THERMAL SPRAY TECHNOLOGIES INC

FOR IMMEDIATE RELEASE

Material Coatings Research to Benefit Aviation Industry

Thermal Spray Technologies develops innovative coatings for next generation jet turbine engines with University of Wisconsin-Madison.

Madison, Wis. (August 28, 2013) – Collaborating with researchers at the University of Wisconsin-Madison (UW-Madison), Thermal Spray Technologies (TST) has played a key role in the development of innovative thermal spray coatings to improve heat protection and fuel efficiency in the next generation of jet turbine engines. The team's experimental results were published in the August issue of the Journal of Thermal Spray Technologies (JTST) in an article titled "Application of Plasma Spraying as a Precursor in the Synthesis of Oxidation Resistant Coatings."

Turbine blades in aircraft engines are subjected to extremely high temperatures. Thermal spray coatings are used to combat these high temperatures and to protect the underlying turbine blade. As technologies to improve fuel efficiency in the aviation industry evolve, it is expected that jet turbine engines will operate at even higher temperatures, which requires the development of coatings that will perform under these grueling conditions.

"Working together with Professor John Perepezko and his research group at UW-Madison has given TST the opportunity to be part of a pioneering project that has the potential to address base material systems used for aircraft turbine engines and the advanced coating required to protect them," said Daryl Crawmer, TST's Director of Technology.

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In addition to Crawmer, a Thermal Spray Hall of Fame inductee, TST President Bill Lenling and Senior R&D Technician Jesse Beske were also involved with the project. Both Lenling and Crawmer are members of ASM International and have been honored as Fellows of ASM, publisher of JTST, a premier journal containing a collection of scientific papers and engineering articles concerning thermal spray processes and applications.

TST's continuing relationship with the distinguished laboratories at UW-Madison began in the mid-1980s when Richard Wilkey, founder of TST's parent corporation Fisher Barton, initiated a research project at the university. During that time, Bill Lenling was a graduate student working under UW-Madison Professor of Materials Engineering, Frank Worzala. The two collaborated on a project that led to TST's establishment in 1993.

"TST continues to partner with the university in the hiring of engineers, interns and co-ops and actively participates in research programs and educational opportunities," noted Lenling. "Our goal is to develop innovative new material coating solutions for the industries we serve and our relationship with UW-Madison helps make this possible."

For more information on TST, its capabilities and its collaboration with UW-Madison, please contact Daryl Crawmer at 608-825-2772 or dcrawmer@tstcoatings.com.

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Thermal Spray Technologies (TST) specializes in developing innovative material coating solutions for a wide array of industries, including aerospace, agricultural equipment, automotive, aviation, food processing, medical devices, the oil and gas markets, power generation and semiconductors. TST is one of eight operating divisions of the Waukesha, Wisconsin-based Fisher Barton Group. For more information, please visit www.tstcoatings.com or www.fisher-barton.com