

EDDY CURRENT TESTING · ET

CRACKS FOUND THROUGH THE PAINT.

Eddy current testing of coated welds and tubes. Surface cracks found through paint and coatings without blasting them off, and tubes inspected from the inside. Single- and dual-frequency sets: an ETher WeldCheck 2 and an Evident (Olympus) Nortec 600.

COATED WELDS | TUBE INSPECTION | ISO 17643 | WELDCHECK 2 | NORTEC 600 | SINGLE & DUAL FREQUENCY

WHY EDDY CURRENT

LEAVE THE COATING ON. FIND THE CRACK ANYWAY.

Magnetic particle testing needs bare steel, so coated welds have to be blasted and recoated. Eddy current tests through non-conductive coatings, separating the coating signal from a crack signal on the screen.

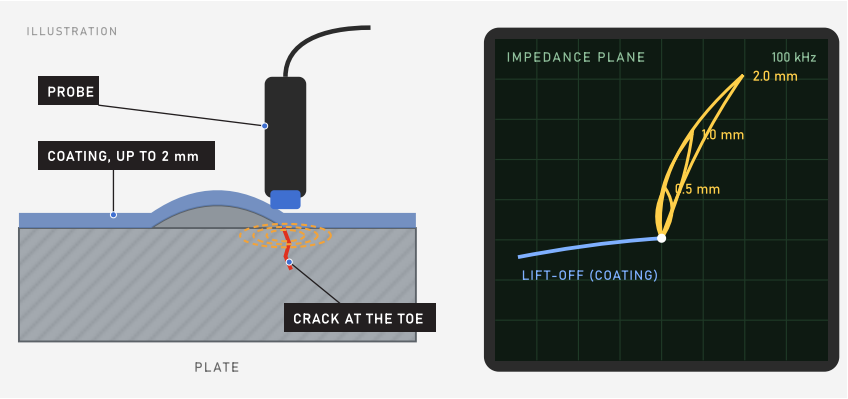


Illustration. Example signals from a reference block with 0.5, 1.0 and 2.0 mm slots, under a coating shim.

COATED WELDS TO ISO 17643

Butt and fillet welds in steel 3 mm and thicker, through non-conductive coatings up to 2 mm. Weld, HAZ and 50 mm either side scanned in two directions.

SET UP ON A REAL SLOT

Calibrated on a reference block with 0.5, 1.0 and 2.0 mm deep slots, under shims as thick as the coating, so the coating is accounted for.

WELDS
COATED WELDS
Service cracks at weld toes on structures, cranes, vessels and offshore steel, with the coating left in place.

TUBES
TUBE INSPECTION
Tubes inspected from the bore, using dual frequency to separate defect signals from supports and other noise.

COATINGS
COATING THICKNESS
Coating thickness measured with an absolute probe from the lift-off signal, before the weld is tested.

OUR SETS AND PEOPLE

SINGLE FREQUENCY
ETHER WELDCHECK 2
Weld inspection set built to EN 1711 and ISO 17643, 10 Hz to 20 MHz, with lift-off compensation for coatings.

DUAL FREQUENCY
NORTEC 600
Evident (Olympus) flaw detector for welds, tubes and surface cracks. Calibrated by Evident.

REFERENCE BLOCKS
CALIBRATED BLOCKS
Steel reference blocks with spark-eroded 0.5, 1.0 and 2.0 mm slots, plus non-conductive shims.

PCN CERTIFIED TECHNICIANS

Eddy current testing by ISO 9712 Level 2 certified technicians as a minimum, with a Level 3 behind the procedures.

ON ROPES AND OFFSHORE

The sets are small and battery powered, so they go up a rope or out to a platform with our technicians.

2 MM
Coating thickness tested through

1 × 5 MM
Smallest crack reliably found in an as-welded joint

2 SETS
Single and dual frequency

COATED WELDS TO CHECK?

NATA 12303 | ISO 9001 | PCN | AINDT

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