



# MANUAL ROCKWELL HARDNESS TESTER (BASIC TYPE) CODE HDT-RW160





■ According to ISO 6508



Ø58mm flat anvil (included)



Ø150mm flat anvil (included)



V-type anvil (included) for cylinders with diameter Ø4~60mm



level (included)



small V-type anvil (optional) for cylinders with diameter Ø2~4mm



desk (optional)

### SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG	
Preliminary test force	98N (10kg)	
Test force	588N (60kg), 980N (100kg), 1471N (150kg)	
Display	analogue	
Stage elevation	manual	
Load control	manual	
Min. reading	0.5HR	
Max. workpiece height	170mm	
Max. testing width	135mm (from the center of indenter to the wall of main body)	
Dimension	466×238×630mm	
Weight	70kg	

### OPTIONAL ACCESSORY

Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Small V-type anvil	ISH-SMALLANVIL
Desk	HDT-DESK

# STANDARD DELIVERY

Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Ø1.5875mm steel ball	5 pcs
Level	1 pc
Hardness test block HRA80~88	1 pc
Hardness test block HRB85~95	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Anti-dust cover	1 pc



# MANUAL ROCKWELL AND SUPERFICIAL ROCKWELL HARDNESS TESTER CODE HDT-RSR100









Ø60mm flat anvil (included)



Ø150mm flat anvil (included)



V-type anvil (included) for cylinders with diameter Ø4~60mm



small V-type anvil (optional) for cylinders with diameter Ø2~4mm



desk (optional)

According to ISO 6508

#### SPECIFICATION

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Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	29.4N/3kgf for Superficial Rockwell 98N/10kgf for Rockwell
Test force	147N/15kgf, 294N/30kgf, 441N/45kgf, 588N/60kgf, 980N/100kgf, 1471N/150kgf
Display	analogue
Stage elevation	manual
Load control	manual
Min. reading	0.5HR
Max. workpiece height	160mm
Max. testing width	140mm (from the center of indenter to the wall of main body)
Dimension	460×240×660mm
Weight	75kg

## STANDARD DELIVERY

Main unit	1 pc
Ø60mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	1 pc
Hardness test block HRB88~95	1 pc
Hardness test block HRC60~65	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block 78~88HR15N	1 pc
Hardness test block 55~73HR30N	1 pc
Hardness test block 57~69HR30T	1 pc
Anti-dust cover	1 pc

### OPTIONAL ACCESSORY

Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block 78~88HR15N	HDT-B-HR15N2
Hardness test block 55~73HR30N	HDT-B-HR30N2
Hardness test block 57~69HR30T	HDT-B-HR30T
Small V-type anvil	ISH-SMALLANVIL
Desk	HDT-DESK

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# FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

# DIGITAL BRINELL/ROCKWELL/VICKERS HARDNESS TESTER CODE HDT-BRV130\*\*

- According to ISO 6506, ISO 6507, ISO 6508
   Force loading by electric motor (without weights)

#### **SPECIFICATION**

SPECIFICATION	
Brinell test load	49N (5kgf), 98N (10kgf), 153N (15.625kgf), 294N (30kgf), 306N (31.25kgf), 613N (62.5kgf), 980N (100kgf), 1226N (125kgf), 1839N (187.5kgf)
Brinell scales	HBW1/5, HBW2.5/62.5, HBW1/10, HBW2.5/15.625, HBW1/30, HBW2.5/31.25, HBW2.5/62.5, HBW10/100, HBW5/125, HBW2.5/187.5
Brinell resolution	0.1HBW
Rockwell test load	98N (10kgf) preload 588 (60kgf), 980 (100kgf), 1471N (150kgf) total load
Rockwell scales	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV
Rockwell resolution	0.1HR
Vickers test load	49N (5kgf), 98N (10kgf), 196N (20kgf), 294N (30kgf), 392N (40kgf), 490N (50kgf), 588N (60kgf), 784N (80kgf), 980N (100kgf), 1176N (120kgf)
Vickers scales	HV5, HV10, HV20, HV30, HV40, HV50, HV60, HV80, HV100, HV120
Vickers resolution	0.1HV
Objective	2.5X/5X
Magnification of microscope	Brinell: 37.5X, Vickers: 75X
Hardness test range	Brinell: 8~650HBW, Rockwell: 20~100HR, Vickers: 8~2900HV
Max. workpiece height	Rockwell: 220mm, Brinell and Vickers: 150mm
Max. testing width	200mm (from the center of indenter to the wall of main body)
Data output	USB flash disk
Power supply	220V, 50/60Hz **
Dimension	560×350×800mm
Weight	70kg

<sup>\*\*</sup>Add "-U" on code No. when power supply is 110V, 50/60Hz

# STANDARD DELIVERY

STANDARD DELIVERT	
Main unit	1 pc
Vickers diamond indenter	1 pc
Rockwell diamond indenter	1 pc
Ø1.5875mm Rockwell indenter	1 pc
Ø2.5mm Brinell indenter	1 pc
Ø5mm Brinell indenter	1 pc
Ø60mm flat anvil for Rockwell	1 pc
Ø150mm flat anvil for Rockwell	1 pc
V-type anvil for Rockwell	1 pc
Ø60mm flat anvil for Vickers and Brinell	1 pc
Hardness test block HRB88~95	1 pc
Hardness test block HRC60~65	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block 400~500HV30	1 pc
Hardness test block 180~300HBW2.5/187.5	1 pc
Level	1 pc
USB flash disk	1 pc
Touch pen	1 pc
Anti-dust cover	1 pc





Ø60mm flat anvil for Rockwell (included)



V-type anvil for Rockwell (included), for cylinders with diameter Ø4~60mm



Ø150mm flat anvil for Rockwell (included)



Ø60mm flat anvil for Vickers and Brinell (included)



small V-type anvil for Rockwell (optional), for cylinders with diameter Ø2~4mm



desk (optional)

Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block 400-500HV30	HDT-B-HV30D
Hardness test block 200-300HBW2.5/187.5	HDT-B-HB25A2
Small V-type anvil for Rockwell	ISH-SMALLANVIL
Desk	HDT-DESK



# BRINELL/ROCKWELL/VICKERS HARDNESS TESTER CODE ISH-BRV\*\*





Ø60mm flat anvil for Rockwell (included)



Ø150mm flat anvil for Rockwell (included)



Ø60mm flat anvil for Vickers and Brinell (included)



V-type anvil for Rockwell (included), for cylinders with diameter Ø4~60mm



V-type anvil for Vickers and Brinell (included)



small V-type anvil for Rockwell (optional), for cylinders with diameter Ø2~4mm



desk (optional)





According to ISO 6506, ISO 6507, ISO 6508

### SPECIFICATION

Rockwell test load	98N preload, 588, 980, 1471N total load
Min. Rockwell reading	0.5HR
Brinell test load	306, 613, 1839N
Vickers test load	294N
Stage elevation	manual
Load control	manual
Magnification of microscope	37.5X/75X
Max. workpiece height	180mm
Max. testing width	200mm (from the center of indenter to the wall of main body)
Power supply	220V, 50/60Hz **
Dimension	546×300×767mm
Weight	90kg

<sup>\*\*</sup>Add "-U" on code No. when power supply is 110V, 50/60Hz

### STANDARD DELIVERY

Main unit	1 pc
Ø1.5875mm carbide ball indenter	1 pc
Diamond Rockwell indenter	1 pc
Ø5mm Brinell indenter	1 pc
Ø2.5mm Brinell indenter	1 pc
Vickers indenter	1 pc
Ø60mm flat anvil for Rockwell	1 pc
Ø150mm flat anvil for Rockwell	1 pc
V-type anvil for Rockwell	1 pc
Ø60mm flat anvil for Vickers and Brinell	1 pc
V-type anvil for Vickers and Brinell	1 pc
Hardness test block HRB88~95	1 pc
Hardness test block HRC60~65	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block 400~500HV30	1 pc
Hardness test block 180~300HBW2.5/187.5	1 pc
Anti-dust cover	1 pc

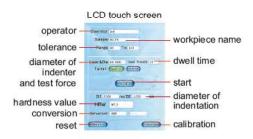
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block 400-500HV30	HDT-B-HV30D
Hardness test block 200-3000HBW2.5/187.5	HDT-B-HB25A2
Small V-type anvil for Rockwell	ISH-SMALLANVIL
Desk	HDT-DESK

# AUTOMATIC TESTING, AUTOMATIC TEST FORCE LOADING



FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHT)





- Automatic testing, automatic test force loading
   LCD touch screen, easy operation
- Measure indentation by measuring microscope then read the hardness value from LCD

- Tolerance testing
   Insert USB flash disk, save the test results as Excel
   Converted to HRA, HRB, HRC, HRD, HRF, HV, HB, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
   Force loading by electric motor, without weights
   According to ISO 6506



ISHB-D200















**AUTOMATIC DIGITAL BRINELL HARDNESS TESTERS** 

**SPECIFICATION** 

Code		ISHB-D200 **	ISHB-D300 **	
Turret rotation		manual	automatic	
Range		8~650HBW		
Reading mod	le	directly read from LCD		
Test force		62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf		
Max. workpie	ce height	200mm		
Max. testing	lax. testing width		155mm (from the center of indenter to the wall of main body)	
Stage elevati	Stage elevation		manual	
Load control		automatic (load/dwell/unload)		
Load dwell ti	oad dwell time		5~60 second	
Measuring	magnification	20X		
microscope	resolution	0.625mm		
Power supply		220V, 50/60Hz**		
Dimension		550x210x750mm		
Weight		110kg		

<sup>\*\*</sup>Add "-U" on code No. when power supply is 110V, 50/60Hz

### STANDARD DELIVERY

Main unit	1 pc
Ø80mm flat anvil	1 pc
Ø200mm flat anvil	1 pc
V-type anvil	1 pc
Ø2.5mm carbide ball indenter	1 pc
Ø5mm carbide ball indenter	1 pc
Ø10mm carbide ball indenter	
Hardness test block 150~250HBW2.5/187.5	
Hardness test block 75~125HBW10/1000	
Hardness test block 175~250HBW10/3000	1 pc
USB flash disk (8G)	1 pc
Touch pen	1 pc
Anti-dust cover	1 pc

Hardness test block 200~300HBW2.5/187.5	HDT-B-HB25A2
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 200~300HBW10/3000	HDT-B-HB10A2
Brinell indentation measuring system	ISHB-MSA
Desk	HDT-DESK



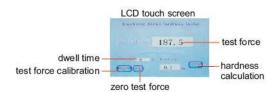
### **AUTOMATIC BRINELL HARDNESS TESTER** CODE ISHB-M100\*\*

FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

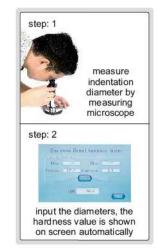
AUTOMATIC TESTING AFTER PRELIMINARY TEST FORCE IS LOADED BY HAND











- LCD touch screen, easy operation
- Automatic testing after preliminary test force is loaded by hand
   Measure indentation diameter by measuring microscope, input the diameters, the hardness
- value is shown on screen automatically

  Force loading by electric motor, without weights

  According to ISO 6506



Ø80mm flat anvil (included)



Ø200mm flat anvil (included)



V-type anvil (included)



measuring microscope (included)



desk (optional)

## SPECIFICATION

Range		8~650HBW	
Reading mode		directly read from LCD	
Test force		62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf	
Max. workpiece height		230mm	
Max. testing width		160mm (from the center of indenter to the wall of main body)	
Stage elevation		manual	
Load control		automatic (load/dwell/unload)	
Load dwell time		5~60 second	
Measuring microscope	magnification	20X	
	graduation	0.01mm	
Power supply		220V, 50/60Hz**	
Dimension		550×210×750mm	
Weight		90kg	

<sup>\*\*</sup>Add "-U" on code No. when power supply is 110V, 50/60Hz

### STANDARD DELIVERY

Main unit	
Ø80mm flat anvil	1 pc
Ø200mm flat anvil	
V-type anvil	
Ø2.5mm carbide ball indenter	
Ø5mm carbide ball indenter	
Ø10mm carbide ball indenter	
Hardness test block 150~250HBW2.5/187.5	
Hardness test block 75~125HBW10/1000	
Hardness test block 175~250HBW10/3000	
Measuring microscope	
Anti-dust cover	1 pc

Hardness test block 200~300HBW2.5/187.5	HDT-B-HB25A2
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 200~300HBW10/3000	HDT-B-HB10A2
Brinell indentation measuring system	ISHB-MSA
Desk	HDT-DESK