

The Solution

Specifically designed to detect and measure surface-breaking defects through several millimeters of non-conductive coating, the Alternating Current Field Measurement, or ACFM®, technique is rapidly replacing conventional inspection methods like magnetic particle inspection for a range of applications. Giving consideration to the associated costs of removing and re-applying paint or coatings to tanks, towers, vessels, and/or pipework, the cost efficiency gains of ACFM is extraordinary. In general, jobs performed by alternating current field measurement are six times less expensive than the same work performed with magnetic particle inspection.

With these cost efficiencies comes higher productivity coupled with high Probability of Detection, or PoD. For reference, a 152-meter (600-foot) weld on a painted structure takes six days with magnetic particle inspection versus one and a half days with alternating current field measurement. New array probe technology offers a minimum of five times faster inspections compared to previous ACFM probes, also minimizing operator fatigue. The high-speed probe is ideal for tank floor and shell joints. At the end of the inspection campaign, a comprehensive report detailing auditable crack length and depth information is created which enables a proactive risk management program.



The Benefits

To further promote worker safety, ACFM technology can be integrated with mobile robots to access the difficult-to-reach locations encountered during large asset integrity evaluations. Standard commercial offerings by Eddyfi Technologies pair remote visual inspection with alternating current field measurement for inspecting cracks that often develop in high rising structural steels. This unmanned solution provides complete coverage without coming at a cost to inspector safety. Contact us to learn more today.



The information in this document is accurate as of its publication. Actual products may differ from those presented herein. © 2021 Eddyfi UK Ltd. Eddyfi, TSC, Amigo2, PACE, U41 and their associated logos are trademarks or registered trademarks of Eddyfi in the United States and/or other countries. Eddyfi reserves itself the right to change product offerings and specifications without notice