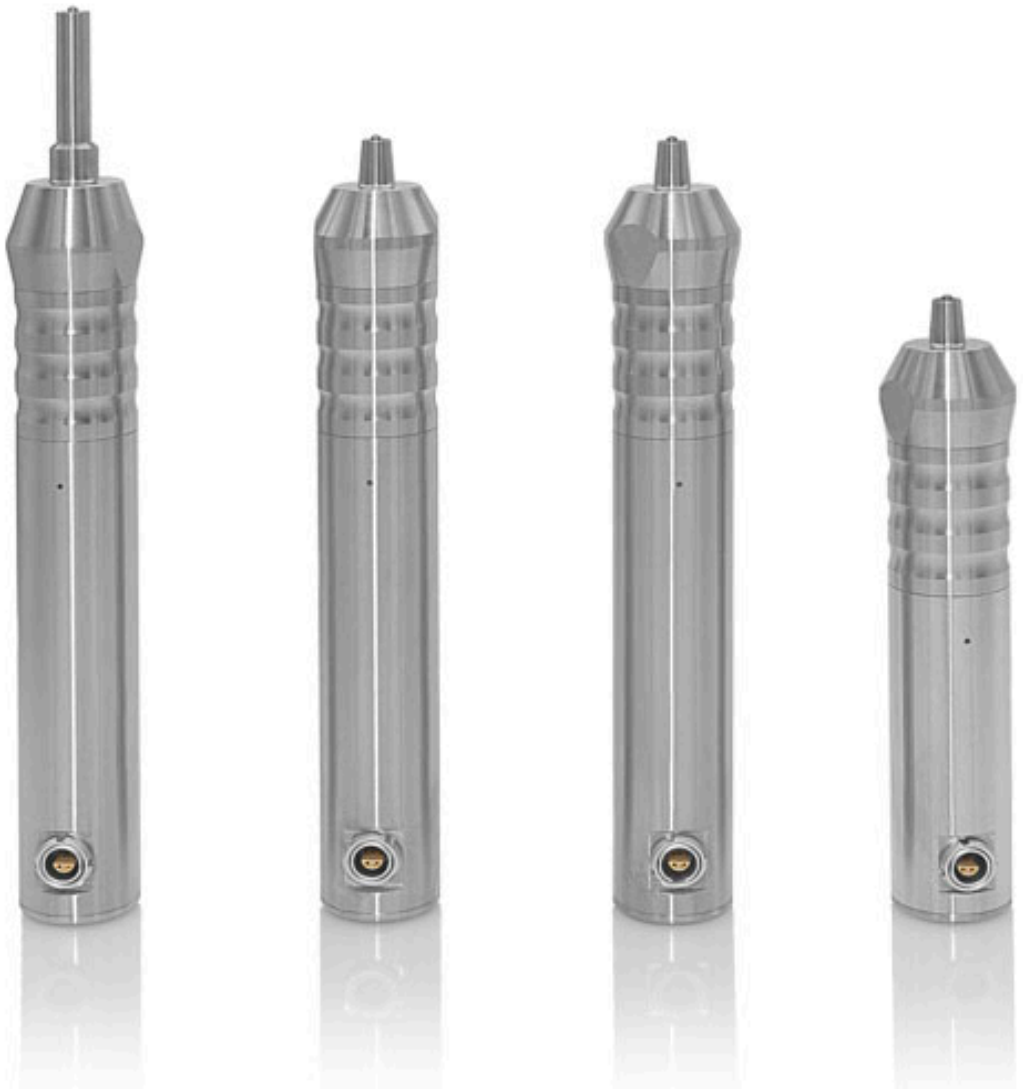
FOERSTER

SONO H

Handheld UCI Measuring Probes for Flexible Hardness Testing



SONO H

Handheld UCI Measuring Probes for Flexible Hardness Testing

Flexible Testing. Reliable Results. The SONO H handheld UCI measuring probes are designed for fast, reliable hardness testing in everyday industrial applications. Their compact, ergonomic design enables flexible measurements directly on the component while delivering stable and reproducible hardness values across a wide range of materials and applications.

The corrosion-resistant stainless-steel housing protects the proven probe technology and ensures long-term durability, even in demanding production environments. The probes are compatible with both the portable SONODUR 3 and the SONODUR R for automated production systems, offering maximum flexibility from manual inspections to integrated quality control.

The intelligent measuring system covers the complete hardness range of the classic Vickers scale and is suitable for metals, industrial ceramics and, with certain limitations, heterogeneous materials such as nodular cast iron. A wide range of probe variants with different test forces and geometries allows the optimum probe configuration for virtually every application.

The probes operate according to the UCI (Ultrasonic Contact Impedance) method. A Vickers diamond mounted on a vibrating rod is pressed into the material with a defined test force. The resulting frequency shift is measured and directly converted into a hardness value. Unlike conventional Vickers testing, no optical evaluation of the indentation is required, enabling fast, reliable and virtually non-destructive hardness testing directly on the component.

YOUR ADVANTAGES AT A GLANCE

Maximum application flexibility: A wide range of probe variants and test forces enables reliable hardness testing across numerous applications.

Reliable and reproducible measurements: Proven UCI technology delivers stable hardness values with high repeatability.

Compact handheld design: Ergonomic probe geometry provides easy access to difficult measuring positions and confined spaces.

Fast measurements within seconds: Short measuring times support efficient testing and rapid decision-making.

Low-destructive testing: Minimal indentations preserve valuable components and sensitive surfaces.

Durable industrial construction: The corrosion-resistant stainless-steel housing ensures reliable operation in demanding industrial environments.

NORMS

DIN 50159: Specifies a hardness testing method for metallic materials using the UCI (Ultrasonic Contact Impedance) technique.

ASTM A1038: Defines the UCI hardness testing method, in which material hardness is determined by measuring the frequency shift of a vibrating probe with a Vickers indenter.

TECHNICAL INFORMATION

TEST METHOD:	UCI-method, according to DIN 50159-1,2-2021, ASTM A1038-2019
PROBE HOUSING MATERIAL:	stainless steel
PROBE HOUSING DIMENSIONS:	25 mm × 177 mm (may differ for special probes)
MEASURING TIP MATERIAL:	Vickers diamond
TIP DIAMETER:	3.4 mm (optional 1.7 mm)
TIP LENGTH:	13 mm (optional 40 mm)
DIAMOND ANGLE:	136°
CONNECTION:	wired via Lemo plug connection

ACCESSORIES

SONO PS 1
Measurement tasks with small installation space and when precisely checking the probe calibration

SONO MS 1 (M)
Operator-independent, highly accurate and flexible precision tripod

SONO MS 2 (M)
The all-rounder among tripods - adjustable, highly accurate and highly flexible

FOERSTER

foerstergroup.com

The FOERSTER Group is represented by subsidiaries and representatives in over 60 countries worldwide. You can find a complete overview on our website.

Headquarters
Institut Dr. Foerster GmbH & Co. KG

In Laisen 70
72766 Reutlingen
Germany

+49 7121 140 0
info@foerstergroup.com

Generated: 2026-09-28 09:39:08