

Product Information

MICRODUR MIC 10 - Portable hardness tester (UCI)



Range of application

Rapid hardness tests, simple handling and a high degree of test safety.

The MIC 10 works to the UCI method of measurement (Ultrasonic Contact Impedance). The UCI method enables rapid and comfortable measurements: Apply the probe – Read off the test data. The Vickers diamond's indentation in the material surface is measured electronically and is immediately displayed digitally as a hardness value. Without, for example, having to make optical evaluation via a microscope.

Hardness testing with the MIC 10 returns information on mechanical properties and wear resistance of steel, as well as on aging processes on metallic parts such as cutting tools.

The tensile strength is determined for material selection and identification tests in structural steel engineering and distribution. Applications include evaluation of welding seams for containers and pipelines, numerous components and parts, such as ball bearings, shafts, bolts, extrusion parts, toothed wheels, etc., are tested in mechanical engineering.

Measurement probes with different weights are available for different material surfaces: For finished surfaces as well as for coarse grained or rough surfaces.

The adjustment parameters for measurements on low alloy and non-alloyed steel are already pre-programmed in the MIC 10. The MIC 10 can be quickly and easily readjusted for other materials.

Advantages and features

- Light, transportable hardness tester with a digital display for hardness tests with Vickers diamonds to the UCI method
- Simple operation and practical functions
- You can select whether a single measurement or the actual arithmetic average is to be displayed at the touch of a button
- Suspect single results can be corrected without any problems without having to cancel the measurement row
- Adjustable alarm threshold settings indicate critical measured values both optically and acoustically
- Functions that aren't required are simply locked, either the different hardness scales or the adjustment possibilities
- The MIC 10 can be adapted precisely to the respective application
- Background lighting can be switched on and off
- Measurement range to Vickers: 20 HV - 1740 HV
- Automatic conversion to DIN 50150 and ASTM E 40 in HV (Vickers), HB (Brinell), HRC (Rockwell C), and HRB (Rockwell B)
- Wide range of accessories, e.g. manual measurement probes for test loads from 10 N to 98 N

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Order item	H07.MIC10.00 Value	Unit
Measurement range	20 - 1740	HV (Vickers)
Weight	approx. 300	g
Dimensions	approx. 160 x 70 x 45 (W x H x D)	mm
Temperature range	Operation: - 15 ... + 55 Storage: - 20 ... + 60	°C °C
Test method	Hardness test with Vickers indenter (136° pyramid diamant). Analysis of test indentation using UCI method under load.	
Conversion scale	HV, HB, HRC, and HRB, referring to DIN 50150, ASTM E 140 N/mm ² (only at 98 N probe)	
Display	4-digit LCD with background illumination	
Current supply	2x 1.5 V Mignon	
Duration of operation	approx. 15 h without illumination	
Interface	RS232 C bidirectional	
Statistics	Display of mean value	

Accessories

Description		Order item
50 N (load force)	Standard hand probe	H07.MIC10.205A
10 N, 98 N	Hand probes (also elongated or shortened)	On request
Carry and setup device	With shoulder strap and holder for a manual measurement probe	H07.MIC10.1040

Further accessories on request