DETECTION OF SURFACE DEFECTS OF FITTINGS WITH FLEX PROBES

Surface cracks in gunmetal fittings can compromise product quality and safety. Eddy current testing reliably detects defects during production.

THE CHALLENGE

Fittings for drinking water systems increasingly use gunmetal instead of brass due to stricter EU regulations. However, gunmetal is more susceptible to surface defects such as cracks. To prevent quality issues and ensure product safety, reliable surface inspection is required directly within the ongoing production process, especially for components with complex geometries.

THE SOLUTION

FOERSTER performs eddy current testing using flex probes combined with the STATOGRAPH CM+ system. Flex probes can be adapted to complex geometries and inspect them within just a few rotations and a low cycle time. The inspection is based on comparison with defined reference defects and is fully automated within the production line, including integrated sorting of tested fittings.

THE RESULT

Reference defects with a depth of 0.2 mm are clearly detected with a signal-to-noise ratio of 3:1. The adaptable probe design enables reliable crack detection even in geometrically demanding areas such as beads. Automated inspection and sorting ensure consistent surface quality and dependable product performance for drinking water applications.

FOERSTER

STATOGRAPH CM+ / CM

Crack testing of complex workpieces with eddy current

FLEX PROBES

Flexible probes for eddy current testing of complex geometries

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