film made from polymer materials, such as polypropylene (PP) or polyethylene terephthalate (PET), used as the core layer in composite current collectors
"PTC coating"	a positive temperature coefficient coating that rapidly increases resistance at elevated temperatures to interrupt current and halt electrochemical reactions, enhancing cell safety
"R&D"	research and development

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"Solid-liquid batteries"	semi-solid batteries or solid-state batteries with liquid electrolyte
"Solvent-Based Coating System"	a coating system designed for safety-critical applications and that uses solvent-based solutions, featuring explosion-proof construction and full-path hazard monitoring
"sq.m."	square meter
"Thermal Runaway"	a chain reaction within a battery leading to a rapid, uncontrolled increase in temperature and pressure, posing significant safety risks
"Transfer Welding"	a specialized welding process essential for ADCC that enables reliable electrical connections while maintaining structural integrity at collector interfaces
" $\mu\text{m}$ "	micrometer, a unit of length equal to one millionth of a meter, commonly used to measure the thickness of coatings and material layers in battery components
"yield rate"	the proportion of products that meet quality standards, out of the total produced