



MEASUREMENT SOLUTION PROVIDER



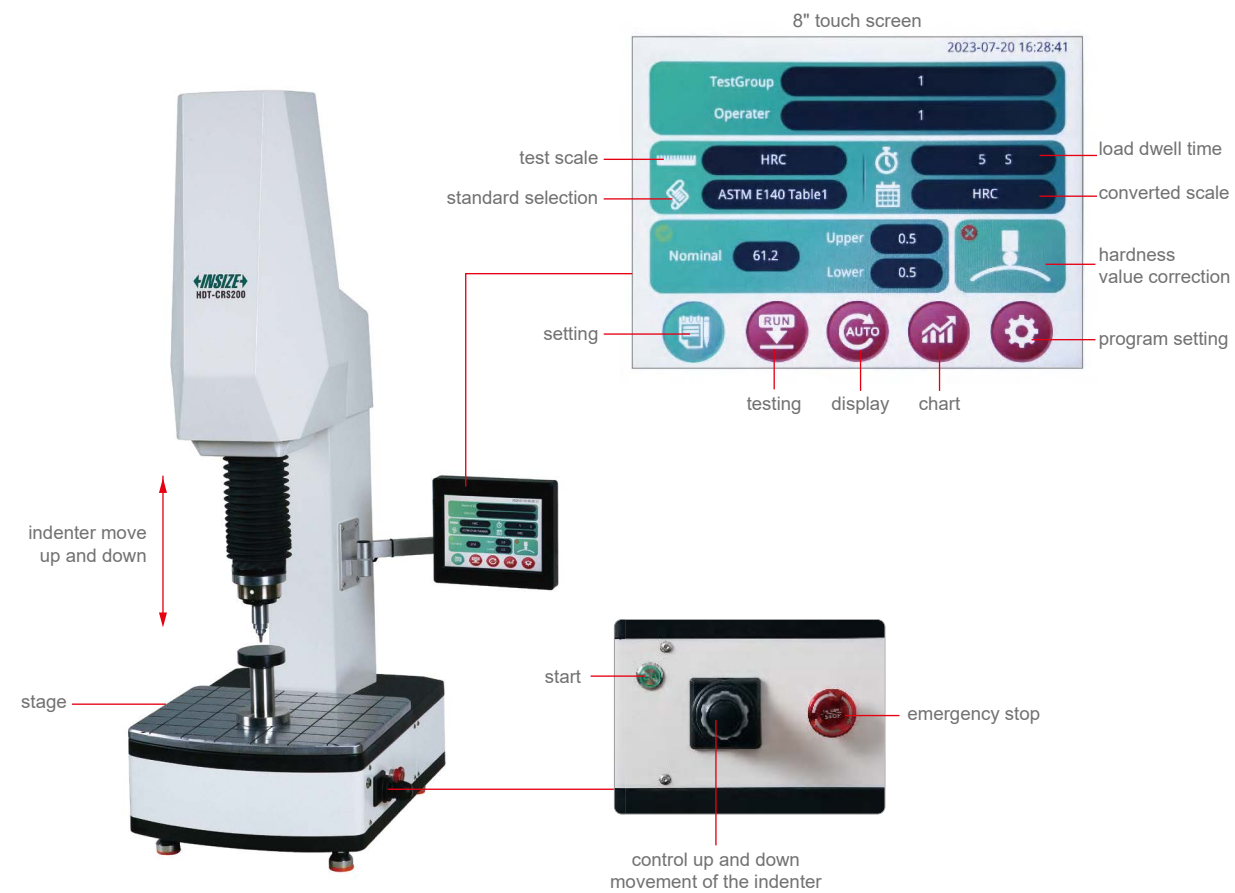
HARDNESS TESTING INSTRUMENTS

CATALOGUE NO. HT-E01



Conversion of hardness-to-hardness or hardness-to-tensile-strength values for unalloyed and low alloy steels and cast steel

Tensile strengt	Vickers hardness	Brinell hardness	Rockwell hardness							
MPa	HV10	HB *	HRB	HRF	HRC	HRA	HRD	HR15N	HR30N	HR45N
255	80	76.0								
270	85	80.7	41.0							
285	90	85.5	48.0	82.6						
305	95	90.2	52.0							
320	100	95.0	56.2	87.0						
335	105	99.8								
350	110	105	62.3	90.5						
370	115	109								
385	120	114	66.7	93.6						
400	125	119								
415	130	124	71.2	96.4						
430	135	128								
450	140	133	75.0	99.0						
465	145	138								
480	150	143	78.7	101.4						
495	155	147								
510	160	152	81.7	103.6						
530	165	156								
545	170	162	85.0							



AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTER (ADVANCED TYPE)

CODE HDT-CRS200

AUTOMATIC
TEST

HIGH
ACCURACY

FORCE LOADING BY ELECTRIC
MOTOR (WITHOUT WEIGHTS)

INSPECTION
CERTIFICATE

HIGH
EFFICIENCY

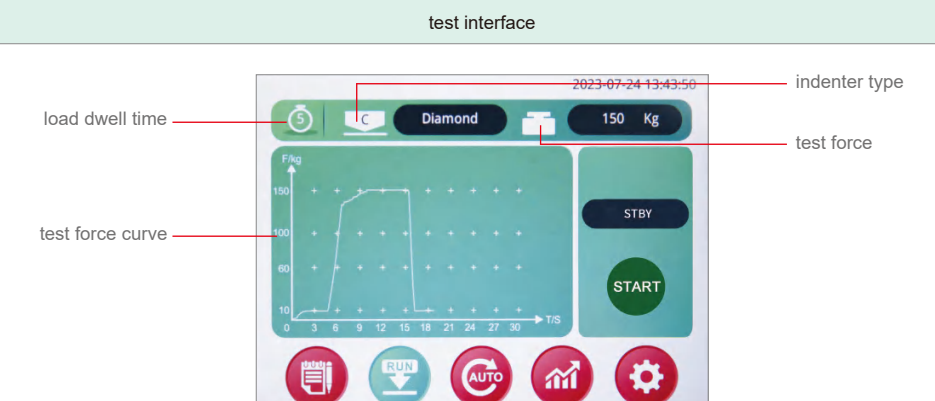
TOUCH
SCREEN

BUILT-IN
BLUETOOTH



- 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 Z 2245

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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 scale	with indenter included	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
Preliminary test force		Superficial Rockwell: 29.4N (3kgf) Rockwell: 98N (10kgf)
Test force		Superficial Rockwell: 147N (15kgf), 294N (30kgf), 441N (45kgf) Rockwell: 588N (60kgf), 980N (100kgf), 1471N (150kgf)
Test force accuracy		±1%
Operational mode		automatic
Load control		automatic (load/dwell/unload)
Resolution		0.05HR
Load dwell time		0~99 seconds
Max. workpiece height		300mm
Max. testing width		200mm (indenter to frame distance)
Output		bluetooth printer, RS232
Power supply		220V, 50/60Hz
Dimension (L×W×H)		555x400x1250mm
Net weight		130kg

STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	1 pc
Ø58mm flat anvil	1 pc
V-type anvil	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HREW80~100	1 pc
Hardness test block HR30N60~85	1 pc
Hardness test block HR30TW70~85	1 pc
Bluetooth printer	1 pc

OPTIONAL ACCESSORY

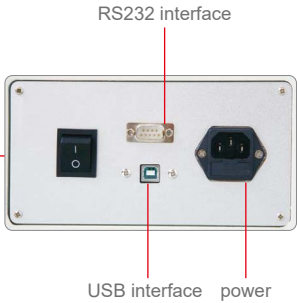
Hardness test blocks	page 117~122
Desk	HDT-DESK



can test rings, tubes, internal surfaces of frame parts, etc.
workpiece demonstration



HDT-DM310

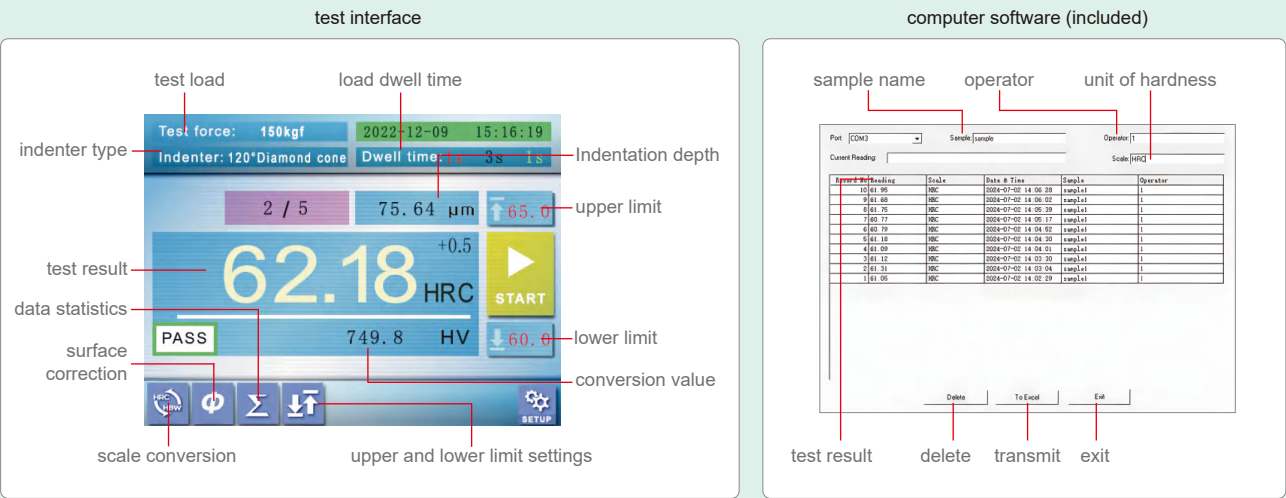


MOTORIZED DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS (DOLPHIN-NOSE TYPE)



- Conforms to ASTM E18, ISO 6508
 - Full closed-loop precise control, real-time monitoring of test force, greatly increase the accuracy
 - USB communication port, can be connected to an external computer, measurement data Excel output
 - Convertible to various hardness standards such as HB, HV, HLD, HK and tensile strength
- Correction function automatically corrects the measurement results of curved parts
 - 250 sets of data are stored independently in the mainframe, which can be accessed at any time
 - Dolphin-nose structure indenter, more measuring space
 - Measurements on 30 Rockwell and Superficial Rockwell scales
 - Mean, variance, maximum and minimum statistics are available
- FORCE LOADING BY ELECTRIC MOTOR (WITHOUT

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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 (60kgf), 980N (100kgf), 1471N (150kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf), 588N (60kgf), 980N (100kgf), 1471N (150kgf)
Stage elevation		manual		
Load control		automatic (load/dwell/unload)		
Resolution		0.01HR		
Load dwell time		2~250 seconds, can be set		
Max. workpiece height		290mm		
Max. testing width		220mm (indenter to frame distance)		
Max. bore depth		130mm		
Min. testing inner diameter		35mm		
Power supply		220V, 50/60Hz		
Dimension (L×W×H)		700×290×880mm		
Net weight		85kg		

To be continued

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STANDARD DELIVERY

Code	HDT-DM290	HDT-DM300	HDT-DM310
Main unit	1 pc	1 pc	1 pc
14mm high diamond Rockwell indenter (HDT-DM-14MM)	1 pc	1 pc	1 pc
Ø1.5875mm carbide ball indenter (HDT-DM-BALL)	1 pc	1 pc	1 pc
Ø150mm flat anvil	1 pc	1 pc	1 pc

Continued from previous page



Ø58mm flat anvil
(included)



Ø150mm flat anvil
(included)



V-type anvil
(included)



printer
(included)



wireless data
transmitter (optional)

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
Ø150mm flat anvil	1 pc	1 pc	1 pc
Ø58mm 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 HR30N65~80	—	1 pc	1 pc
Hardness test block HR30TW70~85	—	1 pc	1 pc
Software	1 pc	1 pc	1 pc
Printer	1 pc	1 pc	1 pc
Anti-dust cover	1 pc	1 pc	1 pc

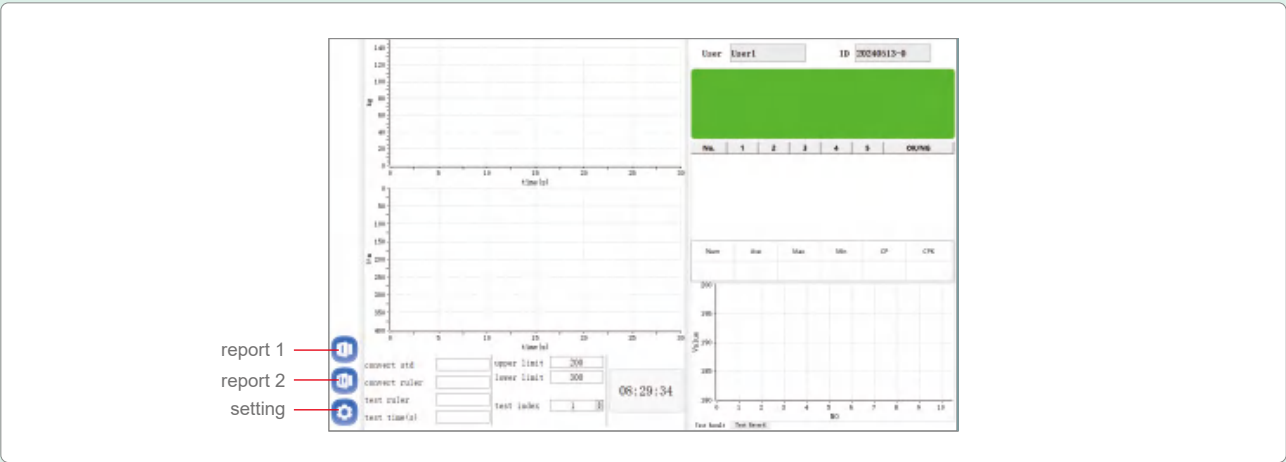
OPTIONAL ACCESSORY

Hardness test blocks	page 117~122
Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3
Wireless data transmission transmitter*	7315-HDT-M
Wireless data transmission receiver*	7315-2/3/6/7/8/9

*The wireless data transmission transmitter and receiver must be purchased together

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computer software (included)



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		Rockwell: 98N (10kgf)	Superficial Rockwell: 29.4N (3kgf)	Rockwell: 98N (10kgf) Superficial Rockwell: 29.4N (3kgf)
Test force		588N (60kgf), 980N (100kgf), 1471N (150kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf), 588N (60kgf), 980N (100kgf), 1471N (150kgf)
Stage elevation		automatic up, down and return		
Load control		automatic (initial test force, main test force loading/holding/unloading)		
Resolution		0.1HR		
Load dwell time		2~60 seconds		
Max. workpiece height		230mm		
Max. testing width		170mm (indenter to frame distance)		
Power supply		100~240V, 50/60Hz		
Dimension (L×W×H)		475×200×700mm		
Net weight		70kg		

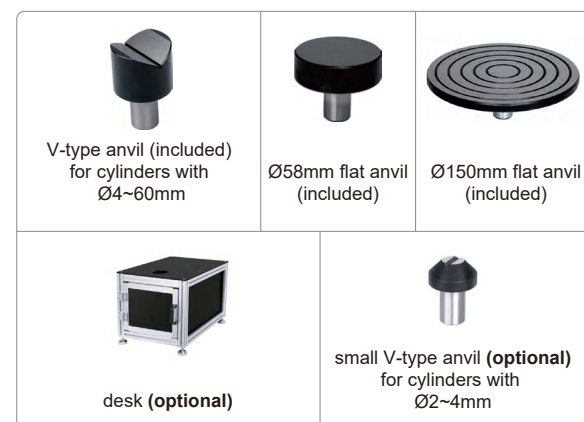
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Ø58mm flat anvil (included)



POPULAR
MODEL

MANUAL ROCKWELL HARDNESS TESTER (BASIC TYPE)

CODE HDT-RW160



- According to ISO 6508



SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Total test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Display	analogue
Stage elevation	manual
Load control	manual
Resolution	0.5HR
Max. workpiece height	170mm
Max. testing width	135mm (indenter to frame distance)
Dimension (L×W×H)	466×238×630mm
Net 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 ball indenter	1 pc
Ø1.5875mm carbide ball	5 pcs
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 blocks	page 117~122
Small V-type anvil	ISH-SMALL-ANVIL
Desk	HDT-DESK



MANUAL DIGITAL ROCKWELL HARDNESS TESTER (BASIC TYPE)

CODE HDT-RD160

DATA OUTPUT

INSPECTION
CERTIFICATE



- According to ISO 6508
- Convert to other Rockwell scales, HV or HB
- Capable of setting tolerances and evaluating test results
- Supports 2~10 selectable repeated measurements, with automatic calculation and display of average and range
- Stores up to 500 test results
- Correction of measurement results based on calibration
- Automatic power off
- Keyboard signals can be output via a USB cable



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



Ø58mm flat anvil
(included)



Ø150mm flat anvil
(included)



desk (optional)



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



wireless printer
(optional)

To be continued

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**MOTORIZED DIGITAL ROCKWELL HARDNESS TESTER
(BASIC TYPE)**
CODE HDT-MD151



- According to ISO 6508
- Convert to other Rockwell scales, HV or HB
- Capable of setting tolerances and evaluating test results
- Supports 2~10 selectable repeated measurements, with automatic calculation and display of average and range
- Stores up to 500 test results
- Correction of measurement results based on calibration
- Automatic power off
- Keyboard signals can be output via a USB cable



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



Ø58mm flat anvil
(included)



Ø150mm flat anvil
(included)



desk (optional)



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



wireless printer
(optional)

To be continued

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SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Conversion scale	HV, HB, HRF, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Output	wireless and USB
Stage	



MANUAL HIGH ROCKWELL HARDNESS TESTER

CODE HDT-RH411



- According to ISO 6508



SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Display	analogue
Stage elevation	manual
Load control	manual
Resolution	0.5HR
Max. workpiece height	400mm
Max. testing width	160mm (indenter to frame distance)
Dimension (L×W×H)	540×300×1030mm
Net weight	140kg

OPTIONAL ACCESSORY

Hardness test blocks	page 117~122
Small V-type anvil	ISH-SMALL-ANVIL

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 ball indenter	1 pc
Ø1.5875mm carbide ball	5 pcs
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





PORTABLE ROCKWELL HARDNESS TESTER

CODE ISHR-P151



- According to ISO 6508, ASTM E18



SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Load control	manual
Resolution	1HR
Max. workpiece thickness	25mm
Max. testing width	25mm (indenter to frame distance)
Dimension (L×W×H)	240×70×160mm
Net weight (with base support)	2.5kg

STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	2 pcs
Hardness test block HRB88~100	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRC20~30	1 pc
Flat anvil	1 pc
V-type anvil	1 pc
Base	1 pc
Anvil extension	1 pc
Magnifier	2 pcs



flat anvil
(included)



V-type anvil
(included)



anvil extension for
thin workpieces
(included)



base (included)





MAGNETIC ROCKWELL HARDNESS TESTER

CODE ISHR-M111



- Apply to large and heavy steel or iron workpieces
- According to ISO 6508, ASTM E18



SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Load control	manual
Resolution	1HR
Flat workpiece requirement	length>180mm, width>60mm, thickness>5mm
Cylinder or tube workpiece requirement	length>180mm, diameter>Ø50mm, wall thickness>8mm
Dimension (L×W×H)	220×70×220mm
Net weight	4.7kg

STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	2 pcs
Hardness test block HRB85~95	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRC20~30	1 pc
Flat anvil	1 pc
Support	4 pcs
Magnifier with LED	1 pc



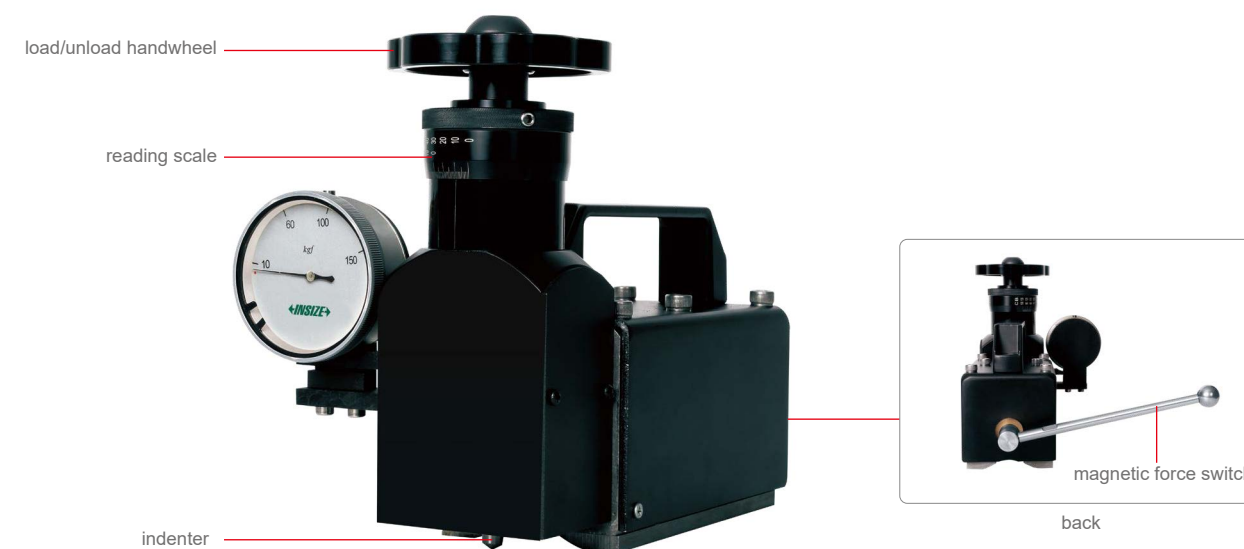
flat anvil for test block (included)



supports for cylinder or tube workpieces (included)



magnifier with LED (included)



MAGNET



MOTORIZED DIGITAL BRINELL HARDNESS TESTERS (STANDARD TYPE)



- According to ISO 6506
- Touch screen color LCD display
- Electric loading test force, without weights
- Casting case, structurally stable and not deformed
- Measure the indentation with microscope, automatically calculate the hardness value and display it on the screen
- Optional wireless data transmission system can be used to connect computer or mobile phone to send data to Excel (keyboard signal)

TOUCH
SCREENFORCE LOADING BY ELECTRIC
MOTOR (WITHUOT WEIGHTS)WIRELESS TRANSMISSION
IS OPTIONAL

Ø200mm flat anvil
(included)



Ø78mm flat anvil
(included)



V-type anvil
(included)



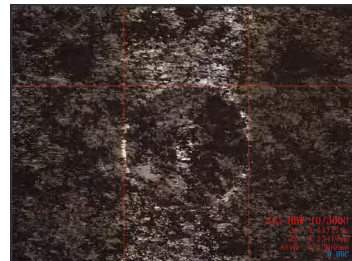
desk (optional)



wireless transmitter
(optional)

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application (complex surface condition test case)



computer (optional)

SPECIFICATION

Code	HDT-MB424	HDT-MB425	HDT-MB426	HDT-MB427	HDT-MB428			
Type	Brinell	Brinell	hammer Brinell	shear pin Brinell	Brinell, hammer Brinell, shear pin Brinell			
Measurement method of Indentation	manual	automatic	automatic	automatic	automatic			
Range	10~650HBW		/					
Max. measuring diameter	6mm							
Accuracy	±2%							
Repeatability	±1%							
Pixel	3M							
Dimension (L×W×H)	105×70×200mm							
Net weight	620g							

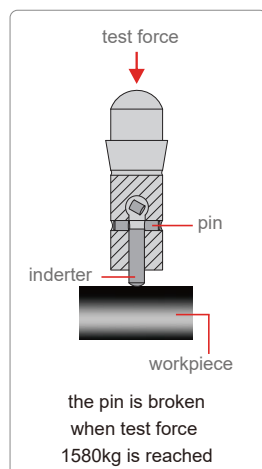
STANDARD DELIVERY

Camera	1 pc
Software	1 pc
USB cable	1 pc
Standard base	1 pc
Magnetic base	1 pc
Slender base	1 pc

OPTIONAL ACCESSORY

OFFICE software	7313-OFFICE
Tablet computer	7313-4

standard base
(included)magnetic base
(included)slender base
(included



HAMMER IMPACT BRINELL HARDNESS TESTER

CODE HDT-PB350



- 1580kg test force and Ø7.26mm ball indenter, equal to 3000kg test force and Ø10mm ball indenter
- Measure Brinell hardness of large and heavy workpieces



SPECIFICATION

Measuring range	100~350HBW (with Ø7.26mm indenter, included) 350~650HBW (with Ø4mm indenter, optional)
Test force	1580kg
Accuracy	±5%HBW
Repeatability	±5%HBW
Measuring microscope	20X, graduation 0.01mm
Dimension (L×W×H)	200×50×100mm
Net weight	0.8kg

STANDARD DELIVERY

Main unit	1 pc
Ø7.26mm indenter	1 pc
Hardness test block	1 pc
Pin	250 pcs
Pin removal tool	1 pc
Measuring microscope	1 pc



hammer impact to apply test force



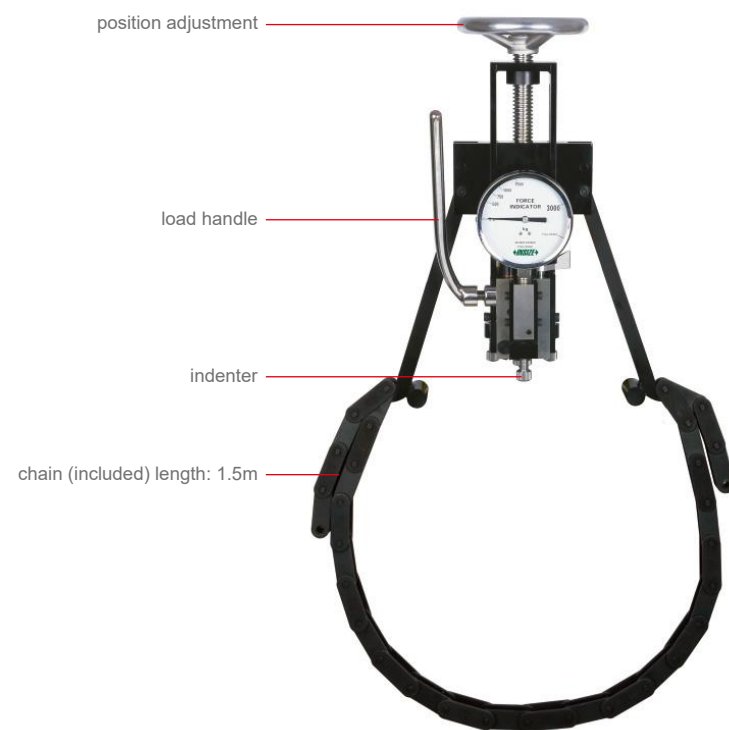
measuring microscope (included)



pins (included)

OPTIONAL ACCESSORY

Ø4mm indenter	ISHB-P101-INDENTER
Pin (250 pcs)	ISHB-P101-PIN



CHAIN TYPE HYDRAULIC BRINELL HARDNESS TESTER CODE ISHB-C161



- To measure the hardness of cylinders or tubes
- According to ISO 6506, ASTM E10

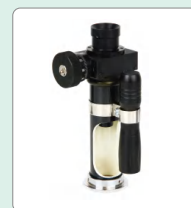


SPECIFICATION

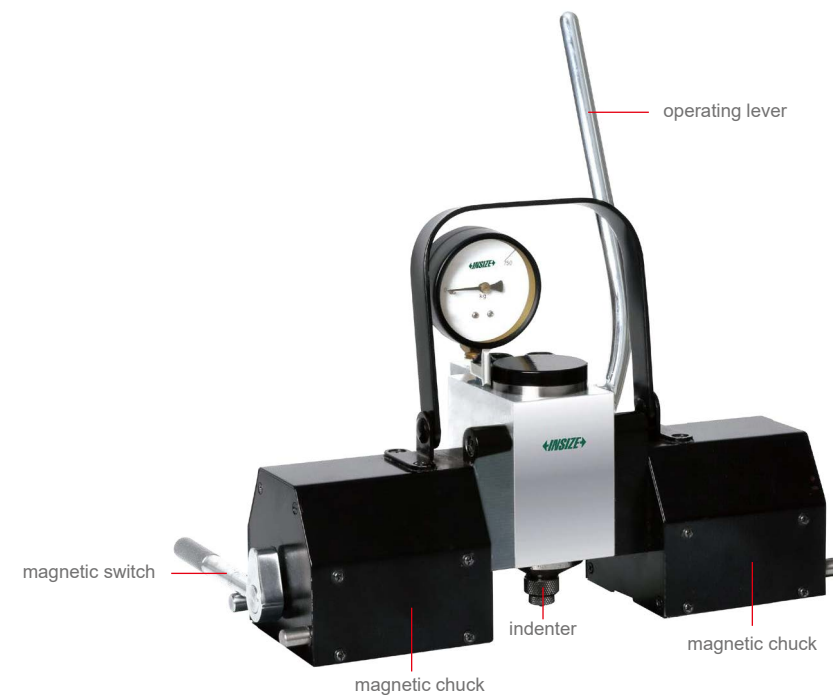
Measuring range	32~650HBW
Workpiece diameter range	Ø150~Ø500mm
Test force	3000kg
Indenter	Ø10mm carbide ball
Measuring microscope	20X, graduation 0.01mm
Dimension (L×W×H)	270×225×570mm
Net weight	14.5kg

STANDARD DELIVERY

Main unit	1 pc
1.5m chain	1 pc
Ø10mm carbide ball	2 pcs
Brinell test block	2 pcs
Measuring microscope	1 pc



measuring
microscope (included)



MAGNETIC BRINELL HARDNESS TESTER CODE HDT-B750



- According to ISO 6506, ASTM E110
- Applied to large and heavy steel or iron workpieces
- Easy to use and portable
- 5mm indenter provides more accurate and easy-to-read measurements

SPECIFICATION

Measuring range	100~650HBW
Test force	750kg
Indenter	Ø5mm carbide ball
Measuring microscope	40X, graduation 0.01mm

