

Your imagination is our first priority to convert in realisation

Rockwell **HARDNESS TESTERS**

MLC-AL150



QUALITY FUNCTIONALITY
AND DESIGN FOR
PERFECT MEASURING

MLC-AL150

Semi-automatic hardness testers for Rockwell, Superficial Rockwell, Brinell and Vickers hardness test methods in compliance with ASTM and ISO standards. RSD Series are bench hardness testers for tough or lab applications. Rockwell and Brinell HBTW hardness values with absolute accuracy in every condition, accurate measurements even on the first test will eliminate the need for repeated tests. Load forces are applied through a dynamometric load cell which eliminates problems associated with dead weight systems on traditional testers. Digital durometers with touch screen, 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 hard facing.

Test loads : from 10 to 150 kgf

Load forces : from 3 to 187, 5 kgf (From 29, 42 to 1839 N)

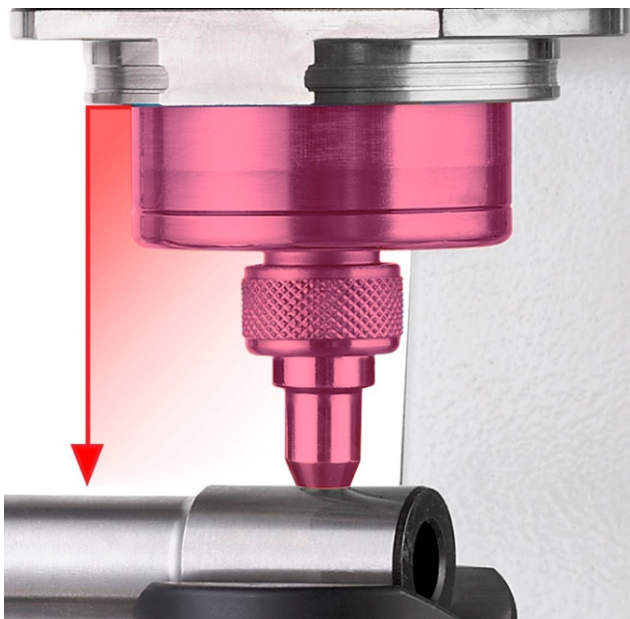
Rockwell ISO 6508 / ASTM E-18 : HRA - HRB - HRC - HRD - HRF - HRG - HRL - HRM - HRR / HRN - HRT

Brinell HBWT ISO 6506 / ASTM E-10 : HB 30 - HB 10 - HB 5 MPa (F/D²)

Vickers ISO 6507 / ASTM E-384 (only indentation) : HV3 - HV10 - HV15 - HV30 - HV60 - HV100

ONE BUTTON MEASUREMENTS

Just pull the START lever 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.

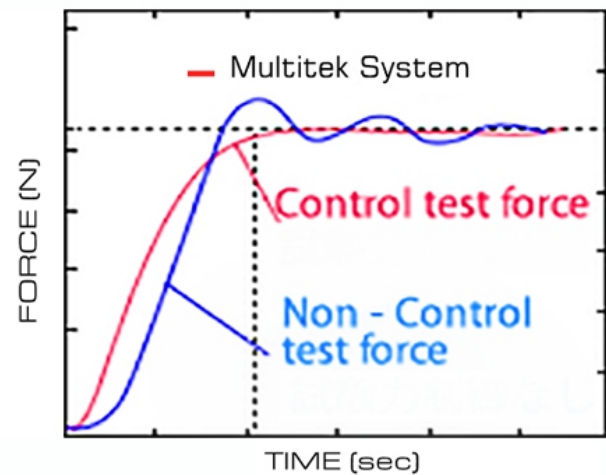


INDENTER STROKE

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.

THE MULTITEK SYSTEM

Load forces are generated by a dynamometric load cell which assures long term accuracy and eliminates problems associated with dead weight systems on traditional testers. Results are not affected by any structural deflection, misalignment or vibration.



REPEATABILITY AND REPRODUCIBILITY (R&R)

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

MOVING TESTER'S HEAD

Total of 700 mm of vertical stroke. The moving tester's head permits easy measurements on large pieces, reaching points at the top of the sample that would be difficult to be measured with common testers.



CLAMPING SYSTEM

Secure contact with the specimen is always maintained, even in the unlikely event of any specimen movement during the operation cycle. The clamping system assures perfect stability of any test piece throughout the test cycle, even if it's oiled, rusty or dirty.

INDUSTRIAL TOUCH PANEL CONTROL

The software controls the whole instrument during the entire cycle avoiding operator errors:



LARGE BASE

The 330 RSD'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.

OPTIONAL TABLE FOR RING SHAPE SAMPLES

Optional interchangeable base for hardness testing on external ring shape tubes, cylindrical surfaces and various samples diameter.



	MLC-AL150
Standards	EN-ISO 6506-2 / EN-ISO 6507-2 / EN-ISO 6508-2 / ASTM E-18 / ASTM E-10 / ASTM E384 / JIS
X-Y Table	----
Indenter and clamping hood stroke	----
Vertical head stroke	----
Elevating screw stroke	0/215 mm
Depth capacity	500 mm
Preload	98, 1 N (10 kgf)
Load accuracy	Better than 0.5%
Force range	<p>Rockwell: 588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf) Vickers (on request): 98.07 - 980.7 N (10 - 100 kgf) Brinell (on request): 98.07 - 612.9 - 1226 - 1839 N - on request 2452 N (10 - 62.5 - 125 - 187.5 kgf - on request 250 kgf)</p> <p>Superficial Rockwell: 147.1 - 294.2 - 441.3 N (15 - 30 - 45 kgf) Vickers (on request): 29.42 - 294.2 N (3 - 30) Brinell (on request): 153.2 - 294.2 - 306.5 N (15.6 - 30 - 31.2 kgf)</p>
Feasible tests	<p>Rockwell: HRC - HRA - HRD - HRB - HRF - HRG - HRL - HRM - HRR Vickers (on request): HV10 - HV100 Brinell (on request): HB30 - HB10 - HB5 MPa (F/D²)</p> <p>Superficial Rockwell: HRN - HRT Vickers (on request): HV3 - HV30 Brinell (on request): HB30 - HB10 - HB5 MPa (F/D²)</p>