PORTABLE HARDNESS TESTING ON LARGE FORGED PARTS WITH SONODUR 3

Large forged parts are often difficult to test with stationary systems. SONODUR 3 enables fast, non-destructive portable hardness testing on site.

THE CHALLENGE

Large forged components such as truck axles, connecting rods, wind turbine gears or heavy motor parts require reliable hardness verification after machining or heat treatment. Conventional stationary testing machines are often unsuitable, as massive parts cannot be transported easily or do not fit into static systems. Destructive sampling is costly and may not represent the entire component.

THE SOLUTION

SONODUR 3 applies the UCI method directly on site, enabling position-independent measurements at multiple locations across the component. Depending on geometry, various probes – including extended versions for deep or hard-to-reach areas – can be used. The system determines hardness values within defined tolerances according to DIN 50159, typically around ±5%.

THE RESULT

Hardness testing becomes faster and more flexible, eliminating the need for laboratory transport or destructive sampling. Multiple measurement points ensure representative evaluation, even on large diameters or safety-critical areas. Immediate digital documentation supports traceability while significantly reducing inspection costs.

SONODUR 3

Portable, high-quality and suitable for industrial use - the user-friendly SONODUR 3 sets standards in the field of mobile materials testing

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Generated: 2026-10-27 06:20:53