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FOR IMMEDIATE RELEASE

## Harper Furnace Technology Enables High Performance Silicon Anodes

Buffalo, NY – High temperature thermal process solutions developed by Harper International Corporation are enabling production at several silicon anode battery material companies in 2024. Silicon anode material offers significantly higher specific capacity than traditional graphite anode materials enabling higher power density, faster charge times and smaller carbon footprint than current batteries. Harper has entered engineering design and equipment supply contracts for pilot and production scale equipment with its USA-based customers, many of whom are funded in part by grants from the U.S. Department of Energy. The Harper technology includes indirect electrically heated, continuous rotary, vertical and horizontal conveyor furnace systems for each customer's unique thermochemical processes. The Harper furnaces include tight control of process atmosphere enabling safe and reliable continuous operation, are rated for temperatures between 800°C and 1,800°C and will have capacity up to 1,000 metric tons per year. Beyond the pilot-scale equipment projects, Harper is actively engineering the next generation of equipment solutions for these customers whose commercial scale plants will require capacity of 20,000 – 40,000 metric tons per year for the electric vehicle (EV) market.

"We are delighted to see Harper's breadth of technology deployed in support of the world's transition to clean energy. These thermal processing solutions are derived from Harper's significant experience in providing indirect, electrically heated furnace systems to a wide array of advanced materials industries. These designs will be custom-engineered to provide our customers optimum process integrity while minimizing energy consumption as they scale-up to higher capacities." Says Harper Vice President, Paul Elwell.

### About Harper International

Harper International is a global leader in complete thermal processing solutions and technical services for the production of advanced materials. From concept to commercialization, from research scale to full production line operations, Harper delivers the most innovative furnace and oven designs in the world. For decades, they have pioneered thermal processing technology innovations with a focus on systems operating from 500 to 3000°C and in non-ambient atmospheres. For additional information, please visit [www.harperintl.com](http://www.harperintl.com) or email [info@harperintl.com](mailto:info@harperintl.com).

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