



**ANCHOR INDIA**  
AUTOMATIONS



**CHECK HARDNESS WITHOUT MARKING THE PART**

# Ultrasonic Hardness Tester

Portable UCI hardness testing with a 20 N probe and almost no indentation — verify rollers, cylinders and finished components on the floor rather than cutting a coupon for the lab.

| MODEL           | METHOD                       | SCALES            | TEST FORCE  |
|-----------------|------------------------------|-------------------|-------------|
| <b>AIA-UH20</b> | Ultrasonic contact impedance | 9 hardness scales | <b>20 N</b> |

## WHY IT MATTERS

### Where it changes your quality control

- 1 Non-destructive spot checks on live production equipment
- 2 Consistent readings across curved and hardened surfaces
- 3 Logged results for traceable quality records



## TECHNICAL PARAMETERS

# AIA-UH20 specification

AIA-UH20 reads as ultrasonic hardness, 20 N test force.

|                          |                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Method</b>            | Ultrasonic Contact Impedance (UCI)                                                                         |
| <b>Hardness scales</b>   | HV, HRC, HRB, HRA, HS, HL, HB, HRE, HRF                                                                    |
| <b>Measurement range</b> | HV 50–1700, HL 170–960, HRC 20–70, HRB 13–100, HRA 60–85.8, HS 26.4–99.5, HB 30–651, HRE 20–70, HRF 60–100 |
| <b>Resolution</b>        | 1 HV, 0.1 HRC                                                                                              |
| <b>Accuracy</b>          | ±4%H + 10 HV, ±2.5 HRC (probe fixture stand test, H as standard value)                                     |
| <b>Repeatability</b>     | 3%H + 8 HV, 2 HRC (probe fixture stand test, H as standard value)                                          |
| <b>Test force</b>        | 20 N                                                                                                       |
| <b>Display</b>           | 240 × 240 dot-matrix IPS                                                                                   |
| <b>Power supply</b>      | Rechargeable lithium battery 3.7 V / 1000 mAh, over 5000 continuous measurements per charge                |
| <b>Charging port</b>     | USB Type-C                                                                                                 |
| <b>Size</b>              | 185 × 43 × 45 mm                                                                                           |
| <b>Weight</b>            | 245 g                                                                                                      |
| <b>Temperature range</b> | Working -10 to 50 °C; storage -10 to 60 °C. 0–85% RH non-condensing                                        |
| <b>Supply</b>            | DC 5 V, 60 mA                                                                                              |

## IN USE

## On the production floor

|                                                                     |                                                            |
|---------------------------------------------------------------------|------------------------------------------------------------|
| Minimal indentation, non-destructive on finished parts              | Built-in metal material library, plus user calibration     |
| Measures ultra-thin material; couple light parts to a solid support | Bluetooth to a mobile app for storage, viewing and sharing |
| Two probes for flat, small and irregular components                 | Built-in data storage for measured values                  |
| One-touch switching between hardness scales                         |                                                            |

## TESTED TO

GB/T 34205-2017 — Metallic materials, hardness testing, ultrasonic contact impedance method  
GB/T 33362-2016 — Metallic materials, conversion of hardness values  
JJF 1436-2013 — Calibration specification of ultrasonic hardness testers

### Ready to specify a system?

Tell us your plate sizes, daily volume and quality targets and we will recommend the right model.

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Specifications are nominal and model dependent, and may change without notice as products are developed. Confirm all figures against a written quotation before they are relied upon for plant layout, electrical provision or purchase.