

MIDLAND METROLOGY LIMITED

uRock-A

Auto Digital Rockwell Hardness Tester



Product Feature & Application

Product Features

Test anvil automatic lifting without manual rotation of hand wheel.

Press the start button and the test anvil will rise automatically and the hardness value will be displayed.

Closed loop control system with high precision load cell instead of dead weights.

8" touch screen for user to directly select the hardness scale and test force. Displays hardness value, conversion scale, test force and dwell time etc.

Rockwell hardness scales HRA, HRB and HRC etc and high resolution to 0.1HR.

Automatic correction of high, medium and low hardness numbers.

Automatic correction of load with the force accuracy increased by dynamometer.

Automatically applies the initial test force and the main test force.

Automatic testing process: loading - dwell - unloading and displays hardness value.

Curve display: test force, displacement depth change curve and real time force value curve.

Powerful data processing function including HR, HB and HV and other hardness scale conversions.

Qualified range can be set. Automatic alarm will sound when over the limit. Testers name, sample name and other information can be inputted.

With USB/RS232 interface, test data can be saved in U-flash directly in EXCEL format. Easy to edit and process.

Indenter protective device can be purchased as an optional extra. (Testing sample size should be over 15mm)



uRock-150A



uRock-45A



URock-150/45A

Product Application

Industrial production, inspection of product quality on processing technology. Ferrous and nonferrous metals, Hardened steel, tempered steel, annealed steel, sheet of various thicknesses, carbide materials, powder metallurgy materials, hardness and thermal spray coating.

Touch Screen Interface

8" touch screen for user to directly select the hardness scale and test force and display hardness value, conversion scale, test force, dwell time, etc.

Tester

Product Name

Radius of Curvature

Range To

Hardness Type

Conversion Type Conversion Value

Dwell Time(S)

Hardness Value [Calibration](#)

[Start](#) [Data](#)

Calibration

Scale:

Standard Hardness Value : Measured:

Low

Medium

High

[Save](#) [Calibration](#)

[Language](#) [Return](#)

Force Calibration

Standard: kg

Measured: kg

[Enter](#) [Return](#)

Measurement Scale

[Calibration](#) [HRB/100/1.588](#) [HRC/150/D](#) [HRD/100/D](#)

[HRE/100/3.175](#) [HRF/60/1.588](#) [HRG/150/1.588](#) [HRH/60/3.175](#)

[HRK/150/3.175](#) [HRL/60/6.35](#) [HRM/100/6.35](#) [HRP/150/6.35](#)

[HRR/60/12.7](#) [HRS/100/12.7](#) [HRV/150/12.7](#)

Please choose the right indenter for the scale you choosed.
Explanation [Return](#)

[HRA/60/D](#)

Scale/Force/Indentor

uRocky-150A

Measurement Scale

[Calibration](#) [HRB/100/1.588](#) [HRC/150/D](#) [HRD/100/D](#)

[HRE/100/3.175](#) [HRF/60/1.588](#) [HRG/150/1.588](#) [HRH/60/3.175](#)

[HRK/150/3.175](#) [HRL/60/6.35](#) [HRM/100/6.35](#) [HRP/150/6.35](#)

[HRR/60/12.7](#) [HRS/100/12.7](#) [HRV/150/12.7](#)

[HR15N/D](#) [HR30N/D](#) [HR45N/D](#)

[HR15T/1.588](#) [HR30T/1.588](#) [HR45T/1.588](#)

[HR15W/3.175](#) [HR30W/3.175](#) [HR45W/3.175](#)

[HR15X/6.35](#) [HR30X/6.35](#) [HR45X/6.35](#)

[HR15Y/12.7](#) [HR30Y/12.7](#) [HR45Y/12.7](#)

Please choose the right indenter for the scale you choosed.
Explanation [Return](#)

[HRA/60/D](#) [HR15N/D](#)

Scale/Force/Indentor Scale/Force/Indentor

Measurement Scale

[HR15N/D](#) [HR30N/D](#) [HR45N/D](#)

[HR15T/1.588](#) [HR30T/1.588](#) [HR45T/1.588](#)

[HR15W/3.175](#) [HR30W/3.175](#) [HR45W/3.175](#)

[HR15X/6.35](#) [HR30X/6.35](#) [HR45X/6.35](#)

[HR15Y/12.7](#) [HR30Y/12.7](#) [HR45Y/12.7](#)

Please choose the right indenter for the scale you choosed.
Explanation [Return](#)

[HRA/60/D](#) [HR15N/D](#)

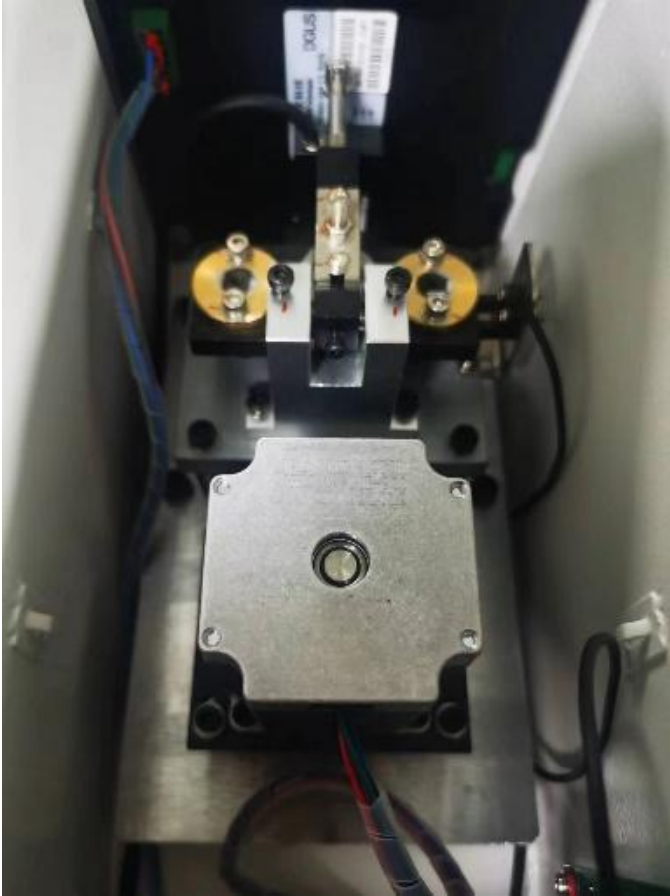
Scale/Force/Indentor Scale/Force/Indentor

uRocky-45A

uRocky-150/45A

User Friendly

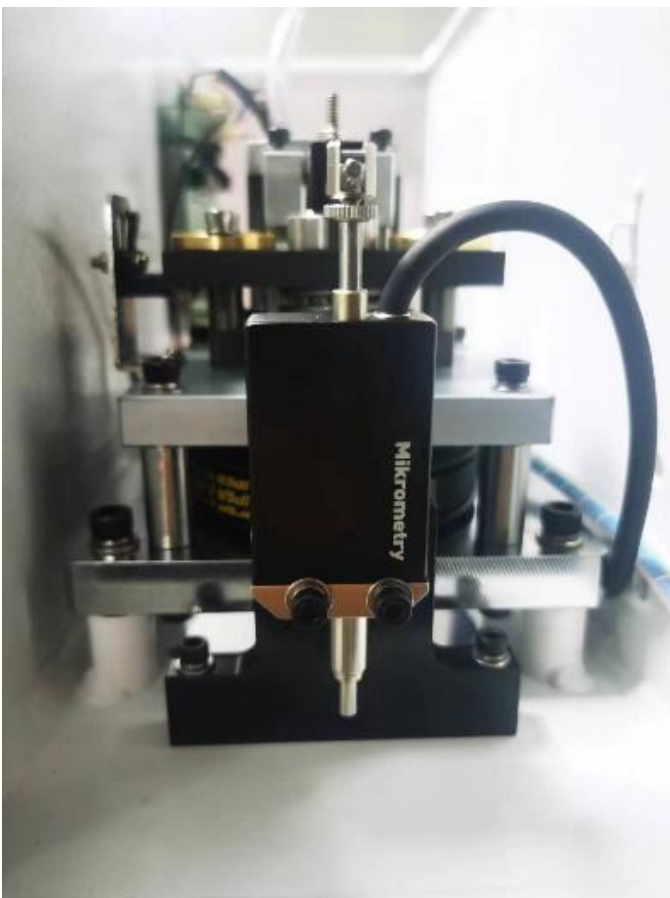
uRock-A has a Closed loop control system and a high precision load cell structure. Automatically applies the initial test force and the main test force. Automatic testing process: loading - dwell - unloading.



Electronic Motorized Loading



Load Cell



Displacement Sensor



Displacement Sensor

Data Output

With USB/RS232 interface, test data can be saved in U-flash directly in EXCEL format making it easy to edit and process.



USB/RS232 Interface

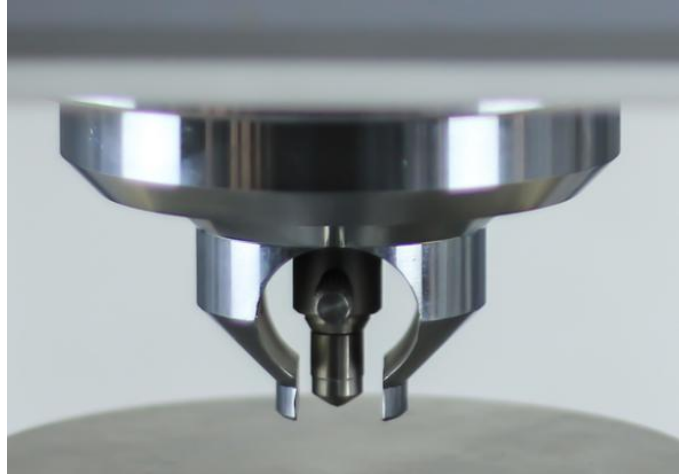


USB/RS232 Interface

Indenter Protective

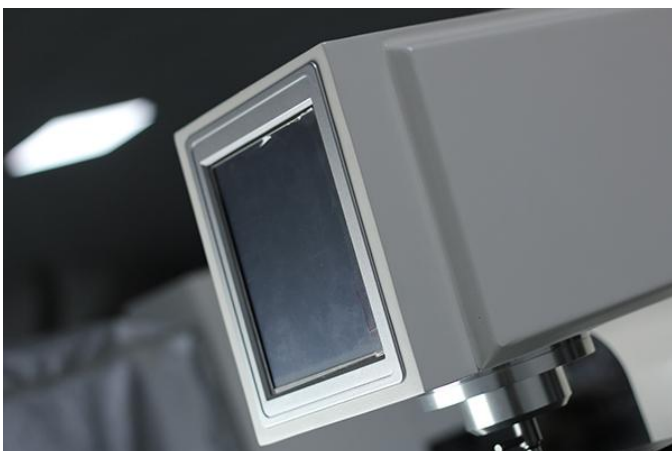
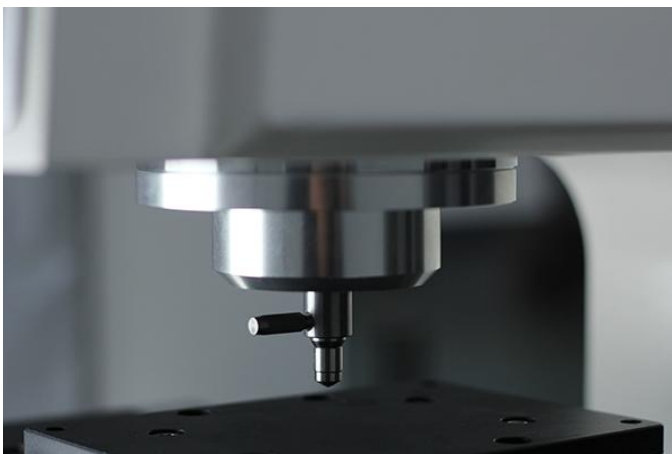


Indenter Protective Device



Indenter Protective Device

More Detailed Photos



Technical Specification

Model	uRock-150A	uRocky45A	uRock-150/45A
Product Name	Auto Digital Rockwell	Auto Digital Superficial	Auto Digital Twin
Initial Test Force (error < 0.5%)	Hardness Tester 10 Kgf (98.07N)	Rockwell Hardness Tester 3.0kgf(29.4N)	Rockwell Hardness Tester Rockwell: 10 Kgf (98.07N) Superficial Rockwell: 3.0kgf(29.4N)
Main Test Force (error < 0.5%)	60kgf(588N) 100kgf(980N) 150kgf(1471N)	15kgf(147.1N) 30kgf(249.2N) 45kgf(441.3N)	15kgf(147.1N) ,30kgf(249.2N), 45kgf(441.3N) 60kgf(588N),100kgf(980N), 150kgf(1471N)
Hardness Scale	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRR, HRP, HRS, HRV	15N, 15T, 15W, 15X, 15Y, 30N30T, 30W, 30X, 30Y, 45N, 45T, 45W, 45X, 45Y	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRR, HRP, HRS, HRV 15N, 15T, 15W, 15X, 15Y, 30N, 30T, 30W, 30X, 30Y, 45N, 45T, 45W, 45X, 45Y
Conversion scale	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T		
Hardness Test Range	HRA:20-95, HRB:20-100, HRC:20-70, HRD:40-77, HRE:70-100, HRF:60-100, HRG:30-94, HRH:80-100, HRK:40-100, HRL:100-120, HRM:85-115, HRR:114-125	HR15N: 70-94 HR30N: 42-86 HR45N: 20-77 HR15T: 67-93 HR30T: 29-82 HR45T: 1-72	HRA:20-88, HRB:20-100, HRC:20-70, HRD:40-77, HRE:70-100, HRF:60-100, HRG:30-94, HRH:80-100, HRK:40-100, HRL:100-120 HRM:85-115, HRR:114-125 HR15N: 70-94, HR30N: 42-86 HR45N: 20-77, HR15T: 67-93 HR30T: 29-82, HR45T: 1-72
Executive Standards	BSEN 6508, ISO 6508, ASTM E18, GB/T230, JJG112		
Dwell Time	0-99s		
Hardness Resolution	0.1 HR		
Hardness Reading	LCD Touch Screen		
Data Output	USB Flash Disk		
Data Save	The measured values are saved in USB flash in Excel format		
Conversion scale	Brinell, Vickers, Superficial Rockwell	Brinell, Vickers, Rockwell	Brinell, Vickers, Rockwell
Test Height	300mm		
Test Throat	200mm		
Machine Dimension	560 * 280 * 850 mm		
Net Weight	80kg		
Power Supply	AC220 + 5%, 50 ~ 60 hz		

Machine Real Photos at Factory



Ordering Information



**uRock-150A Auto Digital
Rockwell Hardness Tester**



**uRock-45A Auto Digital
Superficial Rockwell
Hardness Tester**



**uRock-150A/45A Auto
Digital Twin Rockwell
Hardness Tester**

Packing List

uRock-150A

Item	Qty	Item	Qty
Diamond Rockwell Indentor	1	Diameter 1.5875mm ball head	1
Regulating Screw	4	150mm Test Anvil	1
HRC High Hardness Block	1	55mm Test Anvil	1
HRC Low Hardness Block	1	40mm V-shaped Test Anvil	1
HRB Hardness Block	1	USB Flash Disk	1
Power Line	1	Touch Pen	1
Product Certificate	1 copy	Instruction Manual	1 copy
2A Fuse	2	Dust-proof Plastic Cover	1

uRock-45A

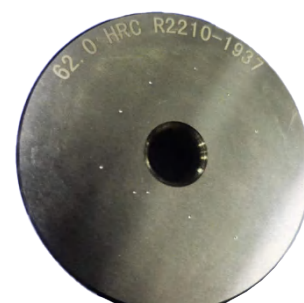
Item	Qty	Item	Qty
Diamond Rockwell Indenter	1	1.5875 mm Ball Indenter	1
Regulating Screw	4	150mm Test Anvil	1
HR15N Hardness Block	1	55mm Test Anvil	1
HR30N Hardness Block	1	40mm V-type Test Anvil	1
HR30T Hardness Block	1	Dust-proof Plastic Cover	1
Power Line	1	Instruction Manual	1 Copy
USB Flash Disk	1	Product Certificate	1 Copy
Touch Pen	1	2A Fuse	2

uRock-150A/45A

Item	Qty	Item	Qty
Diamond Rockwell Indentor	1	1.5875mm Ball Indentor	1
Regulating Screw	4	150mm Test Anvil	1
Hardness Block (HRC high and low, HRB)	3	55mm Test Anvil	1
Hardness Block (HR15, HR30N, HR30T)	3	40mm V-type Test Anvil	1
2A Fuse	2	V-shaped Test Anvil	1
USB Flash Disk	1	Dust-proof Plastic Cover	1
Power Line	1	Product Certificate	1
Touch Pen	1	Instruction Manual	1



HRB Hardness Block



HRC Hardness Block(High)



HRC Hardness Block(Low)



150mm Flat Test Anvil



55mm Flat Test Anvil



40mm V-shape Test Anvil



Superficial Rockwell Block



USB Flash Disk



Touch Pen