CIA Inspection

Crack Detection Service Now Available!

After successful completion of a Field Trial and Staff Training, CIA Inspection is excited to announce that our Remote Robotic Crack Detection System is ready for Commercial Service. Employing our custom built Alternating Current Field Measurement (ACFM) sensor developed by TSC in the UK, the system provides a follow-up service to our laser and visual inspection services. The system is capable of identifying and sizing surface breaking flaws on the interior circumferential welds of coke drums. Utilizing our current laser inspection platform as a base, the remotely deployed system requires no scaffolding and is designed to operate inside live vessels without blinding. Initially our ACFM inspection service will be used as a follow-up to the laser and video scan. The system can identify and size cracks in recognized areas of concern. Ultimately, our intention is to inspect up to three complete circ welds in a similar time to that of our existing service.

In preparation for the launch of this service, extensive training and testing was conducted in March 2010, under the supervision of Dr. Martin Lugg, of TSC. The results were a resounding success. Using a purpose built, 12-foot section of clad coke drum material, manufactured by CB&I (Chicago Bridge and Iron), with EDM cuts of known length and depth acting as simulated cracks, the system was able to identify and size these flaws with an accuracy of better than +/-15%, maintained even through coke cover. As a result of this session, CIAI now has a fully vetted system ready to offer for commercial service and six technicians qualified to run and interpret its results in the field.

Inspections are currently being scheduled from July forward.

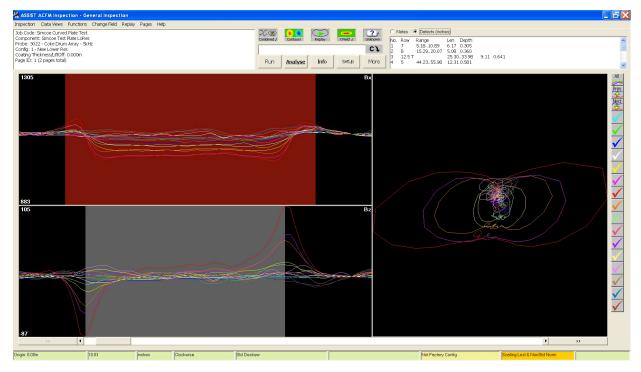
For more information please contact Rick Clark (905) 692-3678, rclark@cia-inspection.com



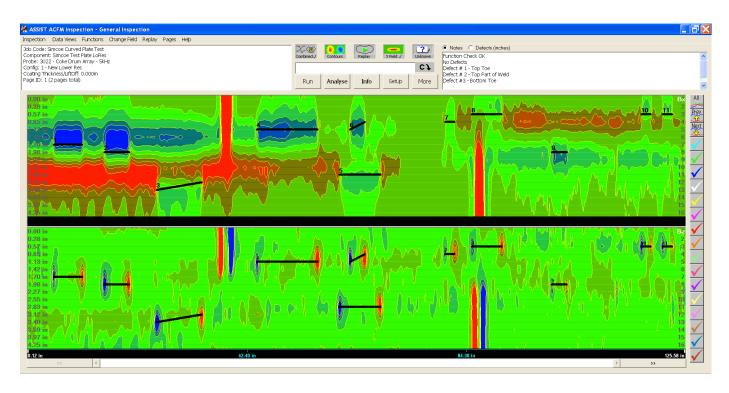


ACFM Crawler and Probe on Test Plate

Simulation of Coke Covered Crack



Probe view of the coke-covered crack number 1. Detected depth 0.305 inches, actual depth, 0.300 inches.



Contour map of the detected indications across 12' of weld.

