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Amprius Technologies Passes Military Performance Specification Nail Penetration Test with Unprecedented 390 Wh/kg Cell

Amprius Cells Have Potential to Increase Energy Density and Reduce Overall Weight of Wearable Battery Cells for U.S. Army Soldiers

FREMONT, Calif.--(BUSINESS WIRE)-- Amprius Technologies, Inc. (“Amprius”) (NYSE: AMPX), a leader in ultra-high energy density lithium-ion batteries with its Silicon Nanowire Anode Platform, today announced that an independent third-party testing lab has validated Amprius’ 390 Wh/kg polymer electrolyte cell by successfully passing the nail penetration test per the requirements of section 4.7.4.4. of the MIL-PRF-32383 (Military Performance Specification).

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20221206005397/en/

Amprius Technologies Passes Military Performance Specification Nail Penetration Test with Unprecedented 390 Wh/kg Cell (Photo: Business Wire)

The test is used to determine the feasibility of a specific product in combat scenarios. Cells tested in accordance with 4.7.4.4. shall not burn or explode, and the external temperature of each test sample shall not be greater than 338 degrees Fahrenheit (170 degrees Celsius) when penetrated by sharp objects. When conducting the test, a 0.113-inch diameter stainless steel nail is driven through a fully charged cell at a prescribed speed. The cell is deemed to have passed if there is no smoke or flame following the nail penetration. The test video in real time, slow motion and infrared can be viewed at Amprius.com/technology/.

Amprius’ innovative polymer electrolyte prevents the penetrating nail from creating a low resistance short circuit, as indicated by the minimal increase in the cell temperature after penetration and only a small decrease in cell voltage. After nail penetration the cell is still functioning and providing power, a critical capability for soldier wearable batteries.

“As we work toward higher production capacity, the successful passing of this nail penetration test is a significant step in the progression of our technology and product development,” said Dr. Ionel Stefan, CTO of Amprius. “We have a unique opportunity to provide a significant energy density performance increase of nearly 100% – doubling the run-time for all mobile-powered devices without increasing the overall weight of wearable batteries for our U.S. Army soldiers.”

In October 2021, Amprius was awarded a contract by the U.S. Army to develop 100% silicon anode lithium-ion batteries. The 18-month rapid prototyping effort includes design,

development, and validation of state-of-the-art, high energy density lithium-ion batteries to be used in various applications by the U.S. Army. As part of that program, Amprius is building and testing cells for use within U.S. Army soldiers' central power source, the Conformal Wearable Battery (CWB). The CWB integrates into a soldier's vest and powers critical communications and navigation equipment.

A purchase order for thirty battery packs has been placed by the U.S. Army for capability demonstration.

About Amprius Technologies, Inc.
Amprius Technologies, Inc. is a leading manufacturer of high-energy and high-power lithium-ion batteries producing the industry's highest energy density cells. The company's corporate headquarters is in Fremont, California where it maintains an R&D lab and a pilot manufacturing facility for the fabrication of silicon nanowire anodes and cells.

For additional information, please visit amprius.com.

Forward-Looking Statements
This press release includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, and the "safe harbor" provisions of the United States Private Securities Litigation Reform Act of 1995, each as amended, including Amprius' management team's expectations, hopes, beliefs, intentions or strategies regarding the future. Forward-looking statements may be identified by the use of words such as "estimate," "plan," "project," "forecast," "intend," "expect," "anticipate," "believe," "seek" or other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding Amprius' partnership with BAE Systems and Amprius' ability to produce its products at a commercial level. These statements are based on various assumptions, whether or not identified in this press release, and on the current expectations of Amprius' management and are not predictions of actual performance. These forward-looking statements are not intended to serve as, and must not be relied upon by any investors as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond Amprius' control. These forward-looking statements are subject to a number of risks and uncertainties, including changes in domestic and foreign business, market, financial, political and legal conditions; risks related to the rollout of Amprius' business and the timing of expected business milestones; the effects of competition on Amprius' business; supply shortages in the materials necessary for the production of Amprius' products; the termination of government clean energy and electric vehicle incentives or the reduction in government spending on vehicles powered by battery technology; Amprius' liquidity position; and delays in construction and operation of production facilities. Additional information concerning these and other factors that may impact the operations and projections discussed herein can be found in the "Risk Factors" section of Amprius' current form on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on September 16, 2022, and other documents filed by Amprius from time to time with the SEC, all of which are available on the SEC's website at www.sec.gov. If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks that Amprius does not presently know or that Amprius currently believes are immaterial that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect

Amprius' expectations, plans or forecasts of future events and views as of the date of this press release. These forward-looking statements should not be relied upon as representing Amprius' assessments as of any date subsequent to the date of this press release. Accordingly, undue reliance should not be placed upon the forward-looking statements. Except as required by law, Amprius specifically disclaims any obligation to update any forward-looking statements.

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