

CRACK TESTING OF WELD SEAMS ON HIGH-VOLTAGE POWER LINES

Cracks or weld defects can compromise high-voltage cable reliability. Eddy current testing reliably detects weld seam defects during production.



THE CHALLENGE

High-voltage cables are critical infrastructure components for industrial plants and energy distribution systems. The metallic sheath, formed from cold-rolled sheet and welded longitudinally, protects the cable against mechanical and electromagnetic influences. Any crack, transverse defect or open seam in the weld area may compromise long-term reliability and safety.

THE SOLUTION

After forming and welding, the seam is inspected automatically using the DEFECTOMAT CI with a dedicated segment coil. The system operates with differential and absolute channels to detect longitudinal and transverse defects as well as open weld areas. This configuration enables continuous 100% inspection directly within the production process.



THE RESULT

Weld seam defects are reliably identified immediately after welding, preventing faulty cable sections from reaching downstream processing. The automated inspection ensures consistent quality, full process control and high operational reliability of high-voltage cables, including demanding applications such as submarine installations.

THE PRODUCTS

DEFECTOMAT CI

Compact inline eddy current inspection for tubes, bars, wire and profiles



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