

How Nondestructive Evaluation Reduces Risk and Boosts Productivity

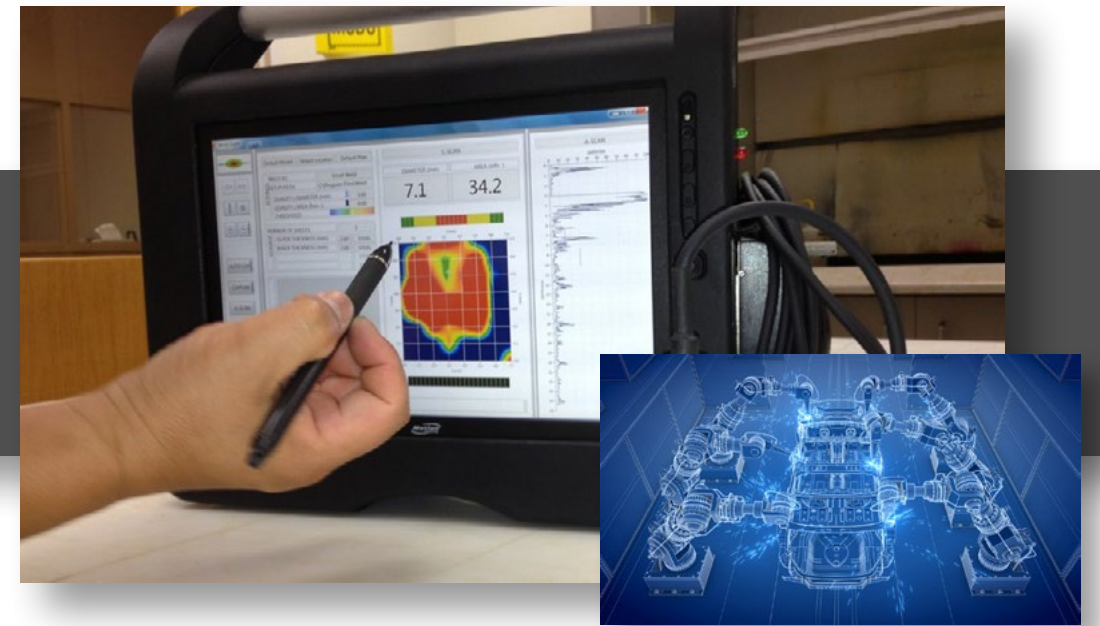
Automobile assembly requires thousands of separate joints, typically made in short times with high repetition rates. Quality assurance is a major concern, therefore the production process has always included extensive destructive testing and redundant welding. NDE offers alternative techniques that are more efficient for assuring vehicle structural performance, perceived quality, and product reliability.



EWI can provide advisory, development, and implementation services for applying NDE to minimize risk and maximize customer satisfaction.

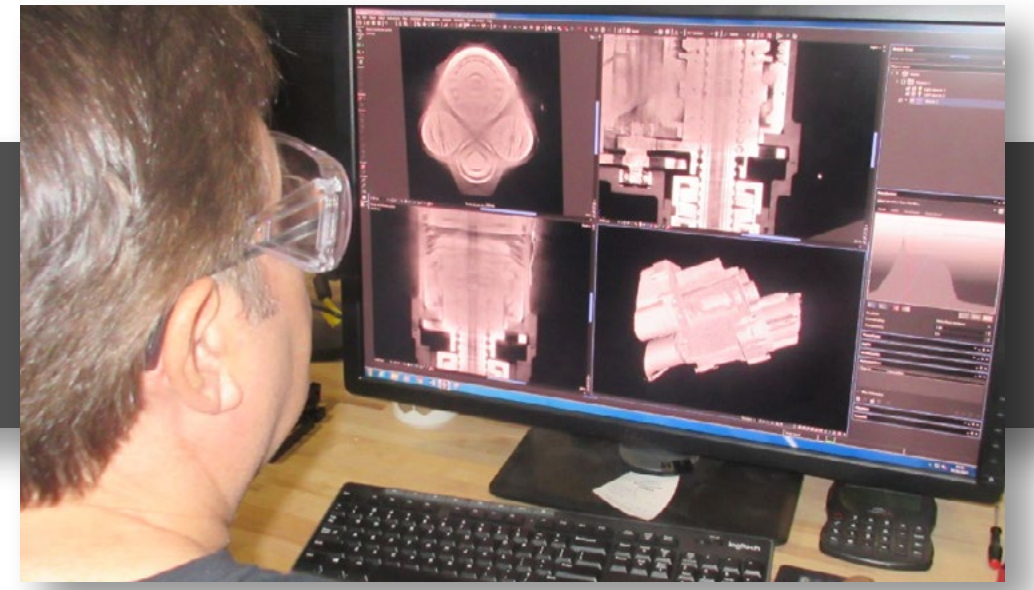
New Phased-array Ultrasonic Tool for Assuring Resistance Spot Weld Quality

EWI has developed a matrix phased-array ultrasonic imaging inspection technique that has been shown to identify spot weld diameters down to roughly 4-mm. This system, SpotSight™ is available commercially through an EWI partner.



CT Imaging for Weld Quality Assessments

Computed tomography (CT) imaging allows a detailed interpretation of weld morphology, and has been used to examine the occurrence and location of instabilities (expulsion events) on automotive sensor components. EWI now has CT imaging capability and has applied it to assessments of resistance projection weld quality.



NDE can be performed with little to no downtime with EWI's unique skills in the process automation and analysis of examination data. EWI develops innovative NDE solutions at our three technology centers in Loveland, CO, Columbus, OH, and Buffalo, NY.

To learn how your organization can use NDE to reduce risk and liability, contact Shaun Freed at sfreed@ewi.org.