FOERSTER

EDDY CURRENT CRACK TESTING OF THIN-WALLED METAL COMPONENTS

Even the smallest surface cracks can compromise the quality of thin-walled metal components. FOERSTER's eddy current testing technology enables reliable, non-destructive crack detection, even in critical edge regions.



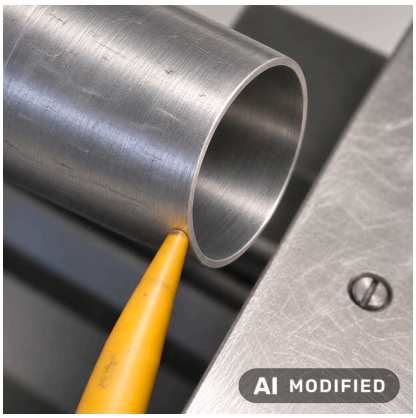
THE CHALLENGE

Thin-walled cylindrical metal components, such as precision sleeves, deep-drawn parts, bushings and small tubular components, are used across various industries. Forming and machining processes can cause surface cracks, particularly near openings and edges where mechanical stresses may be concentrated. Even minor defects can affect component quality and are often difficult to detect visually. Reliable non-destructive testing is essential to identify these cracks and maintain consistent production quality.

THE SOLUTION

FOERSTER's STATOGRAPH technology enables highly sensitive eddy current crack detection on thin-walled cylindrical metal components. For automated inspection, the STATOGRAPH CM+ or TCL can be combined with application-specific sensors and an R2 rotating probe head. The rotating probes scan critical surface areas, including openings and edges. Inspection parameters are tailored to the component geometry and relevant defect sizes, enabling sensitive, reproducible testing within industrial production processes.





THE RESULT

Even the smallest reference crack produces a signal exceeding the defined sorting threshold, demonstrating the sensitivity of the inspection method. Different defect indications can be detected and evaluated against defined acceptance criteria, providing a reliable basis for identifying defective components. The result is efficient, non-destructive crack detection that supports consistent quality control in the production of thin-walled metal components.



STATOGRAPH CM+ / CM

Crack testing of complex workpieces with eddy current



STATOGRAPH TCL

Smart eddy current crack detection in components critical for safety and operation



STATOGRAPH PROBES

Probes for non-destructive crack detection of complex components using eddy current testing



ROTATING HEAD R2 AND ROTATING PROBES

Contactless eddy current component testing

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