

To support the development of **safe hydrogen transport networks**, EWI initiated two Joint Industry Projects for characterizing legacy pipelines and qualifying new pipe steels for hydrogen service.

EWI's cutting-edge **tele-welding** system was successfully deployed in two naval shipyards. More **tele-manufacturing** applications, including **tele-inspection**, are currently in development.

In response to travel restrictions, we had **Virtual Member Days** featuring technical presentations and video lab "tours."

Federal, state, and local government contracts increased by 24% over 2020.

# 2021 YEAR IN REVIEW

Innovating towards the future through smart manufacturing technologies

**EWI**  
We Manufacture Innovation

By combining EWI's process expertise with data science, our development team paired sensors and algorithms to create an effective feedback system for **in-process battery weld evaluation**.

**EWI Skillform training classes** resumed in person. Three new robotics courses were introduced.

EWI's internal R&D program resulted in the licensing of our **co-axial laser wire DED system**, 25 published papers, and 3 patent awards.

EWI built out a state-of-the-art **polymers laboratory** to provide expanded materials characterization and testing services.

Our **applied automation** group has introduced in-line production solutions for machine tending and parts finishing which enable skilled workers to focus on more critical, complex tasks.

Our **cold spray technology center of excellence** began construction at EWI's Buffalo Manufacturing Works in New York. It will launch in early 2022.