Curtiss-Wright Provides Laser Peening to US Department of Energy

CURTISS-WRIGHT’S Surface Technologies Division, a leading global provider of highly engineered surface treatments and analytical services, has 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.

About Curtiss-Wright Corporation

Curtiss-Wright Corporation 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.

MIL Announces Mark Sullivan as President

MARK SULLIVAN has been named President of Magnetic Inspection Laboratory, Inc. located in Elk Grove Village, Illinois. MIL is one of the largest leaders of non-destructive testing, metal finishing, coatings, and welding services for Aerospace, Defense, and Medical industries.

Mr. Sullivan brings over 25 years of experience to the role of President and he is highly regarded for his success in leading executive teams, growing business value, and his commitment to continuous operational improvement.

Mr. Sullivan is an alumnus of Albion College where he earned his Bachelor’s Degree in Economics and Management. He went on to earn his Master of Science degree in Industrial Administration from Krannert Graduate School at Purdue University.

Mr. Sullivan began his career at the Dow Chemical Company working across multiple applications and markets in commercial, management, and leadership roles. He has held the president position at GrafTech International, Cast Nylons Limited, and Buckhorn Incorporated. He successfully improved operating margins and developed new growth at all three companies.

Mr. Sullivan will be working collectively with Tim Schiewe, CEO and Owner of the family-owned business established in 1942. Mr. Sullivan’s deep experience and proven accomplishments will be an asset as he helps to achieve profitable growth and adds long-term value to MIL.

Magnetic Inspection Laboratory, Inc. is a globally recognized leader in special processing for critical components of aerospace, defense, medical and power generation industries. Established in 1942 as a one-man operation by Robert Schiewe Sr., MIL has grown to over 115,000 square feet across three facilities. With over 2,500 approvals for NDT, Chemical Processing, Coatings, and Surface Enhancement, MIL is one of the most diversified aerospace special process providers in North America. Awarded the MFC Small Business Award by Lockheed Martin in 2019, MIL is a trusted partner for Boeing, Honeywell, Airbus, Raytheon, GE, Rolls Royce, Space-X, United Technologies, Lockheed Martin and many others. For a full list of our services or more information, visit www.milinc.com.