2025 YEAR IN REVIEW

A YEAR OF INNOVATION AND IMPACT

A REIMAGINING OF EWI'S LONG-STANDING MEMBERSHIP MODEL, the Cooperative Research Program (CRP) modernizes how industry engages with EWI by combining collaborative, pre-competitive research with structured access to our technical experts and resources. The CRP brings participants together around shared technical challenges and accelerates development of proprietary next-generation manufacturing solutions.

EWI CONTINUED TO ADVANCE ITS CONVERGENT MANUFACTURING CAPABILITIES to enhance our MRO offerings. Testbeds now include automated thermal spray, cold spray, arc welding, and powder laser directed energy deposition (DED) processes, along with phased array eddy current nondestructive testing for in-machine DED monitoring and a recipe sequencer for integrated digital workflows. EWI is currently developing a fully integrated convergent manufacturing cell which is planned to be commissioned in 2026.

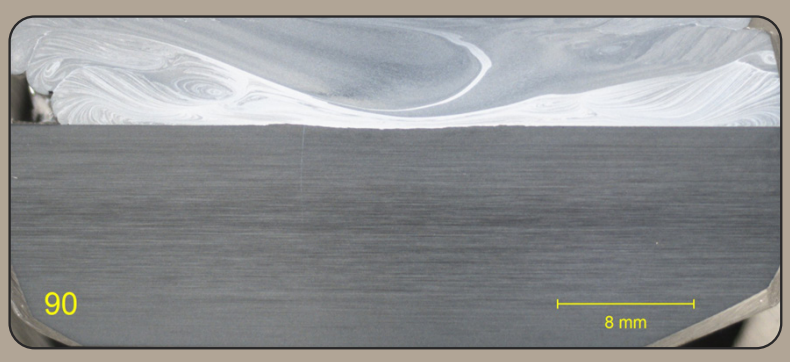
EWI ENTERED INTO A STRATEGIC PARTNERSHIP with The Barnes Global Advisors (TBGA) to enhance the resources and expertise available to members of the Additive Manufacturing Consortium (AMC).

Additive Manufacturing Consortium
Operated by EWI

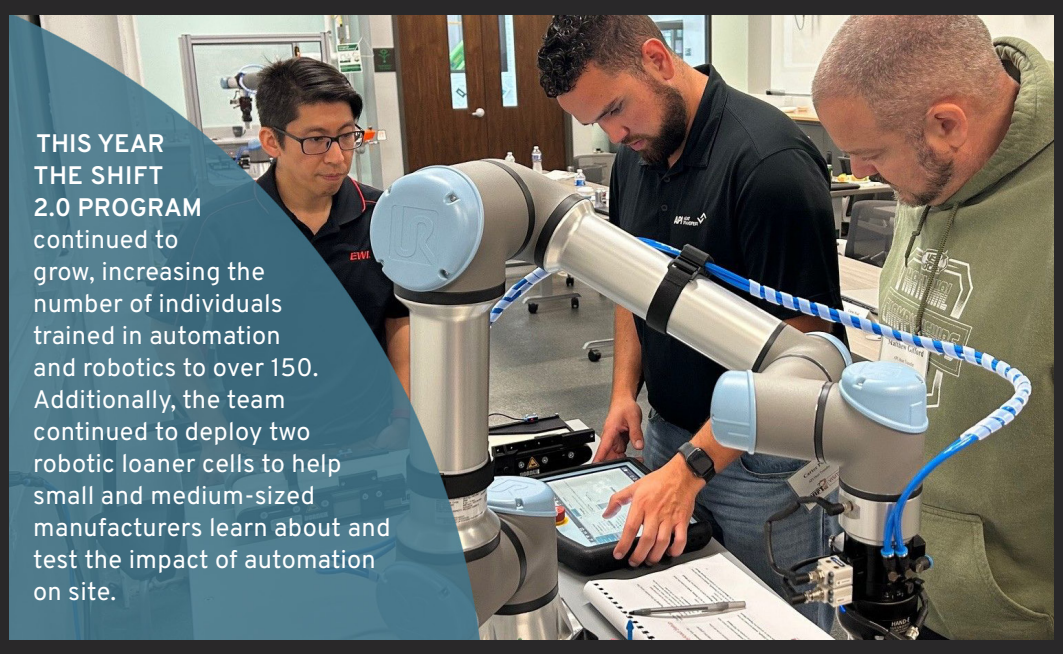
EWI LAUNCHED A NEW PODCAST SERIES featuring six episodes that explore everything from corrosion and materials challenges to next-generation automation and industry innovation. We also hosted two webinars showcasing our plastic welding and polymer, corrosion, and environmental testing expertise, drawing more than 125 attendees.

EWI ADVANCED ELECTRON BEAM POWDER BED FUSION (EB-PBF) MANUFACTURING using the Wayland Additive Calibur3® system, which is equipped with a charge-neutralizing argon ion flood source. Successes for the year include the first-ever printing of fully dense C103 niobium alloy samples, including complex demonstration parts, and large-scale titanium alloy components, all with zero smoke events and using powder recycled over more than a dozen builds.

EWI DEMONSTRATED THE HIGHEST DEPOSITION RATE OF ANY METAL ADDITIVE MANUFACTURING PROCESS, achieving rates over 100 lbs/hr with additive friction stir deposition (AFSD) of aluminum, while preserving microstructural integrity.



THIS YEAR THE SHIFT 2.0 PROGRAM continued to grow, increasing the number of individuals trained in automation and robotics to over 150. Additionally, the team continued to deploy two robotic loaner cells to help small and medium-sized manufacturers learn about and test the impact of automation on site.



MORE THAN 125 PROFESSIONALS AND STUDENTS PARTICIPATED in our five in-person trainings, two online courses, and one hybrid class in robotics, welding, and nondestructive evaluation.

LEAKSIGHT™, A FAST, LOW-COST LEAK DETECTION SYSTEM FOR BATTERY ENCLOSURES, was introduced. It uses a safe, water-based color-changing reagent to pinpoint leaks and enable quick repairs before units move through production.

LASER-ASSISTED COLD SPRAY USING NITROGEN AS A CARRIER GAS WAS DEMONSTRATED, overcoming helium availability and cost limitations, and enhancing deposition performance for full-part fabrication.

LOGAN MCNEIL AND JOE GETGEN RECEIVED EWI TECHNICAL EXCELLENCE AWARDS in recognition of their achievements in applied R&D and technical innovation.

EWI ANNOUNCED THE DEVELOPMENT OF A NEW NOXIOUS GASES LABORATORY that will enable safe H_2S handling for sour service evaluations and expanded corrosive-environment capabilities. The new lab is expected to open in January 2026.

OUR ASSOCIATES PUBLISHED SIX REFEREED TECHNICAL JOURNAL ARTICLES AND DELIVERED MORE THAN 50 PRESENTATIONS on EWI research at professional conferences worldwide. In addition, we hosted three industry workshops with more than 65 attendees.

EWI®
We Manufacture Innovation

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