



FOR IMMEDIATE RELEASE

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**CURTISS-WRIGHT SELECTED BY MICHIGAN STATE UNIVERSITY TO PROVIDE
LASER PEENING WITH THERMAL MICROSTRUCTURE ENGINEERING
TECHNOLOGY ON U.S. DEPARTMENT OF ENERGY PROGRAM**

PARAMUS, NJ – August 31, 2020 – Curtiss-Wright’s Surface Technologies Division, a leading global provider of highly engineered surface treatments and analytical services, today announced that it has been selected as a partner with Michigan State University (MSU) for a U.S. Department of Energy Advanced Research Projects Agency-Energy (ARPA-E) program. The initiative will develop an advanced heat exchanger for supercritical CO₂ generators - a more energy efficient, more compact, and lower cost electric turbine that offers the potential to significantly reduce greenhouse gas emissions. The project will employ MSU-developed HIPPED (Heat Exchanger Intensification Through Powder Processing and Enhanced Design), which features a plate-type heat exchanger that enables lower cost, powder-based advanced additive manufacturing.

"We are very excited to partner with MSU and ARPA-E on this critical new program," said David Rivellini, Senior Vice President and General Manager, Curtiss-Wright Surface Technologies. "Curtiss-Wright’s recent breakthrough using laser peening technology coupled with newly developed thermal microstructure engineering (LP+TME) is enabling enhanced performance of nickel based alloys when subjected to high temperatures and corrosive environments as required for supercritical CO₂ turbine systems."

Surface treatments such as peening have not generally been used in high temperature applications due to the fading out of the benefit in elevated temperature environments. However, Curtiss-Wright’s LP+TME advanced technology creates improved fatigue and corrosion-fatigue performance in high temperature and corrosive environments, thereby offering the potential for higher temperature turbine operation which translates to improved efficiencies for jet engines and gas turbines. For the ARPA-E development, the Curtiss-Wright LP+TME process will be applied to the heat exchanger material exposed to the high temperature and corrosive environment of the supercritical CO₂ system.

To learn more about the Curtiss-Wright’s laser peening technology, please visit:
<https://cwst.com/laser-peening/overview/>

About Curtiss-Wright Corporation

Curtiss-Wright Corporation (NYSE: CW) is a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships. The company employs approximately 8,900 people worldwide. For more information, visit www.curtisswright.com.

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