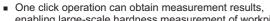
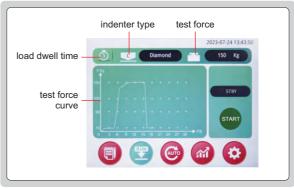
#### AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTER (ADVANCED TYPE) CODE HDT-CRS200 **BUILT-IN** AUTOMATIC FORCE LOADING BY ELECTRIC тоисн HIGH HIGH BLUETOOTH TEST MOTOR (WITHOUT WEIGHTS) SCREEN ACCURACY EFFICIENCY INSPECTION 8" touch screen 2023-07-20 16:28:41 SIZE+ test scale load dwell time standard M E1401 HRO converted scale selection hardness 61.2 value correction setting program setting testing display chart indenter move up and down start stage emergency stop control up and down movement of the indenter

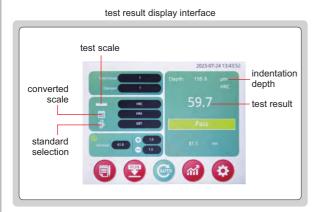
test interface

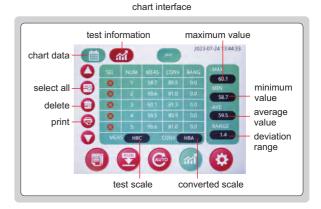


*<b>+INSIZE* 

- enabling large-scale hardness measurement of workpieces
- CNC system, close-loop electronic control system applies test force
   Touch screen operation and display
- Cantilevered structure, achieving full automation of hardness measurement
- The big flat stage is convenient for testing and can work in conjunction with robotic arms and automation equipment to step up online hardness testing and achieve completely unmanned testing
- Bluetooth, RS232 data transmission to computer, data management using hardness management software
- According to ISO 6508, ASTM E18, JIS Z2245







To be continued







INSIZE+

# SPECIFICATION

Measurement range		Rockwell: 20~88HRA, 20~100HRB, 20~70HRC Superficial RockWell: 70~91HR15N, 42~80HR30N, 42~70HR45N, 73~93HR15T, 43~82HR30T, 12~72HR45T		
Hardness	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T		
scale	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP,HRR, HRS, HRV, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y		
Preliminary	/ test force	Superficial Rockwell: 29.4N (3kgf) Rockwell: 98N (10kgf)		
Test force		Superficial Rockwell: 147N (15kg), 294N (30kg),441N (45kg) Rockwell: 588N (60kg), 980N (100kg),1471N (150kg)		
Test force	accuracy	±1%		
Operationa	ıl mode	automatic		
Load contr	ol	automatic (load/dwell/unload)		
Resolution		0.05HR		
Load dwell	time	0~99 second		
Max. work	piece height	300mm		
Max. testin	g width	200mm (from the center of indenter to the wall of main body)		
Output		bluetooth printer, RS232		
Power supply		220V, 50/60Hz		
Dimension		555×400×1250mm		
Weight		130kg		

#### STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.588mm carbide ball indenter	1 pc
Ø58mm flat anvil	1 pc
V-type anvil	1 pc
Hardness test block HRB20~30	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRBW80~100	1 pc
Hardness test block HR30N60~85	1 pc
Hardness test block HR30TW70~85	1 pc
Bluetooth printer	1 pc

Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRB80~100	HDT-B-HRB
Hardness test block HR15N78~88	HDT-B-HR15N2
Hardness test block HR30N55~73	HDT-B-HR30N2
Hardness test block HR30T73~82	HDT-B-HR30T
Desk	HDT-DESK1





To be continued

exit

ToExcel

transmit

delete

test result

surface

scale

conversion

PASS

Φ

data

statistics

HRC

H\

upper and lower

limit settings

lower limit

conversion value

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+INSIZE

#### SPECIFICATION

Code		HDT-DM290	HDT-DM300	HDT-DM310		
Туре		Rockwell	Superficial Rockwell	Rockwell and Superficial Rockwell		
Hardness	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T		
scale	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV	HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y		
Preliminary te	est force	98N/10kgf for Rockwell	29.4N/3kgf for superficial Rockwell	98N/10kgf for Rockwell 29.4N/3kgf for superficial Rockwell		
Test force		588N (60kg), 980N (100kg), 1471N (150kg)	147N (15kg), 294N (30kg), 441N (45kg)	147N (15kg), 294N (30kg), 441N (45kg), 588N (60kg), 980N (100kg), 1471N (150kg)		
Stage elevation	on	manual				
Load control		automatic (load/dwell/unload)				
Load dwell tin	ne	2~250 seconds, can be set				
Resolution		0.01HR				
Max. workpie	ce height	290mm				
Max. testing v	vidth	220mm				
Max. bore depth		130mm				
Min. testing inner diameter		35mm				
Power supply		220V, 50/60Hz				
Dimension		700×290×880mm				
Weight		85kg	85kg			

#### STANDARD DELIVERY

Code	HDT-DM290	HDT-DM300	HDT-DM310
Main unit	1 pc	1 pc	1 pc
Diamond indenter	1 pc	1 pc	1 pc
Ø1.5875mm carbide ball indenter	1 pc	1 pc	1 pc
Ø150mm flat anvil	1 pc	1 pc	1 pc
V-type anvil	1 pc	1 pc	1 pc
Hardness test block HRC20~30	1 pc	—	1 pc
Hardness test block HRC35~55	1 pc	—	1 pc
Hardness test block HRC60~70	1 pc	—	1 pc
Hardness test block HRB85~100	1 pc	—	1 pc
Hardness test block HRA80~88	1 pc	—	1 pc
Hardness test block HR15N89~91	—	1 pc	1 pc
Hardness test block HR15T88~93	—	1 pc	1 pc
Hardness test block HR30N74~80	—	1 pc	1 pc
Hardness test block HR30T70~82	—	1 pc	1 pc
Computer software and USB cable	1 pc	1 pc	1 pc
Anti-dust cover	1 pc	1 pc	1 pc

#### **OPTIONAL ACCESSORY**

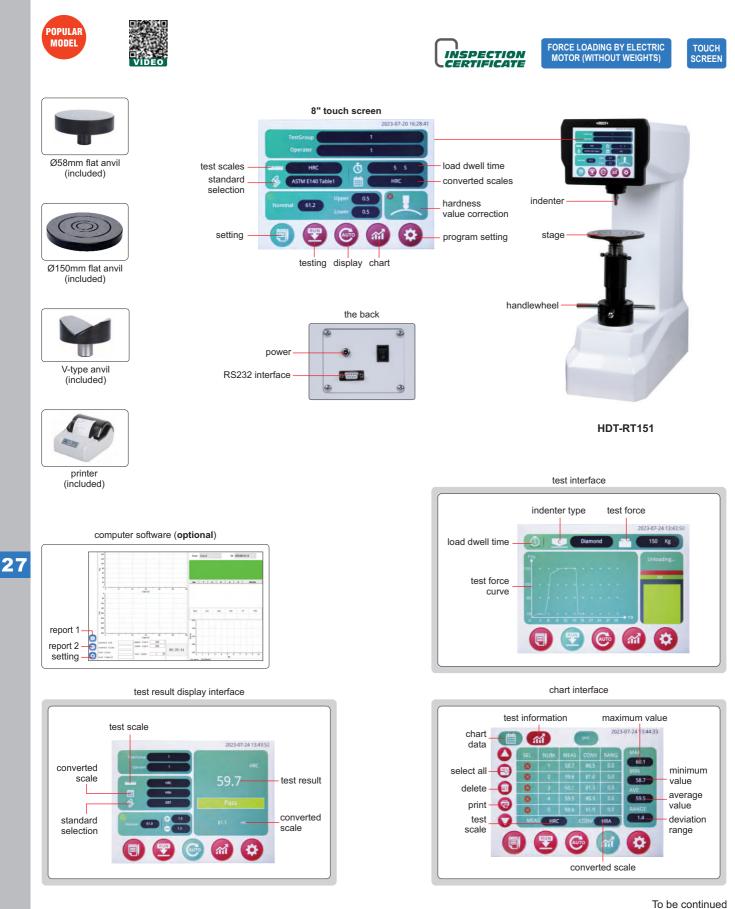
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HR15N78~88	HDT-B-HR15N2

Hardness test block HR15T88~93	HDT-B-HR15T
Hardness test block HR30N55~73	HDT-B-HR30N2
Hardness test block HR30T73~82	HDT-B-HR30T
Ø90mm flat anvil	HDT-DM290-FA
Ø230mm flat anvil	HDT-DM290-FB
Integrated printer (Require pre-installation)	HDT-DM290-PT

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+INSIZE+

# MOTORIZED DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS



+INSIZE

- Electronic loading test force, high accuracy of force value, and stable measurement value
- Touch screen operation and display, simple operation interface
- 15 types of Rockwell hardness scales can be tested
   Convertible to various hardness standards such as HB and HV
- 500 sets of storage
- With correction function, the hardness value can be corrected based on the size of the cylinders

According to ISO 6508

#### SPECIFICATION

Code		HDT-RT151	HDT-RT152	HDT-RT153			
Туре		Rockwell	Superficial Rockwell	Rockwell and Superficial Rockwell			
Measurement range		20~88HRA, 20~100HRB, 20~70HRC	70~91HR15N, 42~80HR30N, 42~70HR45N, 73~93HR15T, 43~82HR30T, 12~72HR45T	Rockwell: 20~88HRA, 20~100HRB, 20~70HRC; Superficial RockWell: 70~91HR15N, 42~80HR30N, 42~70HR45N, 73~93HR15T, 43~82HR30T, 12~72HR45T			
Hardness	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
scale	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV	HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y			
Preliminar	y test force	98N/10kgf for Rockwell	29.4N/3kgf for Superficial Rockwell	98N/10kgf for Rockwell 29.4N/3kgf for Superficial Rockwell			
Test force		588N (60kg), 980N (100kg), 1471N (150kg)	147N (15kg), 294N (30kg), 441N (45kg)	147N (15kg), 294N (30kg), 441N (45kg), 588N (60kg), 980N (100kg), 1471N (150kg)			
Stage elev	ation	manual					
Load contr	rol	automatic (load/dwell/unload)					
Load dwel	l time	2~60 second					
Resolution	1	0.1HR					
Max. workpiece height		230mm					
Max. testing width		170mm					
Power supply		100~240V, 50/60Hz					
Dimension		475×200×700mm					
Weight		70kg					

#### STANDARD DELIVERY

Code	HDT-RT151	HDT-RT152	HDT-RT153
Main unit	1 pc	1 pc	1 pc
Diamond indenter	1 pc	1 pc	1 pc
Ø1.5875mm carbide ball indenter	1 pc	1 pc	1 pc
Ø58mm flat anvil	1 pc	1 pc	1 pc
Ø150mm flat anvil	1 pc	1 pc	1 pc
V-type anvil	1 pc	1 pc	1 pc
Hardness test block HRC20~30	1 pc	—	1 pc
Hardness test block HRC40~50	1 pc	—	—
Hardness test block HRC60~70	1 pc	—	1 pc
Hardness test block HRBW80~100	1 pc	—	1 pc
Hardness test block HRA80~90	1 pc	—	—
Hardness test block HR15N80~90	—	1 pc	
Hardness test block HR30N60~85	—	1 pc	1 pc
Hardness test block HR30TW70~85	—	1 pc	1 pc
Printer	1 pc	1 pc	1 pc
Anti-dust cover	1 pc	1 pc	1 pc

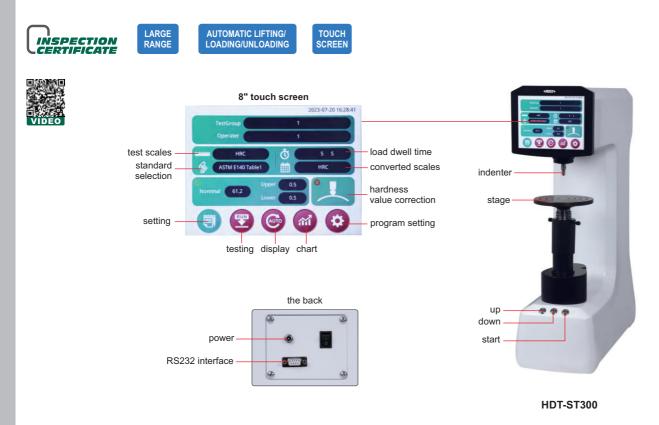
#### **OPTIONAL ACCESSORY**

Hardness test block HRC20~30	HDT-B-HRC1	Hardness test block HR30N55~73	HDT-B-HR30N2
Hardness test block HRC35~55	HDT-B-HRC2	Hardness test block HR30T73~82	HDT-B-HR30T
Hardness test block HRC60~70	HDT-B-HRC3	Software	HDT-RT15-RECEIVER
Hardness test block HRB88~100	HDT-B-HRB	Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Hardness test block HRA80~84	HDT-B-HRA	Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Hardness test block HR15N78~88	HDT-B-HR15N2	Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3

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INSIZE+

# AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS



- Comply with the test standards of GB/T 230, ISO 6508, ASTM E18, JIS Z2245
- Implement the scale conversion standards such as ISO, ASTM, and GB
- 8 inch touch screen for operation and display
- Capable of testing 15 Rockwell hardness scales and surface Rockwell scales
- The main unit can independently store 500 groups of data, and the data will not be lost in case of power failure
- With correction function, the hardness value can be corrected based on the size of the cylinders

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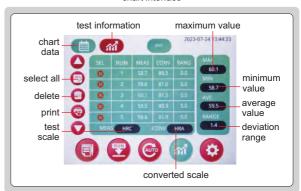


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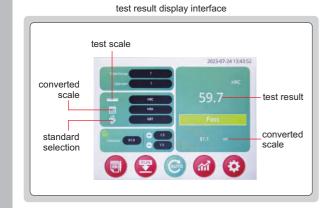


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To be continued

#### chart interface



#### SPECIFICATION

Code		HDT-ST300	HDT-ST310	HDT-ST320		
Туре		Rockwell	Superficial Rockwell	Rockwell and Superficial Rockwell		
Measurement range		20~95HRA, 10~100HRB, 10~70HRC	70~94HR15N, 42~86HR30N, 20~77HR45N, 67~93HR15T, 29~82HR30T, 10~72HR45T	Rockwell: 20~95HRA, 10~100HRB, 10~70HRC; Superficial RockWell: 70~94HR15N, 42~86HR30N, 20~77HR45N, 67~93HR15T, 29~82HR30T, 10~72HR45T		
with indenter included		HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T		
Hardness scale	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV	HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y		
Preliminar	y test force	98N/10kgf for Rockwell	29.4N/3kgf for Superficial Rockwell	98N/10kgf for Rockwell 29.4N/3kgf for Superficial Rockwell		
Test force		588N (60kg), 980N (100kg), 1471N (150kg)	147N (15kg), 294N (30kg), 441N (45kg)	147N (15kg), 294N (30kg), 441N (45kg), 588N (60kg), 980N (100kg), 1471N (150kg)		
Stage elev	ation	automatic up, down and return				
Load contr	rol	automatic (initial test force, main test force loading/holding/unloading)				
Load dwel	l time	2~60second				
Resolution	1	0.1HR				
Max. work	piece height	230mm				
Max. testing width		170mm				
Power supply		100~240V, 50/60Hz				
Dimension		475×200×700mm				
Weight		70kg				

#### STANDARD DELIVERY

Code	HDT-ST300	HDT-ST310	HDT-ST320
Main unit	1 pc	1 pc	1 pc
Diamond indenter	1 pc	1 pc	1 pc
Ø1.5875mm carbide ball indenter	1 pc	1 pc	1 pc
Ø58mm flat anvil	1 pc	1 pc	1 pc
Ø150mm flat anvil	1 pc	1 pc	1 pc
V-type anvil	1 pc	1 pc	1 pc
Hardness test block HRC20~30	1 pc	—	1 pc
Hardness test block HRC40~50	1 pc	<u> </u>	—
Hardness test block HRC60~70	1 pc	—	1 pc
Hardness test block HRBW80~100	1 pc	1 pc	1 pc
Hardness test block HRA80~90	1 pc	—	—
Hardness test block HR15N80~90	—	1 pc	—
Hardness test block HR30N60~85	—	1 pc	1 pc
Hardness test block HR30TW70~85	—	1 pc	1 pc
Printer	1 pc	1 pc	1 pc
Anti-dust cover	1 pc	1 pc	1 pc

#### **OPTIONAL ACCESSORY**

Hardness test block HRC20~30	HDT-B-HRC1	Hardness test block HR30N55~73	HDT-B-HR30N2
Hardness test block HRC35~55	HDT-B-HRC2	Hardness test block HR30T73~82	HDT-B-HR30T
Hardness test block HRC60~70	HDT-B-HRC3	Software	HDT-RT15-HID
Hardness test block HRB88~100	HDT-B-HRB	Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Hardness test block HRA80~84	HDT-B-HRA	Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Hardness test block HR15N78~88	HDT-B-HR15N2	Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3

+INSIZE+

# MOTORIZED ROCKWELL HARDNESS TESTER (BASIC TYPE) CODE HDT-RA151

# 





According to ISO 6508

*<i>AINSIZE* 

Ø58mm 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)

### SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N
Test force	588N, 980N, 1471N
Display	analogue
Stage elevation	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Min. reading	0.5HR
Max. workpiece height	170mm
Max. testing width	128mm (from the center of indenter to the wall of main body)
Power supply	220V, 50/60Hz
Dimension	500×225×640mm
Weight	65kg

#### 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	HDT-RW160-SV
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
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

### MOTORIZED HIGH ROCKWELL HARDNESS TESTER CODE HDT-RM421







According to ISO 6508

#### SPECIFICATION

SF LOII IGATION	
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	automatic (load/dwell/unload)
Load dwell time	1~60 second
Min. reading	0.5HR
Max. workpiece height	400mm
Max. testing width	160mm (form the center of indenter to the wall of main body)
Power supply	220V, 50/60Hz
Dimension	540×300×1030mm
Weight	140kg



*-INSIZE+* 



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



Ø150mm flat anvil (included)



Ø58mm flat anvil (included)



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

#### 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 HRA80~84	1 pc
Hardness test block HRB88~100	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

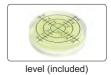
Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Small V-type anvil	HDT-RW160-SV

# MANUAL HIGH ROCKWELL HARDNESS TESTER CODE HDT-RH411











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



Ø150mm flat anvil (included)



Ø58mm flat anvil (included)



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

According to ISO 6508

*<i>AINSIZE* 

#### 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	400mm
Max. testing width	160mm (form the center of indenter to the wall of main body)
Dimension	540×300×1030mm
Weight	140kg

#### STANDARD DELIVERY

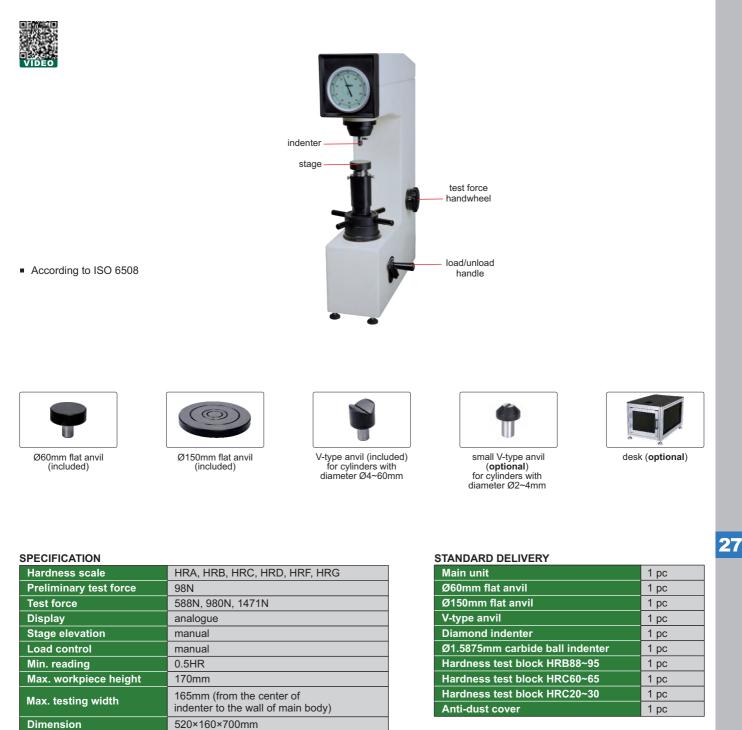
Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Ø1.5875mm steel ball	5 pcs
Level	1 pc
Hardness test block HRA80~84	1 pc
Hardness test block HRB88~100	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Anti-dust cover	1 pc

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	HDT-RW160-SV



# MANUAL ROCKWELL HARDNESS TESTER CODE ISH-R150





#### OPTIONAL ACCESSORY

Weight

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

60kg



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

# INSPECTION CERTIFICATE





According to ISO 6508

POPULAR MODEL



Ø58mm flat anvil (included)



Ø150mm flat anvil (included)



for cylinders with diameter Ø4~60mm







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

#### 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

# SPECIFICATION

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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

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	HDT-RW160-SV
Desk	HDT-DESK



cylinder holder (included)

slice holder (included)

vice (included)



camera (optional)



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### SPECIFICATION

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.5µm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	90mm
Max. testing width	95mm (from the center of indenter to the wall of main body)
X-Y stage	dimension: 100×100mm, travel range: 25×25mm
Power supply	220V, 50/60Hz
Dimension	510×290×570mm
Weight	40kg

#### STANDARD DELIVERY

Main unit	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Slice holder	1 pc
Vice	1 pc
Cylinder holder	1 pc
Anti-dust cover	1 pc

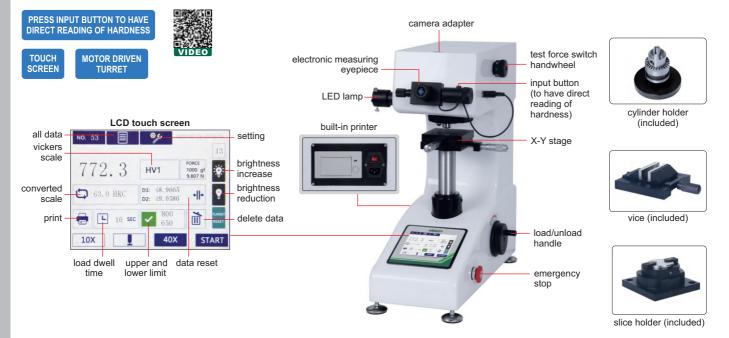
### OPTIONAL ACCESSORY

Hardness test block 400~500HV0.2	HDT-B-HV02C
Hardness test block 700~750HV1	HDT-B-HV1F
Knoop indenter	HDT-MV-KNOOP
Camera	HDT-MVH-CM
Measuring software (manual)	HDT-MVH-SW
Measuring software (automatic)	HDT-MVH-AW
Desk	HDT-DESK



# DIGITAL MICRO-VICKERS HARDNESS TESTER (STANDARD TYPE) CODE HDT-MVH1100





- Touch screen color LCD display
- Data storage and average value calculation
   Automatic switch between the indenter
- and objective lens
- According to ISO 6507



# SPECIFICATION

27

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)	
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1	
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	
Range	5~3000HV	
Length measurement resolution	0.025µm	
Objective/indenter switch	motor driven turret	
Stage lifting	manual	
Load control	automatic (load/dwell/unload)	
Load dwell time	1~60 second	
Objective	10X, 40X	
Eyepiece	10X	
Total magnification	10X (for measurement or observation), 400X (for measurement)	
Max. workpiece height	90mm	
Max. testing width	95mm (from the center of indenter to the wall of main body)	
X-Y stage	dimension: 100×100mm, travel range: 25×25mm	
Data output	built-in printer	
Power supply	220V, 50/60Hz	
Dimension	510×290×570mm	
Weight	40kg	

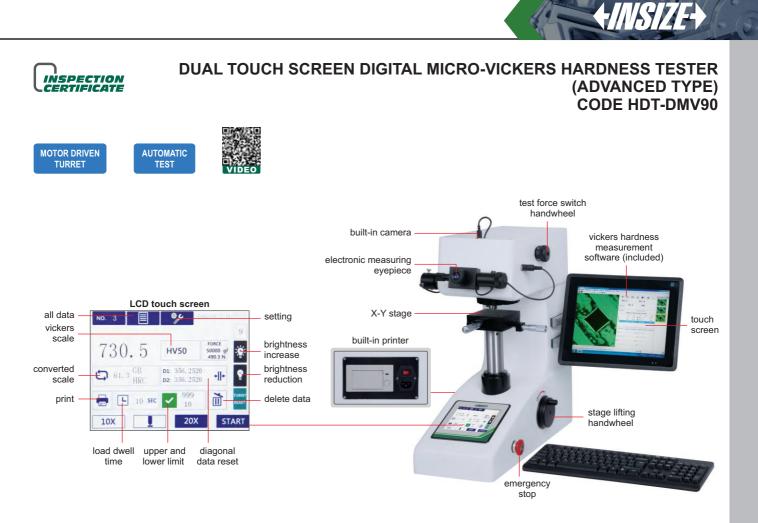
camera and measuring software (optional)



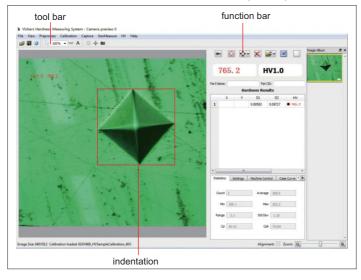
#### STANDARD DELIVERY

Main unit	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Slice holder	1 pc
Vice	1 pc
Cylinder holder	1 pc
Anti-dust cover	1 pc

Hardness test block 400~500HV0.2	HDT-B-HV02C
Hardness test block 700~750HV1	HDT-B-HV1F
Knoop indenter	HDT-MV-KNOOP
Camera	HDT-MVH-CM
Measuring software (manual)	HDT-MVH-SW
Measuring software (automatic)	HDT-MVH-AW



#### vickers hardness measurement software (included)







27

cylinder holder (included)





desk (optional)

- Dual touch screen control, high-definition image measurement and analysis
- One click start, automatic pressing and automatic measurement
- The host and vickers hardness measurement software can be operated independently
- Automatic switch between the indenter and objective lens
- Data storage and average value calculation
- Can connect with wired and wireless networks to transmit data
- According to ISO 6507

To be continued

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#### SPECIFICATION

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.01µm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	90mm
Max. testing width	95mm (from the center of indenter to the wall of main body)
X-Y stage	dimensions: 100×100mm, travel range: 25×25mm
Data output	built-in printer, USB
Power supply	220V, 50/60Hz
Dimension	500×420×480mm
Weight	42kg

#### STANDARD DELIVERY

Main unit	1 pc
Vickers hardness measurement software	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Wireless keyboard	1 pc
Wireless mouse	1 pc
Vice	1 pc
Slice holder	1 pc
Cylinder holder	1 pc
Auti-dust cover	1 pc

Hardness test block 400~500HV0.2	HDT-B-HV02C
Hardness test block 700~750HV1	HDT-B-HV1F
Knoop indenter	HDT-MV-KNOOP
Desk	HDT-DESK
OFFICE software	7313-OFFICE



automatic X-Y stage





cylinder holder (included)





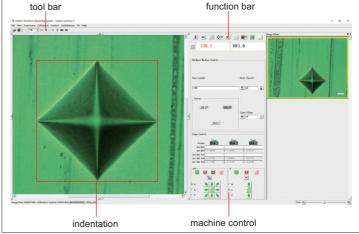


slice holder (included)

desk (optional)

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vickers hardness measurement software (included)





 Suitable for micro-hardness determination of various metals and non-metal materials, effective depth and heat affected area measurement, especially suitable for measuring workpieces hardness gradient distribution curve and surface hardness after heat treatment, effective hardening layer depth

- Automatic switch between the indenter and objective lens
- Z-axis automatic focus, X, Y axis automatic movement, can be for multi-point continuous measurement
- Automatic moving table by built-in step motor, high positioning accuracy, good repeatability, fast moving speed, high efficiency
- Automatic moving table bidirectional movement, equipped with safety devices to avoid misoperation
- The software can control the hardness tester hardware operation, two-way communication with each other
- The image acquisition device has fast reaction speed, high automatic measurement accuracy and good repeatability
- The system can automatically generate Word or Excel test report, and the report template can be modified
- According to ISO 6507

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#### AUTOMATIC TEST CONTROL SYSTEM

Hardness tester control	<ol> <li>automatic turret, automatic loading, automatic measurement</li> <li>automatic display of test force, load dwell time, illumination brightness</li> </ol>	
Automatic control of X-Y stage	software system automatic control of X-Y stage movement	
Measurement mode	<ol> <li>automatic mode: automatic loading, automatic measurement, automatic display of measurement results</li> <li>manual measurement mode can be selected</li> </ol>	
Automatic measurement	about 0.3sec of one indentation	
Measurement repeatability	±1% (700HV/500gf)	
The smallest indentation that can be measured	about 5µm (automatic measurement)	
Data output format/ edit functions	<ol> <li>inspection reports can be customized according to customer requirements</li> <li>the depth of hardened layer is shown in table form</li> <li>output various measurement data, hardness table, hardening layer depth, maximum value, average value, minimum value, image with hardness value</li> </ol>	

#### AUTOMATIC X-Y STAGE

Drive motor	step motor
Drive control	movement control by software, speed is adjustable
Dimension	110×110mm
Max. travel distance	50×50mm
Min. travel distance	1µm
Movement speed	1~10mm/sec, speed can be adjusted
Displacement repetition accuracy	within 1µm

#### SPECIFICATION

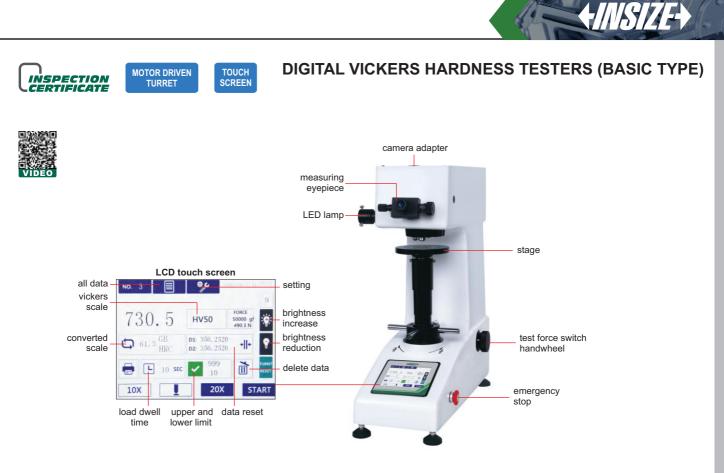
Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.01µm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Focus mode	Z-axis autofocus
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	80mm
Max. testing width	110mm (from the center of indenter to the wall of main body)
Pixel	5M
Communication interface	RS232
Power supply	220V, 50/60Hz
Dimension	520×290×680mm
Weight	42kg

#### STANDARD DELIVERY

Main unit	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Automatic X-Y stage drive box	1 pc
Vickers hardness measurement software	1 pc
Computer	1 pc
Vice	1 pc
Slice holder	1 pc
Cylinder holder	1 pc
Auti-dust cover	1 pc

#### OPTIONAL ACCESSORY

Hardness test block 400~500HV0.2	HDT-B-HV02C
Hardness test block 700~750HV1	HDT-B-HV1F
Knoop indenter	HDT-MV-KNOOP
Desk	HDT-DESK
OFFICE software	7313-OFFICE



HDT-VE56

- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter
- and objective lens According to ISO 6507



input the indentation diagonal lengthes, the hardness value is shown on screen automatically

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camera and measuring software (optional)



To be continued





Ø58mm flat anvil (included)



V-type anvil (included)



(included)

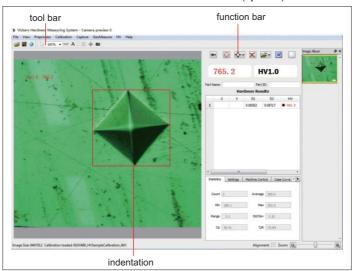




camera (optional)

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#### vickers hardness measurement software (optional)



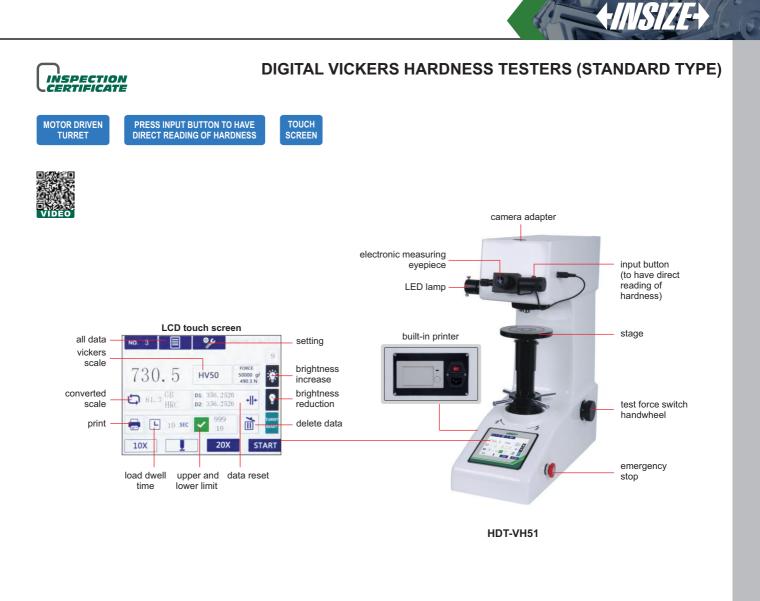
#### SPECIFICATION

Code	HDT-VE03	HDT-VE14	HDT-VE35	HDT-VE56
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50
Converted scales	HRA, HRB, HRC, HRD,	HRF, HV, HK, HBW, HR15	5N, HR30N, HR45N, HR15	5T, HR30T, HR45T
Range	8~3000HV	8~3000HV		
Length measurement resolution	0.5µm			
Objective/indenter switch	motor driven turret			
Stage lifting	manual			
Load control	automatic (load/dwell/unload)			
Load dwell time	1~60 second			
Objective	10X, 20X			
Eyepiece	10X			
Total magnification	100X (for measurement or observation), 200X (for measurement)			
Max. workpiece height	175mm			
Max. testing width	135mm (form the center of indenter to the wall of main body)			
Power supply	220V, 50/60Hz			
Dimension	580×320×660mm			
Weight	55kg			

#### STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block 400~500HV10	1 pc
Hardness test block 700~750HV50	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Anti-dust cover	1 pc

Hardness test block 400~500HV10	HDT-B-HV10D
Hardness test block 700~750HV50	HDT-B-HV50G
Desk	HDT-DESK
Vickers hardness tester camera (fit 5kg and 10kg)	HDT-MVH-CM1
Vickers hardness tester camera (fit 30kg and 50kg)	HDT-MVH-CM2
XY working platform	HDT-VEH-ST
Measuring software (manual)	HDT-MVH-SW
Measuring software (automatic)	HDT-MVH-AW



- Touch screen color LCD display
- Data storage and average value calculation
   Automatic switch between the indenter
- and objective lensAccording to ISO 6507



Ø58mm flat anvil (included)



V-type anvil (included)





desk (optional)



(optional)



camera (optional)

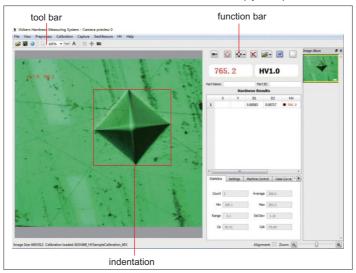
camera and measuring software (optional)



To be continued

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#### vickers hardness measurement software (optional)



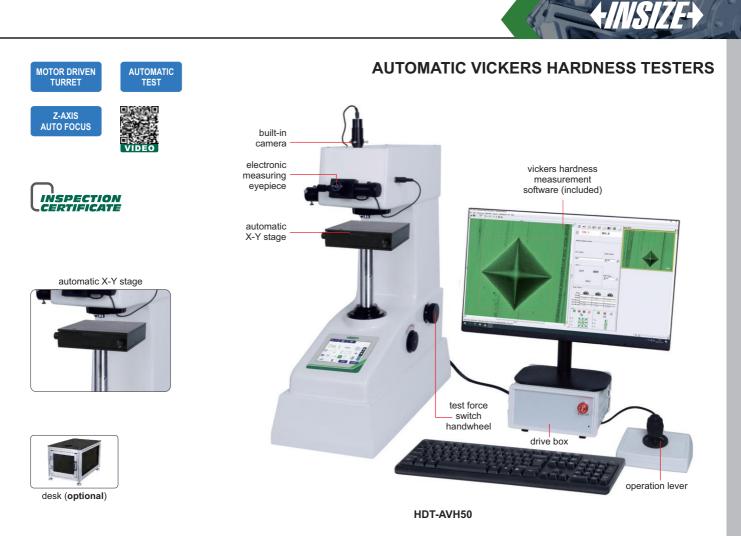
#### SPECIFICATION

Code	HDT-VH05	HDT-VH11	HDT-VH31	HDT-VH51
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50
Converted scales	HRA, HRB, HRC, HRD,	HRF, HV, HK, HBW, HR15	5N, HR30N, HR45N, HR15	5T, HR30T, HR45T
Range	8~3000HV			
Length measurement resolution	0.125µm	0.125µm		
Objective/indenter switch	motor driven turret			
Stage lifting	manual			
Load control	automatic (load/dwell/unload)			
Load dwell time	1~60 second			
Objective	10X, 20X			
Eyepiece	10X			
Total magnification	100X (for measurement or observation), 200X (for measurement)			
Max. workpiece height	175mm			
Max. testing width	135mm (form the center of indenter to the wall of main body)			
Output	built-in printer			
Power supply	220V, 50/60Hz			
Dimension	580×320×660mm			
Weight	55kg			

#### STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block	2 pcs
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Anti-dust cover	1 pc

Hardness test block	page 875~876
Desk	HDT-DESK
Vickers hardness tester camera (fits 5kgf and 10kgf)	HDT-MVH-CM1
Vickers hardness tester camera (fits 30kgf and 50kgf)	HDT-MVH-CM2
XY working platform	HDT-VEH-ST
Measuring software (manual)	HDT-MVH-SW
Measuring software (automatic)	HDT-MVH-AW



- Suitable for vickers hardness determination of various metals and non-metal materials, effective depth and heat affected area measurement, especially suitable for measuring workpieces hardness gradient distribution curve and surface hardness after heat treatment, effective hardening layer depth
- Automatic switch between the indenter and objective lens
- Z-axis automatic focus, X, Y axis automatic movement, can be for multi-point continuous measurement
- Automatic moving table by built-in step motor, high positioning accuracy, good repeatability, fast moving speed, high efficiency
- Automatic moving table bidirectional movement, equipped with safety devices to avoid misoperation

1 pc

1 pc

2 pcs

1 pc

1 pc

1 pc

1 pc

1 pc of each

- The software can control the hardness tester hardware operation, two-way communication with each other
- The image acquisition device has fast reaction speed, high automatic measurement accuracy and good repeatability
- The system can automatically generate Word or Excel test report, and the report template can be modified
- According to ISO 6507

STANDARD DELIVERY

10X, 20X objective

Hardness test block

Automatic X-Y stage

measurement software

Vickers hardness

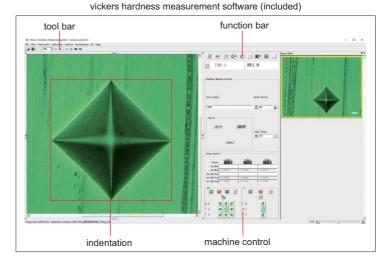
Auti-dust cover

Vickers indenter

Main unit

drive box

Computer



To be continued

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#### AUTOMATIC TEST CONTROL SYSTEM

Hardness tester control	1.automatic turret, automatic loading, automatic measurement 2.automatic display of test force, load dwell time, illumination brightness
Automatic control of X-Y stage	software system automatic control of X-Y stage movement
Measurement mode	<ol> <li>automatic mode: automatic loading, automatic measurement, automatic display of measurement results</li> <li>manual measurement mode can be selected</li> </ol>
Automatic measurement	about 0.3sec of one indentation
Measurement repeatability	±1% (700HV/5kgf)
The smallest indentation that can be measured	about 10µm (automatic measurement)
Data output format/ edit functions	<ol> <li>1.inspection reports can be customized according to customer requirements</li> <li>2.the depth of hardened layer is shown in table form</li> <li>3.output various measurement data, hardness table, hardening layer depth, maximum value, average value, minimum value, image with hardness value</li> </ol>

#### AUTOMATIC X-Y STAGE

Drive motor	step motor
Drive control	movement control by software, speed is adjustable
Dimension	110x110mm
Max. travel distance	50x50mm
Min. travel distance	1µm
Movement speed	1~10mm/sec, speed can be adjusted
Displacement repetition accuracy	within 1µm

#### SPECIFICATION

Code	HDT-AVH05	HDT-AVH10	HDT-AVH30	HDT-AVH50
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50
Converted scales	HRA, HRB, HRC, HRD,	HRF, HV, HK, HBW, HR15	5N, HR30N, HR45N, HR15	5T, HR30T, HR45T
Range	5~3000HV			
Length measurement resolution	0.01µm			
Objective/indenter switch	motor driven turret			
Stage lifting	manual/electric			
Focus mode	Z-axis autofocus			
Load control	automatic (load/dwell/unload)			
Load dwell time	1~60 second			
Objective	10x, 20X			
Eyepiece	10X			
Total magnification	100X (for measurement or observation), 200X (for measurement)			
Max.workpiece height	160mm			
Max. testing width	130mm (from the center of indenter to the wall of main body)			
Pixel	5M			
Communication interface	RS232			
Power supply	220V, 50/60Hz			
Dimension	630x300x800mm			
Weight	75kg			

Hardness test block	page 875~876
Desk	HDT-DESK
OFFICE software	7313-OFFICE





INSPECTION









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Ø78mm flat anvil (included)



Ø200mm flat anvil (included)



27



desk (optional)



measuring microscope (included)

Hardness test block 100~200HBW2.5/187.5	HDT-B-HB25A1
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 100~200HBW10/3000	HDT-B-HB10A1
Desk	HDT-DESK
Measuring software	HDT-MB

Touch screen color LCD display

- Measure indentation diameter by measuring microscope, then input the diameters, the hardness value is shown on screen automatically
- Electric loading test force, without weights
- Casting case, structurally stable and not deformed
- According to ISO 6506

#### SPECIFICATION

		-	
Test force		62.5kgf, 100kgf, 125kgf, 187.5kgf, 250kgf, 500kgf, 750kgf, 1000kgf, 1500kgf, 3000kgf	
Brinell scale		HBW2.5/62.5, HBW2.5/187.5, HBW5/62.5, HBW5/125, HBW5/250, HBW5/750, HBW10/100, HBW10/250, HBW10/500, HBW10/1000, HBW10/1500, HBW10/3000	
Range		8~650HBW	
Hardness resolution		0.1HBW	
Stage elevation		manual	
Load control		automatic (load/dwell/unload)	
Load dwell time		0~60 second	
Measuring	magnification	20X	
microscope	resolution	0.01mm	
Max. workpiece height		230mm	
Max. testing width		140mm (form the center of indenter to the wall of main body)	
Power supply		220V, 50/60Hz	
Dimension		510×210×750mm	
Weight		130kg	

#### STANDARD DELIVERY

Main unit	1 pc
Ø78mm 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	1 pc
Hardness test block 100~200HBW2.5/187.5	1 pc
Hardness test block 90~200HBW10/1000	1 pc
Hardness test block 100~200HBW10/3000	1 pc
Measuring microscope	1 pc



# MOTORIZED DIGITAL BRINELL HARDNESS TESTERS (STANDARD TYPE)



# FORCE LOADING BY ELECTRIC MOTOR (WITHUOT WEIGHT)



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- Touch screen color LCD display
- Measure the indentation with microscope, automatically calculate the hardness value and display it on the screen
   Electric loading test force, without weights
- Casting case, structurally stable and not deformed
- According to ISO 6506

#### SPECIFICATION

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SPECIFICATION			
Code		HDT-MB610	HDT-MB710
Turret rotation		manual automatic	
Test force		62.5kgf, 100kgf, 125kgf, 187.5kgf, 250kgf, 500kgf, 75	50kgf, 1000kgf, 1500kgf, 3000kgf
Brinell scale		HBW2.5/62.5, HBW2.5/187.5, HBW5/125, HBW5/750, HBW10/100, HBW10/250, HBW10/500, HBW10/1000, HBW10/1500, HBW10/3000	
Range		8~650HBW	
Hardness reso	lution	0.1HBW	
Stage elevation	n	manual	
Load control		automatic (load/dwell/unload)	
Load dwell tim	Load dwell time 0~60 second		
Measuring	magnification	20X	
microscope	resolution	0.1µm	
Max. workpiec	workpiece height 200mm		
Max. testing width 135mm (form the center of indenter to the wall of main body)		in body)	
Data output built-in printer, RS232			
Power supply 220V, 50/60Hz			
Dimension 510×210×750mm			
Weight 130kg			

#### STANDARD DELIVERY

Main unit	1 pc
Ø78mm 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	1 pc
Hardness test block 100~200HBW2.5/187.5	1 pc
Hardness test block 90~200HBW10/1000	1 pc
Hardness test block 100~200HBW10/3000	1 pc

Hardness test block 100~200HBW2.5/187.5	HDT-B-HB25A1
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 100~200HBW10/3000	HDT-B-HB10A1
Desk	HDT-DESK
Measuring software	HDT-MB



INSPECTION CERTIFICATE

#### TOUCH SCREEN

## MOTORIZED DIGITAL ROCKWELL/BRINELL/VICKERS HARDNESS TESTER CODE HDT-BRV330





Ø60mm flat anvil (included)



Ø150mm flat anvil (included)

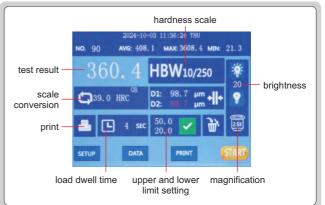


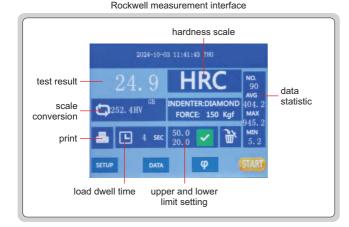
V-type anvil (included)

- 5.6" color touch LCD display
- Electronic closed-loop control of the applied test force, easy to use, stable display value
- Total of 21 measurement scales, including Brinell, Rockwell and Vickers test method
- Convertible to various hardness standards such as HB, HV, HRC, HK, etc.
- Two types of internal and external illumination are available, and different illumination is used according to the size of the indentation to make the indentation clearer
- Average, maximum and minimum value statistic are available
- Data storage and query function, can be printed out by the printer
- According to ISO 6506, ISO 6507, ISO 6508, ASTM E-10, ASTM E-18, ASTM E-92

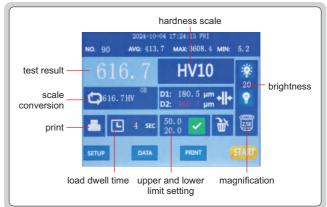


Brinell measurement interface





#### Vickers measurement interface



To be continued

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### SPECIFICATION

Туре	Brinell	Rockwell	Vickers
Test force	306.5N (31.25kg), 612.9N (62.5kg), 1226N (125kg), 1839N (187.5kg), 980.8N (100kg), 2451.6N (250kg)	588N (60kg), 980N (100kg), 1471N (150kg)	49.03N (5kg), 98.07N (10kg), 196.1N (20kg), 294.2N (30kg), 490.3N (50kg), 980.7N (100kg)
Hardness scale	HBW2.5/31.25, HBW2.5/62.5, HBW2.5/187.5, HBW5/62.5, HBW5/125, HBW5/250, HBW10/100, HBW10/250	HRA, HRB, HRC, HRD, HRF, HRG	HV3, HV5, HV10, HV20, HV30, HV50, HV100
Conversion scale	HRA, HRB, HRC, HRD,HRF, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HB, HV, HK		
Range	5-650HBW 20-88HRA, 20-100HRB, 20-70HRC 1		10-2900HV
Stage lifting	manual		
Load control	automatic (load/dwell/unload)		
Eyepiece	10X		
Objective	2.5X (included, for Brinell), 5X (included)	led, for Vickers), 10X ( <b>optional</b> , for Vic	kers)
Resolution	0.1HB	0.1HR	0.1HV
Load dwell time	0~99 seconds, can be set		
Max. testing width	160mm		
Max. workpiece height	165mm	180mm	165mm
Power supply	220V, 50/60Hz		
Dimension	550×235×720mm		
Weight	80kg		

#### STANDARD DELIVERY

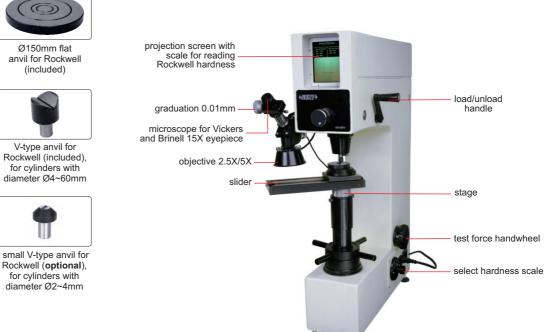
Main unit	1 pc
Diamond Rockwell indenter	1 pc
Diamond Vickers indenter	1 pc
Ø2.5mm ball indenter	1 pc
Ø5mm ball indenter	1 pc
Ø1.5875 carbide ball indenter	1 pc
Ø150mm flat anvil	1 pc
Ø60mm flat anvil	1 pc
V-type anvil	1 pc
Skateboard stage	1 pc
Internal lighting bulb	1 pc
External lighting bulb	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRB85~100	1 pc
Hardness test block HBW2.5/187.5	1 pc
Hardness test block HV30	1 pc
Anti-dust cover	1 pc

10X objective	HDT-OB-10
Ø10mm ball indenter	HDT-BRV-INDENTER10
Hardness test block 20~30HRC	HDT-B-HRC1
Hardness test block 35~55HRC	HDT-B-HRC2
Hardness test block 60~70HRC	HDT-B-HRC3
Hardness test block 88~100HRB	HDT-B-HRB
Hardness test block 80~84HRA	HDT-B-HRA
Hardness test block 400~500HBW2.5/187.5	HDT-B-HB25A4
Hardness test block 400~500HV5	HDT-B-HV5D

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

-INSIZE+)





Ø60mm flat anvil for Vickers and Brinell (included)

Ø60mm flat

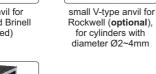
anvil for Rockwell

(included)



V-type anvil for Vickers and Brinell (included)





a 5

Ø150mm flat

anvil for Rockwell

(included)

V-type anvil for

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

#### **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 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

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

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INSIZE Czech | +420 544 500 151 | info@insize.cz | www.insize.cz