

# AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTER (ADVANCED TYPE) CODE HDT-CRS200

BUILT-IN BLUETOOTH

AUTOMATIC TEST

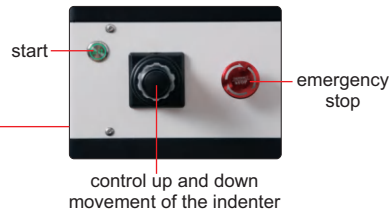
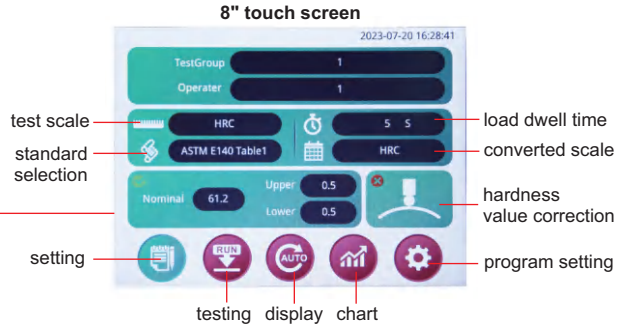
FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

TOUCH SCREEN

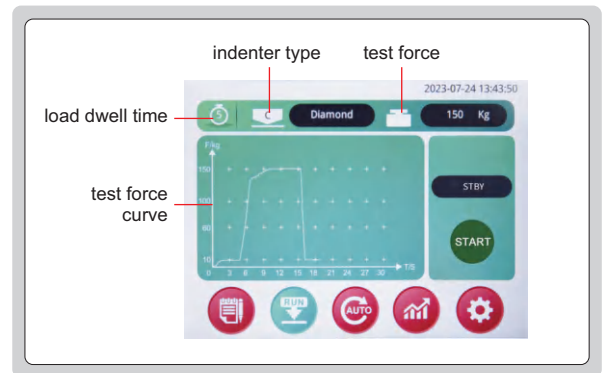
HIGH ACCURACY

HIGH EFFICIENCY

INSPECTION CERTIFICATE



test interface



- One click operation can obtain measurement results, 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

test result display interface

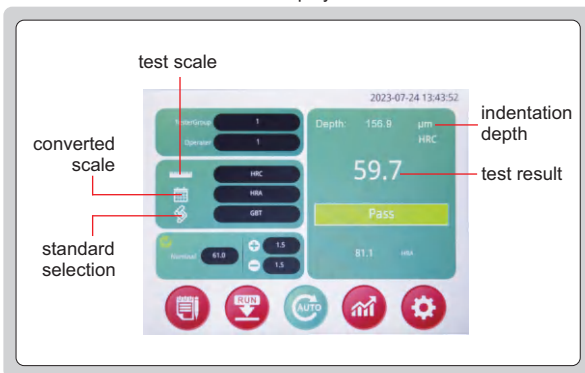
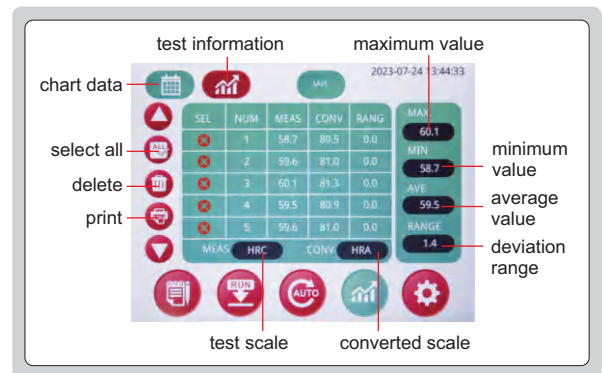


chart interface



To be continued

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Ø58mm flat anvil  
(included)



V-type anvil  
(included)



bluetooth printer  
(included)

### SPECIFICATION

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

### OPTIONAL ACCESSORY

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

**MOTORIZED DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS (DOLPHIN-NOSE TYPE)**

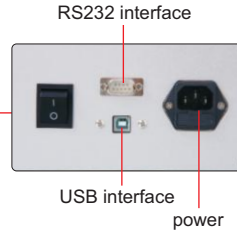
FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

TOUCH SCREEN

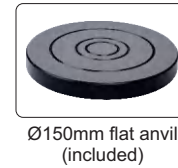
**INSPECTION CERTIFICATE**



workpiece demonstration



**HDT-DM310**

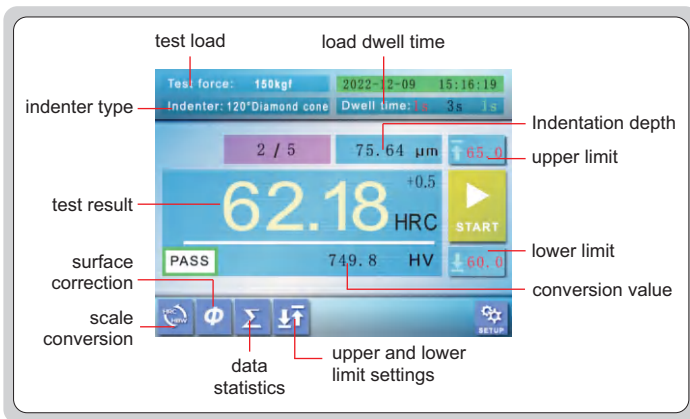


- Full closed-loop precise control, real-time monitoring of test force, greatly increase the accuracy
- Dolphin-nose structure indenter, more measuring space
- Measurements on 30 Rockwell and Superficial Rockwell scales
- Convertible to various hardness standards such as HB, HV, HLD, HK and tensile strength
- 250 sets of data are stored independently in the mainframe, which can be accessed at any time
- Mean, variance, maximum and minimum statistics are available
- USB communication port, can be connected to an external computer, measurement data Excel output
- Correction function automatically corrects the measurement results of curved parts
- Conforms to ASTM E-18, ISO 6508

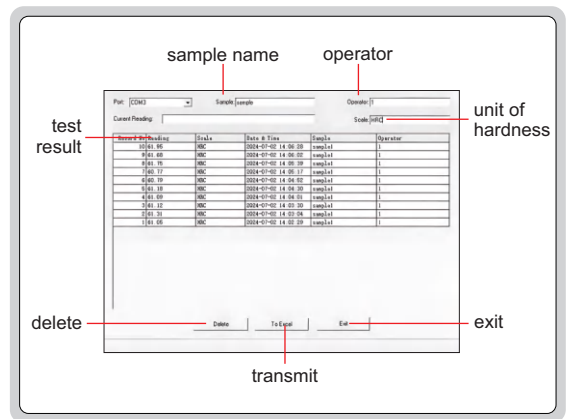


integrated printer (optional)

test interface



computer software (included)



To be continued



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**SPECIFICATION**

Code		HDT-DM290	HDT-DM300	HDT-DM310
Type		Rockwell	Superficial Rockwell	Rockwell and Superficial Rockwell
Hardness scale	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
	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 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 elevation		manual		
Load control		automatic (load/dwell/unload)		
Load dwell time		2~250 seconds, can be set		
Resolution		0.01HR		
Max. workpiece height		290mm		
Max. testing width		220mm		
Max. bore depth		130mm		
Min. testing inner diameter		35mm		
Power supply		220V, 50/60Hz		
Dimension		700×290×880mm		
Weight		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

## MOTORIZED DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS

POPULAR MODEL



INSPECTION CERTIFICATE

FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

TOUCH SCREEN



Ø58mm flat anvil (included)



Ø150mm flat anvil (included)

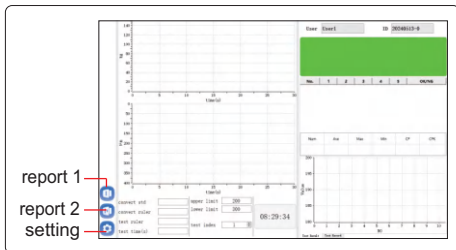


V-type anvil (included)



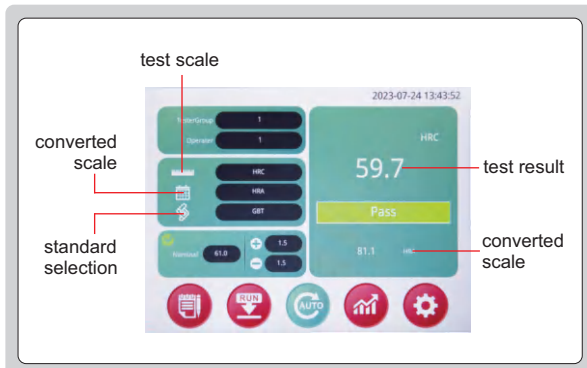
printer (included)

computer software (optional)



report 1  
report 2  
setting

test result display interface



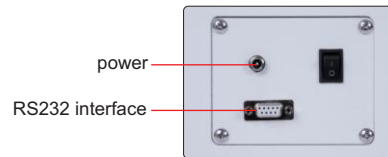
test scale  
converted scale  
standard selection  
test result  
converted scale

8" touch screen

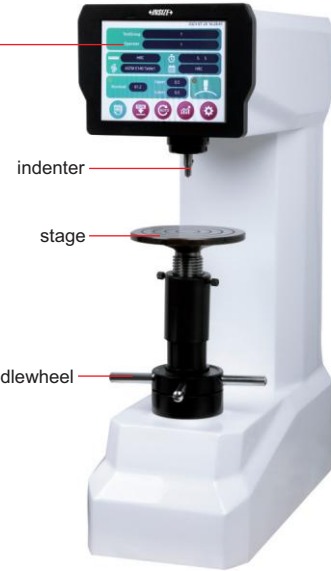


test scales  
standard selection  
setting  
testing  
display  
chart  
load dwell time  
converted scales  
hardness value correction  
program setting

the back



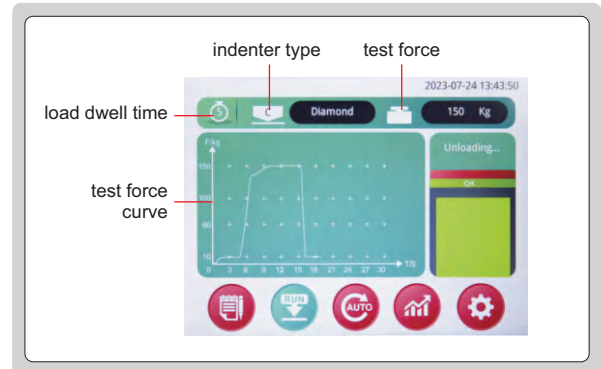
power  
RS232 interface



indenter  
stage  
handlewheel

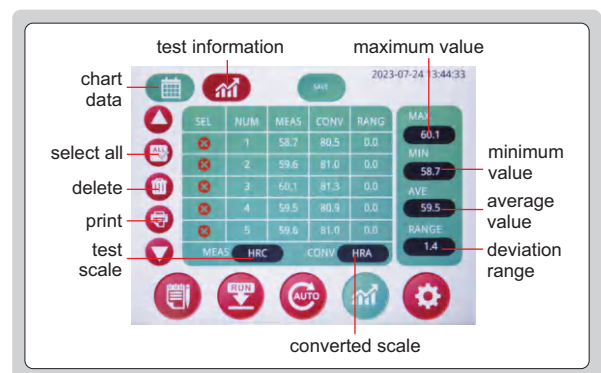
HDT-RT151

test interface



indenter type  
test force  
load dwell time  
test force curve

chart interface



test information  
maximum value  
chart data  
select all  
delete  
print  
test scale  
converted scale  
minimum value  
average value  
deviation range

To be continued



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- 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
Type		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 scale	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
	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 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 elevation		manual		
Load control		automatic (load/dwell/unload)		
Load dwell time		2~60 second		
Resolution		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 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 HR30N55~73	HDT-B-HR30N2
Hardness test block HR30T73~82	HDT-B-HR30T
Software	HDT-RT15-RECEIVER
Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3

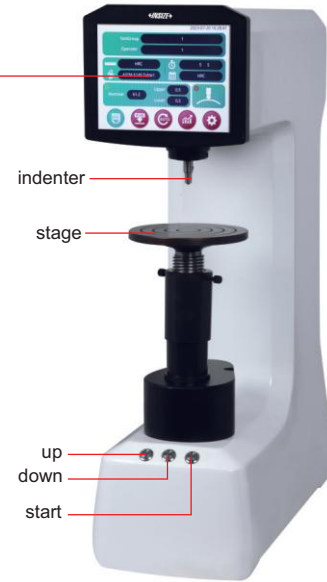
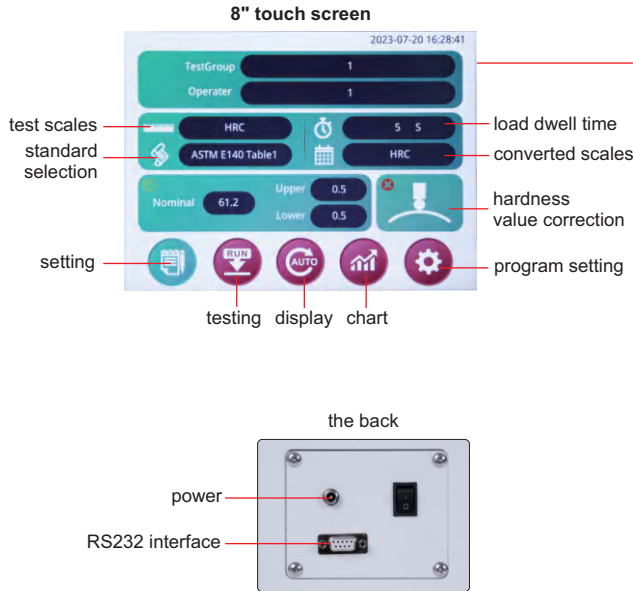
# AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS



LARGE RANGE

AUTOMATIC LIFTING/LOADING/UNLOADING

TOUCH SCREEN



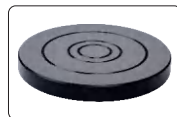
HDT-ST300

- 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

27



Ø58mm flat anvil (included)



Ø150mm flat anvil (included)



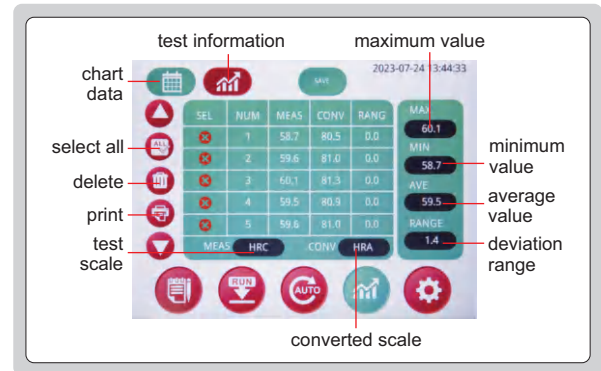
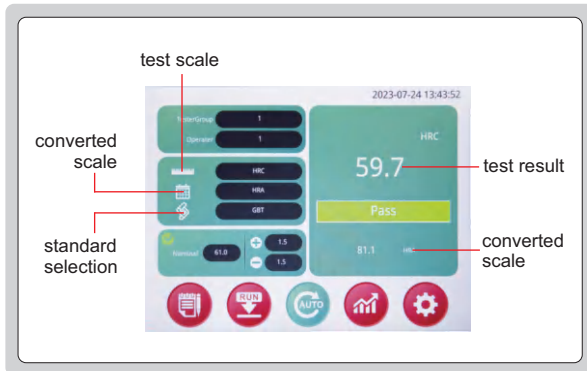
V-type anvil (included)



printer (included)

test result display interface

chart interface



To be continued



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### SPECIFICATION

Code		HDT-ST300	HDT-ST310	HDT-ST320
Type		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
Hardness scale	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
	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 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 elevation		automatic up, down and return		
Load control		automatic (initial test force, main test force loading/holding/unloading)		
Load dwell time		2~60second		
Resolution		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-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	—	—
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 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 HR30N55~73	HDT-B-HR30N2
Hardness test block HR30T73~82	HDT-B-HR30T
Software	HDT-RT15-HID
Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3



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



■ According to ISO 6508



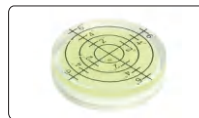
Ø58mm flat anvil (included)



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
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

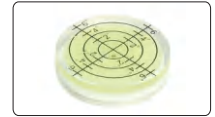
## STANDARD DELIVERY

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

## 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

# MOTORIZED HIGH ROCKWELL HARDNESS TESTER CODE HDT-RM421



level (included)



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

## 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	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

## STANDARD DELIVERY

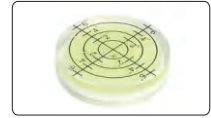
Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Ø1.5875mm steel ball	5 pcs
Level	1 pc
Hardness test block HRA80~84	1 pc
Hardness test block HRB88~100	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55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

## 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

# MANUAL HIGH ROCKWELL HARDNESS TESTER CODE HDT-RH411

INSPECTION  
CERTIFICATE



level (included)



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

## SPECIFICATION

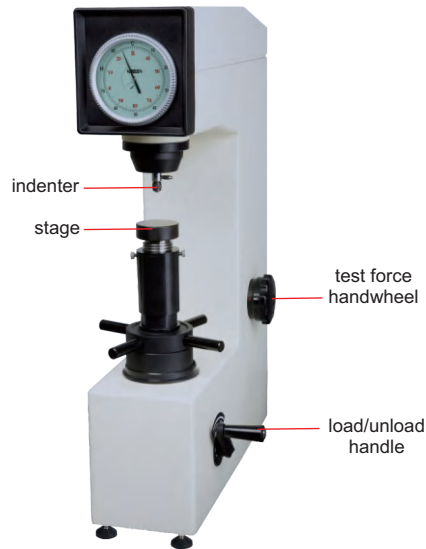
<b>Hardness scale</b>	HRA, HRB, HRC, HRD, HRF, HRG
<b>Preliminary test force</b>	98N (10kg)
<b>Test force</b>	588N (60kg), 980N (100kg), 1471N (150kg)
<b>Display</b>	analogue
<b>Stage elevation</b>	manual
<b>Load control</b>	manual
<b>Min. reading</b>	0.5HR
<b>Max. workpiece height</b>	400mm
<b>Max. testing width</b>	160mm (form the center of indenter to the wall of main body)
<b>Dimension</b>	540×300×1030mm
<b>Weight</b>	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

## 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



■ According to ISO 6508



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)

**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	manual
Min. reading	0.5HR
Max. workpiece height	170mm
Max. testing width	165mm (from the center of indenter to the wall of main body)
Dimension	520×160×700mm
Weight	60kg

**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
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
Small V-type anvil	ISH-SMALLANVIL
Desk	HDT-DESK

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



**POPULAR  
MODEL**



■ According to ISO 6508



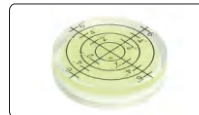
Ø58mm flat anvil  
(included)



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

## 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

## 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

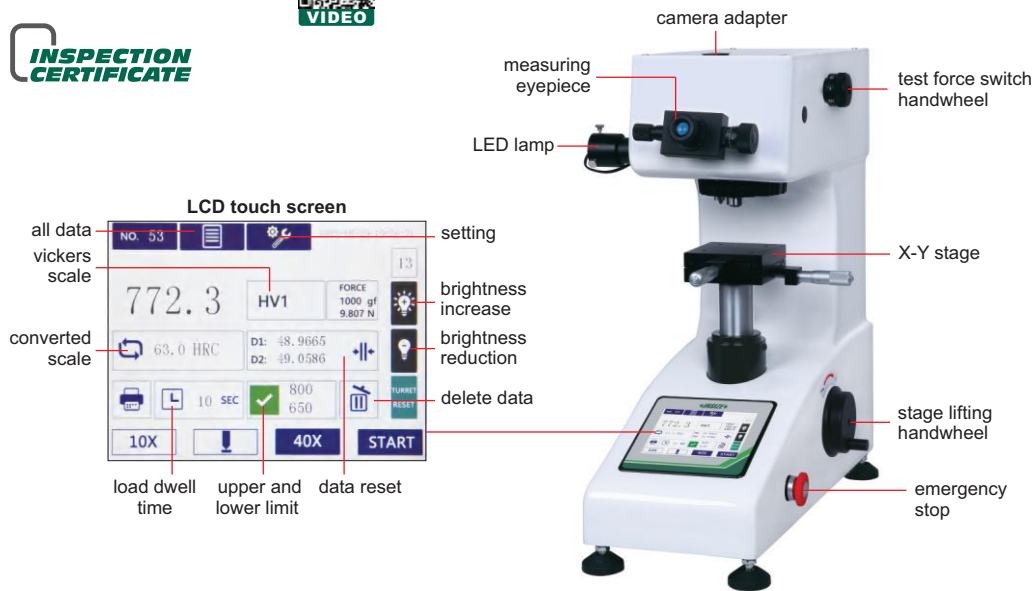
MOTOR DRIVEN TURRET

TOUCH SCREEN



## DIGITAL MICRO-VICKERS HARDNESS TESTER (BASIC TYPE) CODE HDT-MVE1300

**INSPECTION CERTIFICATE**

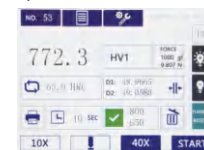


step: 1



measure indentation diagonal lengths by measuring microscope

step: 2



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

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

camera and measuring software (optional)



cylinder holder (included)



slice holder (included)



vice (included)



desk (optional)



camera (optional)



### 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

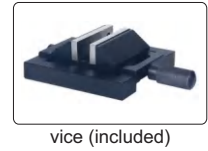
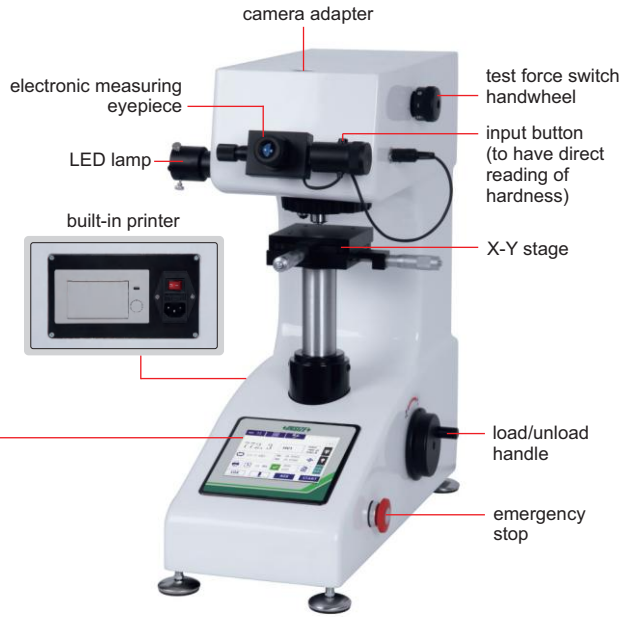
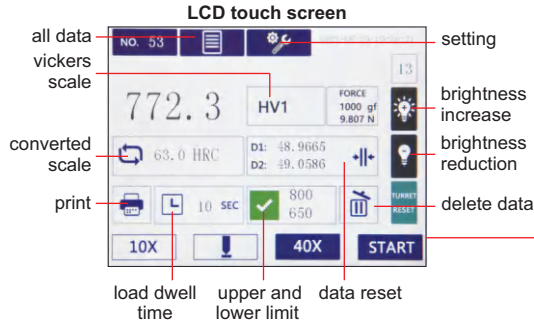


PRESS INPUT BUTTON TO HAVE DIRECT READING OF HARDNESS



TOUCH SCREEN

MOTOR DRIVEN TURRET



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



camera (optional)

camera and measuring software (optional)



## SPECIFICATION

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

## STANDARD DELIVERY

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

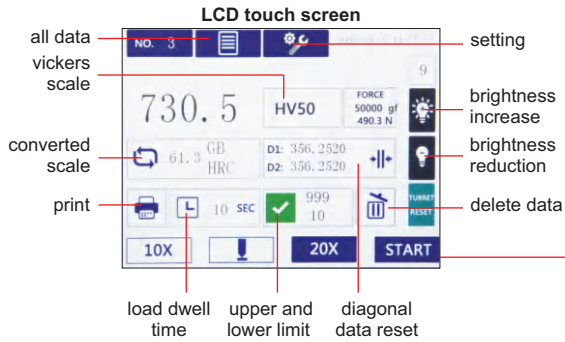
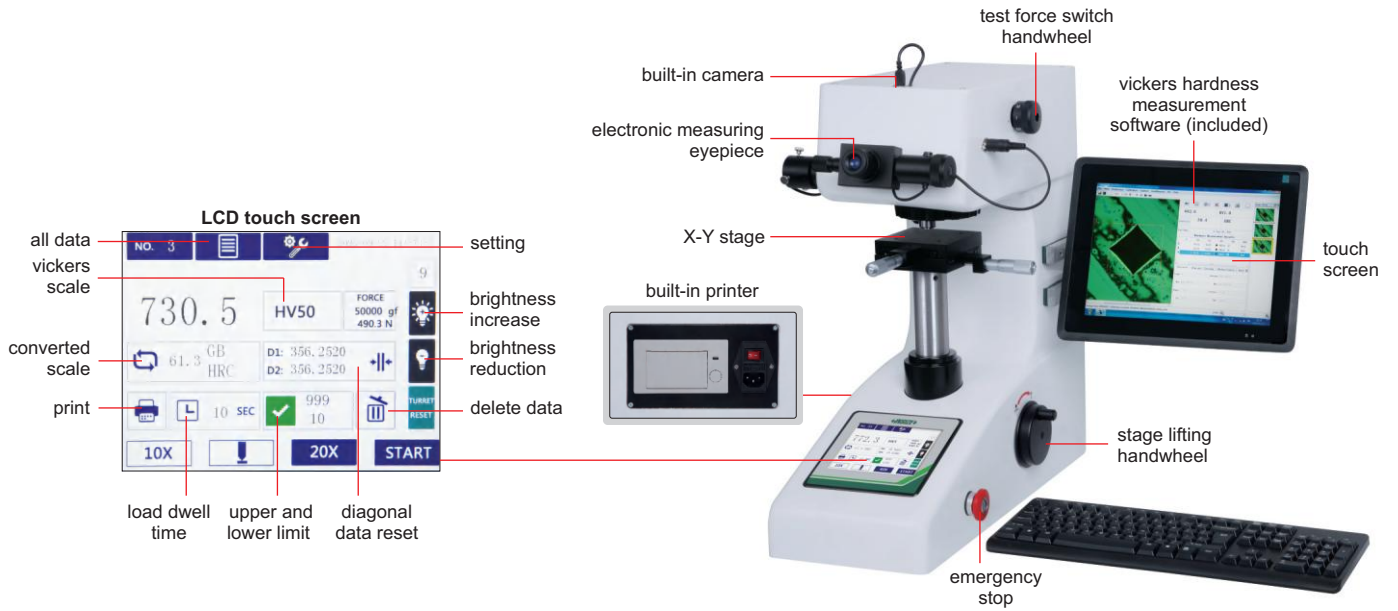
## OPTIONAL ACCESSORY

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

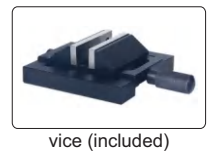
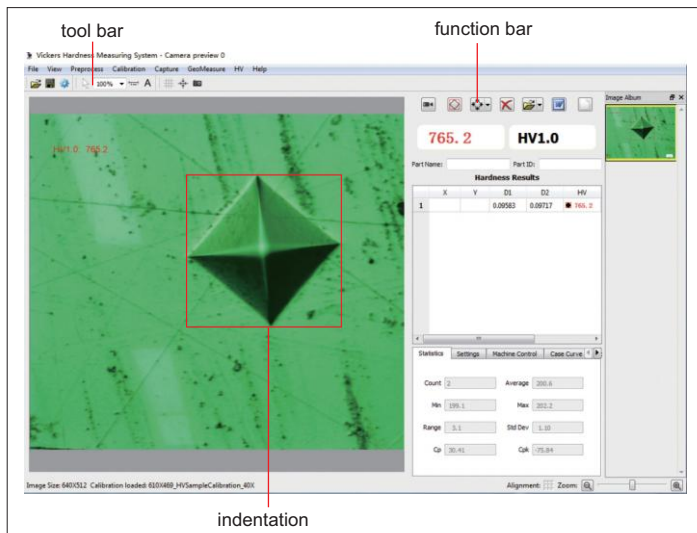
# DUAL TOUCH SCREEN DIGITAL MICRO-VICKERS HARDNESS TESTER (ADVANCED TYPE) CODE HDT-DMV90

MOTOR DRIVEN TURRET

AUTOMATIC TEST



vickers hardness measurement software (included)



- 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



Continued from previous page

#### SPECIFICATION

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

#### STANDARD DELIVERY

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

#### OPTIONAL ACCESSORY

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

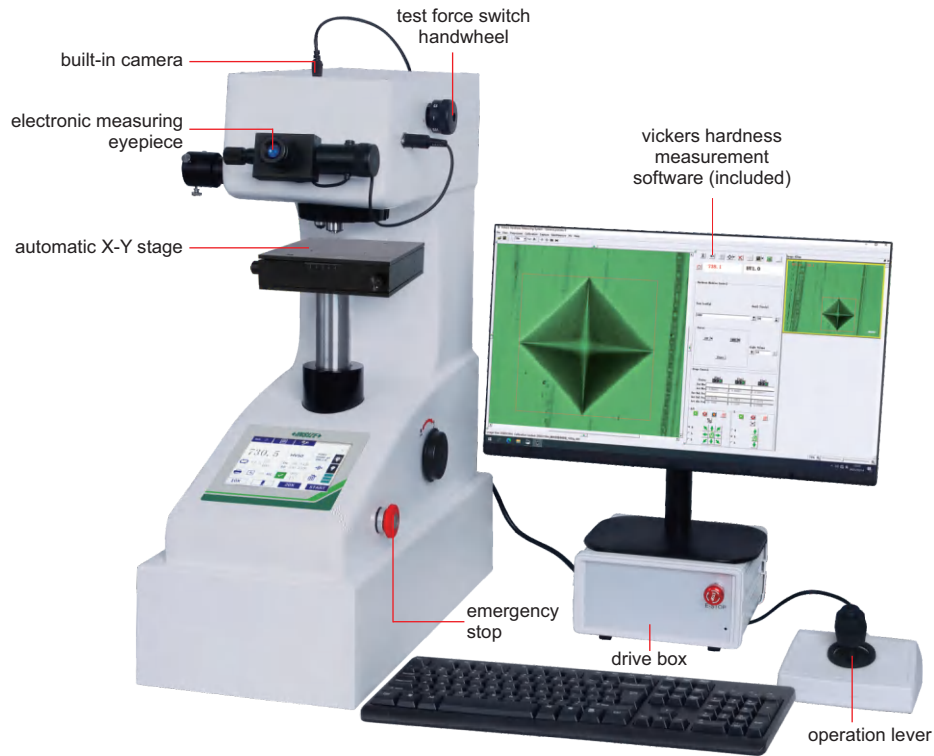
MOTOR DRIVEN  
TURRET

AUTOMATIC  
TEST

Z-AXIS  
AUTOFOCUS

# AUTOMATIC MICRO-VICKERS HARDNESS TESTER CODE HDT-AMV338

INSPECTION  
CERTIFICATE



automatic X-Y stage



cylinder holder (included)



vice (included)



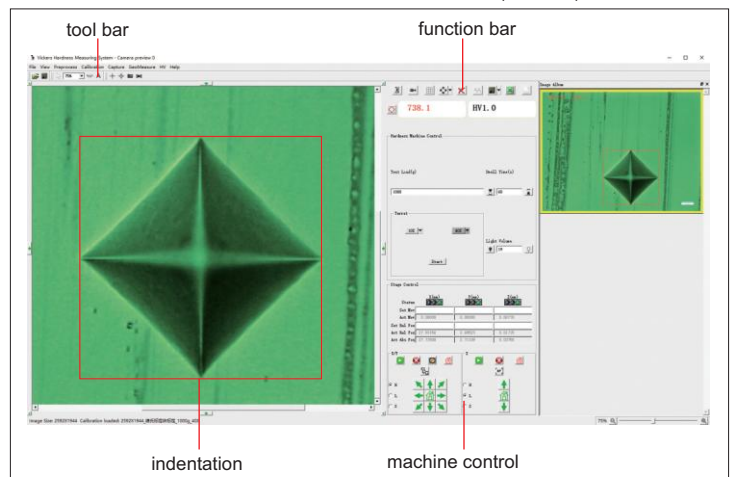
slice holder (included)



desk (optional)

- 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

vickers hardness measurement software (included)



Continued from previous page

### AUTOMATIC TEST CONTROL SYSTEM

<b>Hardness tester control</b>	1. automatic turret, automatic loading, automatic measurement 2. automatic display of test force, load dwell time, illumination brightness
<b>Automatic control of X-Y stage</b>	software system automatic control of X-Y stage movement
<b>Measurement mode</b>	1. automatic mode: automatic loading, automatic measurement, automatic display of measurement results 2. manual measurement mode can be selected
<b>Automatic measurement</b>	about 0.3sec of one indentation
<b>Measurement repeatability</b>	±1% (700HV/500gf)
<b>The smallest indentation that can be measured</b>	about 5µm (automatic measurement)
<b>Data output format/edit functions</b>	1. inspection reports can be customized according to customer requirements 2. the depth of hardened layer is shown in table form 3. output various measurement data, hardness table, hardening layer depth, maximum value, average value, minimum value, image with hardness value

### AUTOMATIC X-Y STAGE

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

### SPECIFICATION

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

### STANDARD DELIVERY

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

### OPTIONAL ACCESSORY

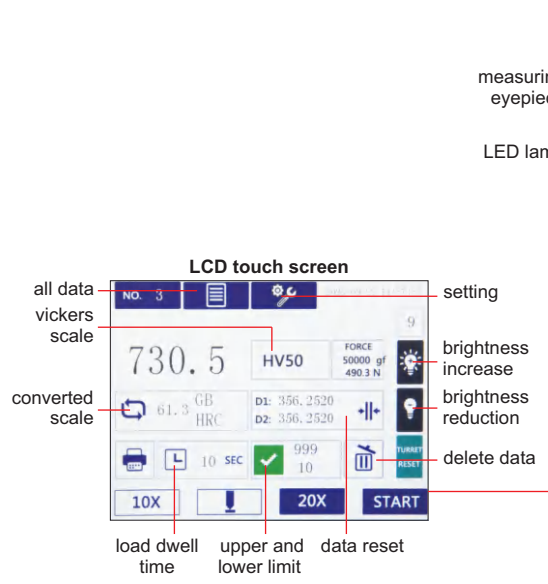
<b>Hardness test block 400~500HV0.2</b>	HDT-B-HV02C
<b>Hardness test block 700~750HV1</b>	HDT-B-HV1F
<b>Knoop indenter</b>	HDT-MV-KNOOP
<b>Desk</b>	HDT-DESK
<b>OFFICE software</b>	7313-OFFICE



MOTOR DRIVEN TURRET

TOUCH SCREEN

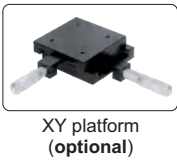
# DIGITAL VICKERS HARDNESS TESTERS (BASIC TYPE)



HDT-VE56

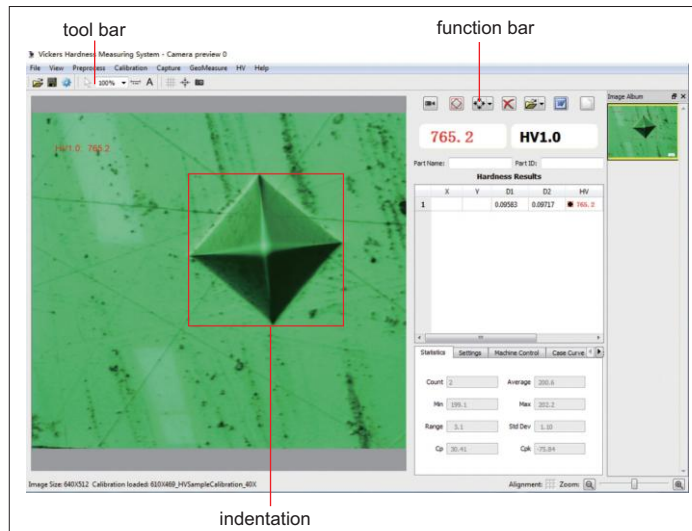
- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- According to ISO 6507

<p>step: 1</p> <p>measure indentation diagonal lengths by measuring microscope</p>	<p>step: 2</p> <p>input the indentation diagonal lengths, the hardness value is shown on screen automatically</p>
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Continued from previous page

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, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
Range	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

### OPTIONAL ACCESSORY

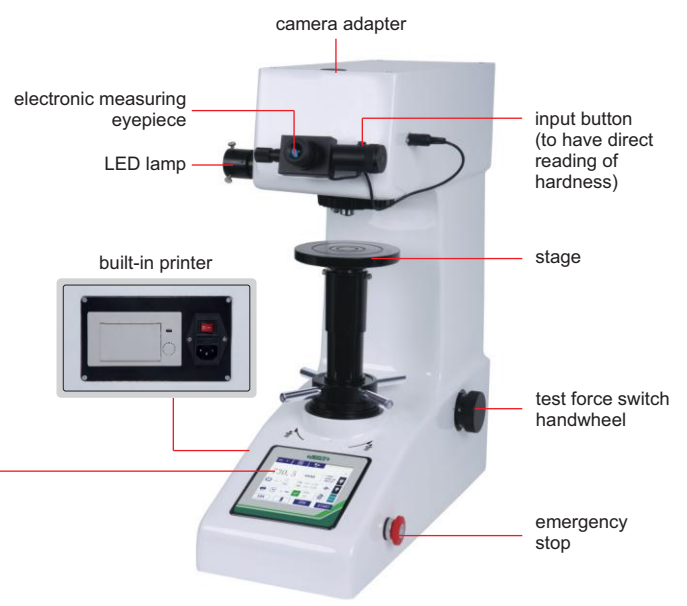
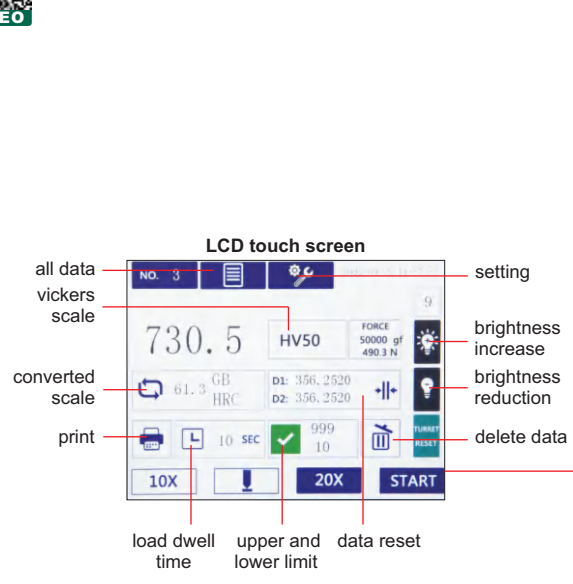
Hardness test block 400~500HV10	HDT-B-HV10D
Hardness test block 700~750HV50	HDT-B-HV50G
Desk	HDT-DESK
Vickers hardness tester camera (fit 5kg and 10kg)	HDT-MVH-CM1
Vickers hardness tester camera (fit 30kg and 50kg)	HDT-MVH-CM2
XY working platform	HDT-VEH-ST
Measuring software (manual)	HDT-MVH-SW
Measuring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

# DIGITAL VICKERS HARDNESS TESTERS (STANDARD TYPE)

MOTOR DRIVEN  
TURRET

PRESS INPUT BUTTON TO HAVE  
DIRECT READING OF HARDNESS

TOUCH  
SCREEN

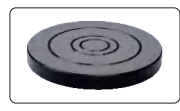


HDT-VH51

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



Ø58mm flat anvil (included)



Ø150mm flat anvil (included)



XY platform (optional)



V-type anvil (included)



desk (optional)



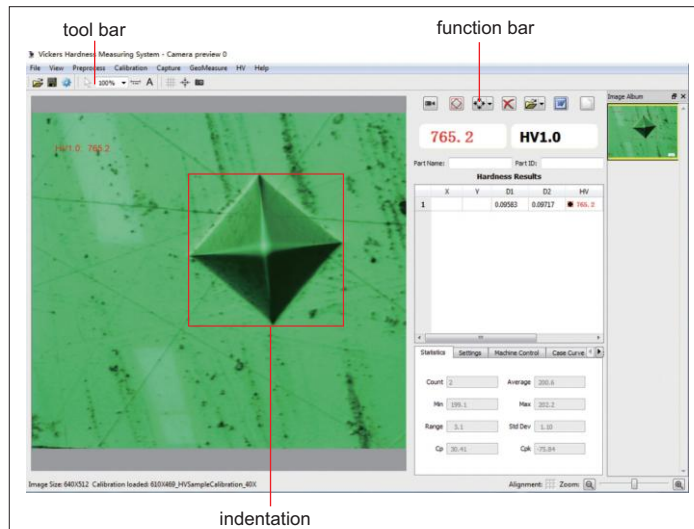
camera (optional)



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, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
Range	8~3000HV			
Length measurement resolution	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

### OPTIONAL ACCESSORY

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

# AUTOMATIC VICKERS HARDNESS TESTERS

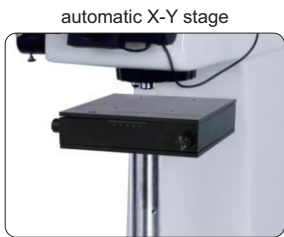
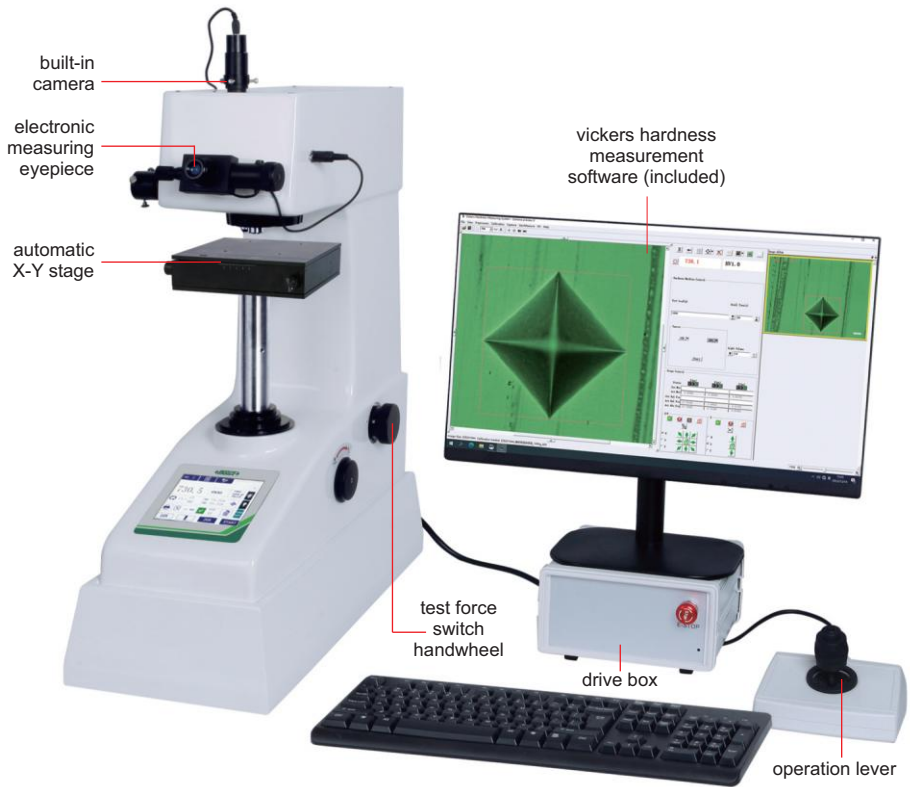
MOTOR DRIVEN TURRET

AUTOMATIC TEST

Z-AXIS AUTO FOCUS



INSPECTION CERTIFICATE



automatic X-Y stage



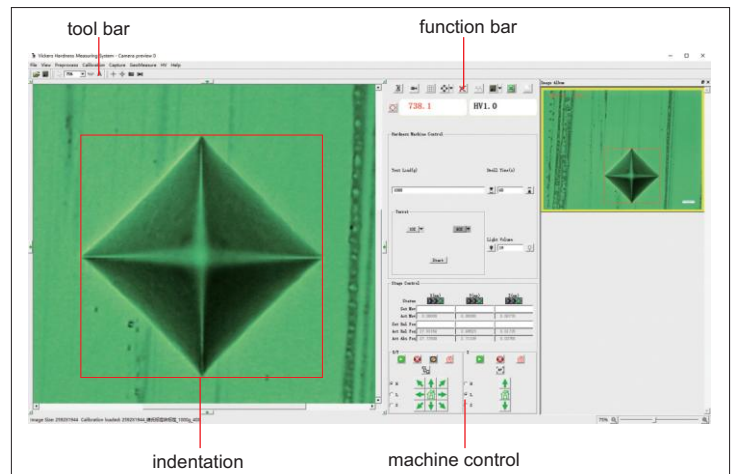
desk (optional)

HDT-AVH50

- 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
- 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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vickers hardness measurement software (included)



## STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block	2 pcs
Automatic X-Y stage drive box	1 pc
Vickers hardness measurement software	1 pc
Computer	1 pc
Anti-dust cover	1 pc

To be continued



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#### AUTOMATIC TEST CONTROL SYSTEM

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

#### AUTOMATIC X-Y STAGE

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

#### SPECIFICATION

Code	HDT-AVH05	HDT-AVH10	HDT-AVH30	HDT-AVH50
<b>Test force</b>	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
<b>Vickers scales</b>	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
<b>Converted scales</b>	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
<b>Range</b>	5~3000HV			
<b>Length measurement resolution</b>	0.01µm			
<b>Objective/indenter switch</b>	motor driven turret			
<b>Stage lifting</b>	manual/electric			
<b>Focus mode</b>	Z-axis autofocus			
<b>Load control</b>	automatic (load/dwell/unload)			
<b>Load dwell time</b>	1~60 second			
<b>Objective</b>	10x, 20X			
<b>Eyepiece</b>	10X			
<b>Total magnification</b>	100X (for measurement or observation), 200X (for measurement)			
<b>Max. workpiece height</b>	160mm			
<b>Max. testing width</b>	130mm (from the center of indenter to the wall of main body)			
<b>Pixel</b>	5M			
<b>Communication interface</b>	RS232			
<b>Power supply</b>	220V, 50/60Hz			
<b>Dimension</b>	630x300x800mm			
<b>Weight</b>	75kg			

#### OPTIONAL ACCESSORY

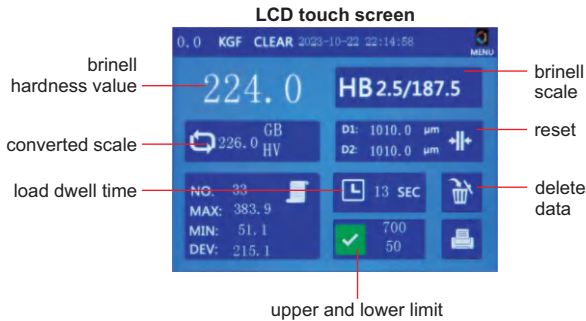
<b>Hardness test block</b>	page 875~876
<b>Desk</b>	<b>HDT-DESK</b>
<b>OFFICE software</b>	<b>7313-OFFICE</b>



# MOTORIZED DIGITAL BRINELL HARDNESS TESTER (BASIC TYPE) CODE HDT-MBE320

TOUCH  
SCREEN

FORCE LOADING BY ELECTRIC  
MOTOR (WITHUOT WEIGHT)



step: 1

measure indentation diameter by measuring microscope

step: 2

input the diameters, the hardness value is shown on screen automatically

- 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 microscope	magnification	20X
	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

## OPTIONAL ACCESSORY

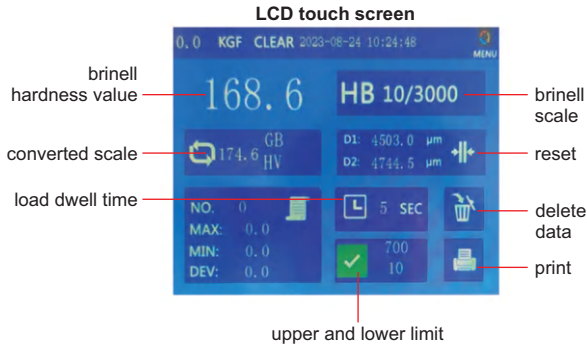
Hardness test block 100~200HBW2.5/187.5	HDT-B-HB25A1
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 100~200HBW10/3000	HDT-B-HB10A1
Desk	HDT-DESK
Measuring software	HDT-MB□□□

# MOTORIZED DIGITAL BRINELL HARDNESS TESTERS (STANDARD TYPE)



TOUCH SCREEN

FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHT)



- 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

Code	HDT-MB610	HDT-MB710
Turret rotation	manual	automatic
Test force	62.5kgf, 100kgf, 125kgf, 187.5kgf, 250kgf, 500kgf, 750kgf, 1000kgf, 1500kgf, 3000kgf	
Brinell scale	HBW2.5/62.5, HBW2.5/187.5, HBW5/125, 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 microscope	magnification	20X
	resolution	0.1µm
Max. workpiece height	200mm	
Max. testing width	135mm (form the center of indenter to the wall of main 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

## OPTIONAL ACCESSORY

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**

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

**FORCE LOADING BY ELECTRIC MOTOR (WITHUOT WEIGHT)**

**INSPECTION CERTIFICATE**



Ø60mm flat anvil (included)



Ø150mm flat anvil (included)

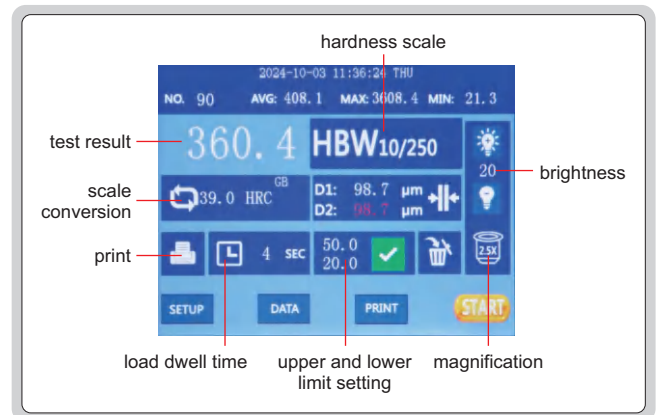


V-type anvil (included)

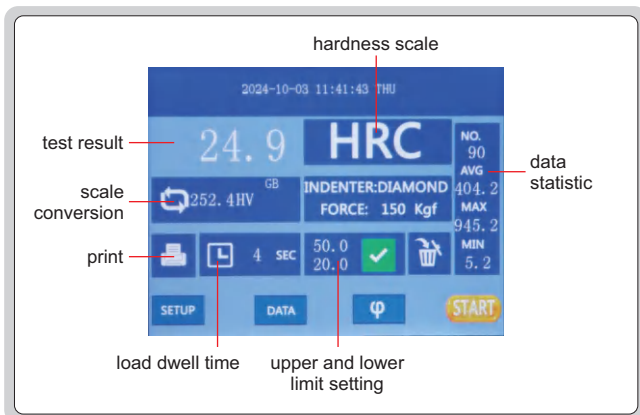


- 5.6" color touch LCD display
- Electronic closed-loop control of the applied test force, easy to use, stable display value
- Total of 21 measurement scales, including Brinell, Rockwell and Vickers test method
- Convertible to various hardness standards such as HB, HV, HRC, HK, etc.
- Two types of internal 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

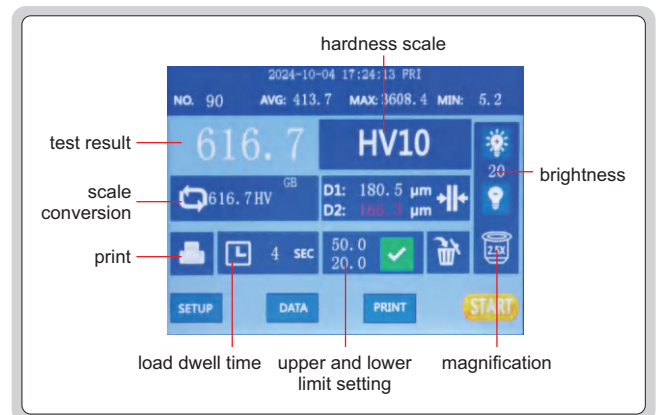
Brinell measurement interface



Rockwell measurement interface



Vickers measurement interface



To be continued

Continued from previous page

#### SPECIFICATION

Type	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	10-2900HV
Stage lifting	manual		
Load control	automatic (load/dwell/unload)		
Eyepiece	10X		
Objective	2.5X (included, for Brinell), 5X (included, for Vickers), 10X ( <b>optional</b> , for Vickers)		
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

#### OPTIONAL ACCESSORY

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



**INSPECTION  
CERTIFICATE**

## 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



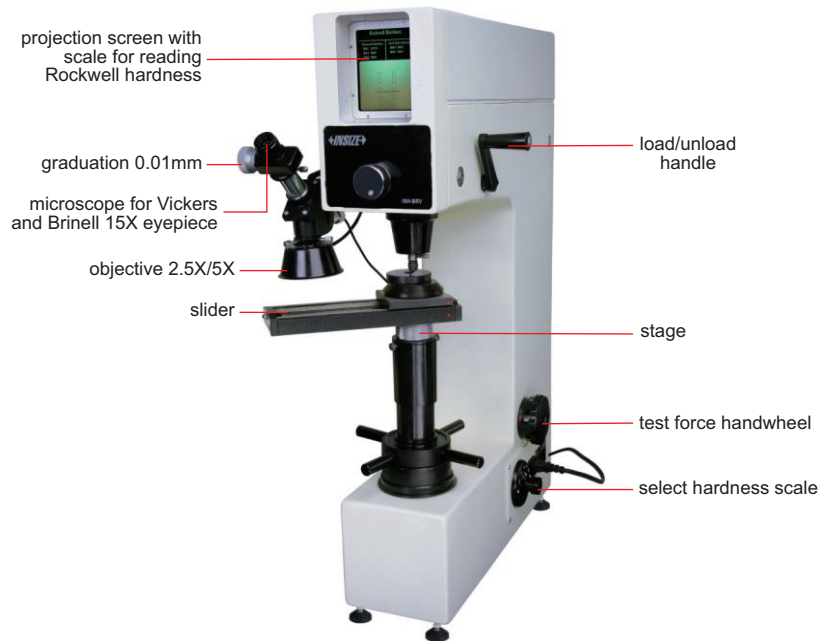
V-type anvil for Vickers and Brinell (included)



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

### 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

### 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