# The Leader in Eddy Current Testing Performance

# Surface-Breaking Crack Detection/Imaging

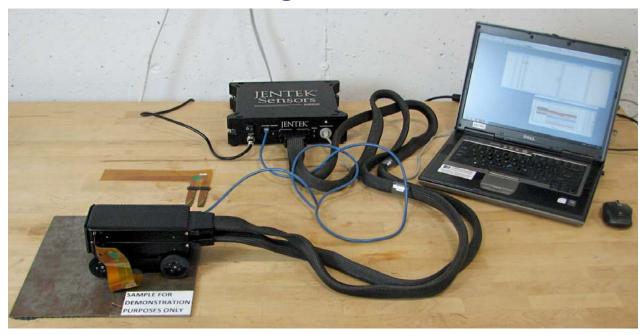


Developer of the Revolutionary MWM<sup>®</sup>-Array Eddy Current Technology

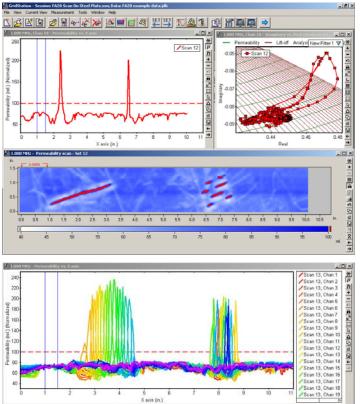
Multi-touch screen

JENTEK Sensors

## **Surface-Breaking Crack Demonstration**



JENTEK GridStation 8200 Non-Integrated System with MWM<sup>®</sup>-Array FA224 Sensors

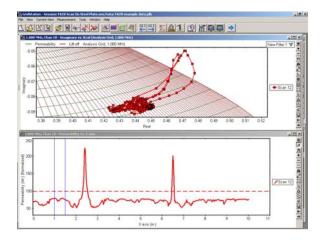


GridStation<sup>®</sup> Software Images

- Crack Detection
- Multiple-Channel MWM-Array Support
- Crack Depth Measurement
- Rapid C-Scan Imaging on Flat and Curved Surfaces, using Conformable MWM-Arrays and MR-MWM-Arrays

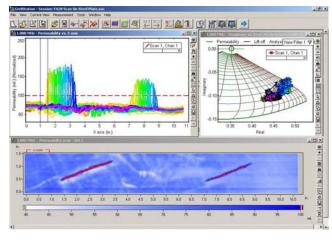


	MWM-Array
$\square$	‡ Lift-Off (h)
	$\mu, \sigma_{steel}$

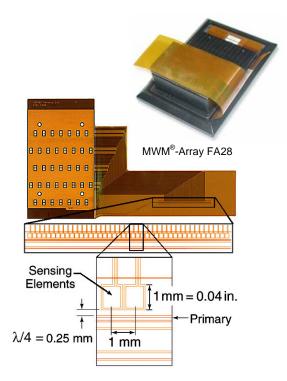


#### **Grid Methods:**

- Enable rapid real-time measurement of multiple properties and layer thicknesses
- Enable automatic correction for lift-off (paint, insulation/coating thickness variations)
- Calibration using ASTM E-2338 methods



GridStation<sup>®</sup> Software Screen



#### **MWM-Arrays offer:**

- No crosstalk between sensing elements
- Rapid fully parallel data acquisition
- Conformable constructs for easy scanning of curved surfaces

### GridStation<sup>®</sup> 8200a System



#### About JENTEK Sensors, Inc.

JENTEK Sensors, Inc. was founded in 1992 to address the need for improved inspection and enhanced life management of high-value assets (pipelines, refineries, aircraft, rotorcraft, spacecraft, ships, power plants) and for quality assessment and control of high value-added processes (coating, welding, heat treatment, shot peening).

JENTEK's GridStation<sup>®</sup> products, together with our MWM<sup>®</sup>-Array eddy-current sensors, are now U.S. military and commercial OEM standard practice for inspection of engine and other critical components. This includes FAA approval for the technical aspects of a recent commercial engine application and successful implementations for demanding applications such as the Space Shuttle leading edge composite at NASA's Kennedy Space Center and military aircraft engine disk slots at the U.S. Navy Fleet Readiness Center - East. According to one U.S. Navy subject matter expert, "the application of JENTEK Sensors' MWM technology has resulted in significant benefits in operational readiness and allows for effective risk mitigation of a safety of flight issue" and the MWM system is the "gold standard of inspections at the Navy Depot." Our patented technologies and products offer unique, cost-effective solutions to address critical and challenging customer needs. Application focus areas include:

Nondestructive Testing (NDT):

- Oil & Gas Infrastructure
- Aircraft Engines and Land-based Turbines
- Composites and Metal Structures

Surface Mounted / Embedded Sensors and Sensor Networks:

- Fatigue Crack Detection and Growth Monitoring
- Stress Corrosion Crack Detection and Growth Monitoring
- Corrosion (internal and external wall loss) Detection and Monitoring
- Magnetic Torque & Stress Sensors (including non-contact torque/bending loads)



JENTEK is now a growing commercial enterprise with competitive and *proven* products. We have delivered numerous fully-integrated systems and solutions to the aerospace, defense, energy, manufacturing, and consumer products industries.



## JENTEK<sup>®</sup> Sensors, Inc.

110-1 Clematis Avenue, Waltham, MA 02453-7013 Phone: 781-373-9700 • Email: jentek@jenteksensors.com www.jenteksensors.com

GridStation, MWM, and JENTEK Sensors are registered trademarks of JENTEK Sensors, Inc.

JENTEK Issued patents include U.S. Patent #s: 8,928,316, 8,803,515, 8,768,657, 8,494,810, 8,237,433, 8,222,897, 8,050,883, 7,994,781, 7,876,094, 7,812,601, 7,696,748, 7,589,526, 5,533,575, 7,528,598, 7,526,964, 7,518,360, 7,467,057, 7,451,657, 7,451,659, 7,411,390, 7,385,392, 7,348,771, 7,289,913, 7,280,940, 7,230,421, 7,188,532, 7,183,764, 7,161,351, 7,161,350, 7,106,055, 7,095,224, 7,049,811, 6,995,557, 6,992,482, 6,952,095, 6,798,198, 6,784,662, 6,781,387, 6,727,691, 6,657,429, 6,486,673, 6,433,542, 6,420,867, 6,380,747, 6,377,039, 6,351,120, 6,198,279, 6,188,218, 6,144,206, 5,966,011, 5,793,206, 5,629,621, 5,990,677 and RE39,206 (other patents pending).

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