

Your imagination is our first priority to convert in realisation

# *Rockwell* **HARDNESS TESTERS**

LC1500-1A



QUALITY  
FUNCTIONALITY  
AND DESIGN  
FOR PERFECT  
MEASURING

**MULTITEK**  
TECHNOLOGIES

## LC1500-1A

Automatic hardness testers for Rockwell, Superficial Rockwell, Brinell, Vickers and Shore test methods in compliance with ASTM and ISO hardness standards. LC Series are top level floor hardness testers for tough applications. Fully motorized for fully automatic test cycles. Absolute accuracy (better than 0.5 %) in every condition. Load forces are applied through load cells and electronically controlled in Closed Loop, user friendly interface, real time statistics, graphs and large archive storage. Hardness testing on all metals: iron, steel, tempered steel, cast iron, brass, aluminum, copper and metal alloys. Heat treatment, hardening, nitriding, cementation and hardfacing. Hard and soft plastics.

**Test loads:** from 10 to 150 kgf

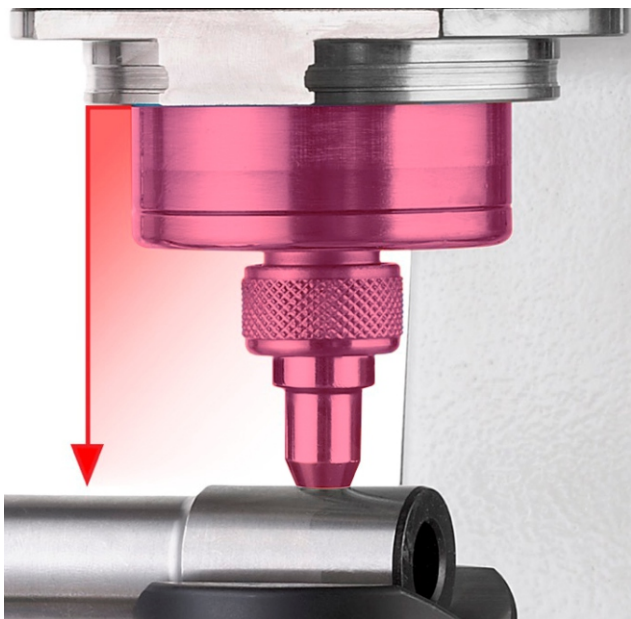
**Rockwell ISO 6508 / ASTM E-18 :** HRA - HRB - HRC - HRD - HRF - HRG - HRL - HRM - HRR / HRN - HRT

**Brinell HBWT ISO 6506 / ASTM E-10 :** HB 30 - HB 10 - HB 5 - HB 2,5 MPa (F/D<sup>2</sup>)

**Vickers ISO 6507 / ASTM E-384 (Only indentation) :** HV15 - HV20 - HV30 - HV50 - Hv100 Motorized Spindle System.

### ONE BUTTON MEASUREMENTS

Just press one button and the hardness tester's head moves down to make contact with the sample's surface, locking it. The hardness test cycle will automatically begin in automatic succession without breaching a phase. Within seconds results appear.

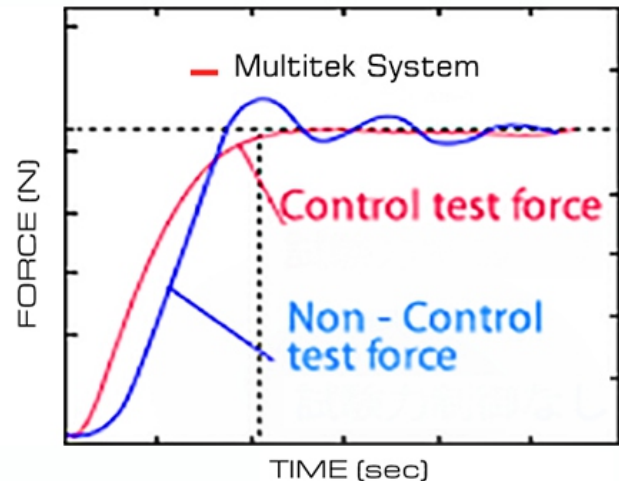


### INDENTER STROKE

When testing unstable samples or deflecting parts, head will follow the sample without losing contact thanks to its 50 mm stroke for indenter and clamping hood. Easy and fast hardness measurements on pieces with different thicknesses without acting on tester head or elevating screw.

## CLOSED LOOP TECHNOLOGY

Load forces are applied through load cells and controlled in "Closed Loop" with a frequency of 1 khz, assuring perfect linearity in every range. Results are not affected by any structural deflection, misalignment or vibration.



## REPEATABILITY AND REPRODUCIBILITY (R&R)

Accurate measurements even in extreme conditions, eliminate the need for repeated tests. The R&R data is at the top of its class.

## MOTORIZED TESTER'S HEAD

Load forces are applied through load cells and controlled in "Closed Loop" with a frequency of 1 khz, assuring perfect linearity in every range. Results are not affected by any structural deflection, misalignment or vibration.



## CLAMPING SYSTEM

Accurate measurements even in extreme conditions, eliminate the need for repeated tests. The R&R data is at the top of its class.

## LARGE BASE

The LC's wide work table base is capable of bearing masses beyond 1000 kg which allows for steady hardness measurements on bulky or irregular pieces. It also offers a comfortable working base for small pieces.

## SOFTWARE

The pre-installed software controls the whole instrument during the entire cycle avoiding operator errors. Powerful analysis system with easy and fast test settings, live statistics and graph. Data and test sessions storage.

	LC1500-1A
<b>Standards</b>	EN-ISO 6506-2 / EN-ISO 6507-2 / EN-ISO 6508-2 / EN-ISO 2039 / EN-ISO 868 / ASTM E-18 E-10 / ASTM E-384 / ASTM E-2240 / JIS
<b>X-Y Table</b>	1500x1500 mm
<b>Indenter and clamping hood stroke</b>	530x590 mm
<b>Vertical head stroke</b>	0/500 mm motorized
<b>Elevating screw stroke</b>	330x390 mm
<b>Depth capacity</b>	500 mm
<b>Preload</b>	29.4 - 98.1 N (3 - 10 kgf)
<b>Load accuracy</b>	Better than 0.1%
<b>Force range</b>	<p><b>Rockwell:</b> 588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf)</p> <p><b>Superficial Rockwell:</b> 29.42 - 147.1 - 294.2 - 441.3 N (3 - 15 - 30 - 45 kgf)</p> <p><b>Brinell:</b> 49.03 - 61.29 - 98.07 - 153.2 - 245.2 - 294.2 - 306.5 - 612.9 - 1226 - 1839 N (On request 2452 N)</p> <p>(5 - 6.25 - 10 - 15.6 - 25 - 30 - 31.2 - 62.5 - 125 - 187.5 kgf - On request 250 kgf)</p> <p><b>Vickers - Knoop:</b> 15 - 20 - 30 - 50 - 100 kgf</p>
<b>Feasible tests</b>	<p>Rockwell: HRC - HRA - HRD - HRB - HRF - HRG - HRL - HRM - HRR</p> <p>Superficial Rockwell: HRN - HRT</p> <p>Brinell HBWT: HB30</p> <p>Vickers - Knoop (Only indentation): HV15 - HV20 - HV30 - HV50 - HV100</p>