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FOR IMMEDIATE RELEASE

Harper International Offers “Exceptional Opportunity” for Oxidation Ovens

Buffalo, NY – Harper International, the most trusted partner in thermal processing technologies for Carbon Fiber Equipment and Full Line Systems, announces the release of its next generation Oxidation Oven System that incorporates state-of-the-art enhancements. With better thermal and air velocity uniformity, Harper's most recent 3-meter wide production scale Oxidation Oven demonstrates outstanding performance and up to 30% improvement in production efficiency.



In selecting the oven's materials of construction, Harper has taken into account the wide range of chemistries and unique processing needs that individual precursors and customers may require. The stainless steel interior of the advanced oxidation oven design allows for a range of precursors to be produced throughout all line sizes, from research to production scale. Additionally, this most recent design yields longer equipment life, improved corrosion resistance, and increased Carbon Fiber quality.

The most distinguishing features of Harper's cutting edge design are the supply nozzles and atmospheric end seals.

Harper's proprietary oven design innovations nearly eliminate chimney effect, and provide excellent thermal and velocity uniformity at the fiber entrance and exit points. The patented supply nozzles provide excellent velocity uniformity across the width, length and height of the oven to maximize uniformity across the tow band throughout the fiber processing volume. Independently adjustable louvers are provided internal and external to the end seal, allowing operators to maximize energy efficiency and minimize fugitive gases. Harper's end seals also feature a maintenance door on both sides of the chamber, allowing for quick and convenient service actions.

“Harper's latest oxidation oven design offers our customers improvement in product quality while reducing operating and service costs in their fiber manufacturing”, commented Renee Bagwell, PhD, Senior Process Technology Engineer at Harper. “At Harper, we are continually evolving our product designs to meet our customer demands for better efficiency and quality, and the data obtained during full scale testing demonstrates our success.”

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 or email info@harperintl.com.

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