BARPROOF 140

Phased-array ultrasonic testing makes hidden defects in bars visible





Focus on the essentials

Need to thoroughly inspect your bars for surface defects like overlaps or internal defects like diverse types of inclusions? Our BARPROOF 140 ultrasonic inspection system was developed for exactly this purpose! Used in combination with ourestablished instruments for surface testing, it performs exhaustive bar testing in the highest FOERSTER quality.

The BARPROOF 140 – designed specifically for ultrasonic testing of bars with bright and hot-rolled surfaces – uses phased-array technology and ultrasonic coupling enclosed in a rotating water jacket. The compact sensor system can be easily integrated into existing test lines and covers a large diameter range with various probe sets. This takes up less space while ensuring high availability with lower investment costs. Thanks to the different focal points enabled by phased-array ultrasonic technology, it's possible to detect surface, near-surface and internal defects even at high test speeds. There are no rotating components.

Overall, the device is characterized by its excellent inspection sensitivity, minimal wear and low maintenance requirements.

The benefits

- Single-source solution: We offer you the test instruments and test line for comprehensive and thorough inspection of bars with bright or hotrolled surfaces, including service.
- Reproducible defect detection, high throughput: Detection of surface and internal defects as well as near-surface defects at test speeds of up to 2 m/s.
- Proven phased-array ultrasonic electronics: Includes industry-proven evaluation software and sensitive phased-array probes.
- Low maintenance: The absence of rotating components ensures minimal wear.
- Fast retooling when changing dimensions: Simplified device design and storable test settings shorten changeover times.
- FOERSTER Instrumentation Software: Optional integration for centralized display of test results.



Versatile and functional

Used together with a variety of phased-array probe sets, the basic BARPROOF 140 can test bars with a diameter of 10 to 140 mm. Thanks to its finely tuned components, it detects all common defect types with high reproducibility. Core components include powerful phased-array ultrasonic electronics, sophisticated ECHOVIEW F evaluation software and sensitive phased-array probes.

Comprehensive bar testing with BARPROOF 140

For testing bars with bright or hot-rolled surfaces, several test instruments are typically combined into one test line. This usually starts with a device for detecting surface and near-surface defects, such as the CIRCOGRAPH eddy current test instrument or the CIRCOFLUX flux leakage system. This is followed by the BARPROOF 140 for ultrasonic testing for surface, near-surface and internal defects. For fully automated testing, the FOERSTER test line guides the bars centrally through the individual instruments. And there's no need to stop the test line to maintain or make adjustments to the instruments: they can be moved into a service position for this purpose.

FOERSTER is your one-stop shop for complete bar testing lines. We work with you to develop your customized bar test line and offer you comprehensive services, a single trusted source.

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Headquarters

Institut Dr. Foerster GmbH & Co. KG In Laisen 70 72766 Reutlingen Germany +49 7121 140 0 info@foerstergroup.com



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