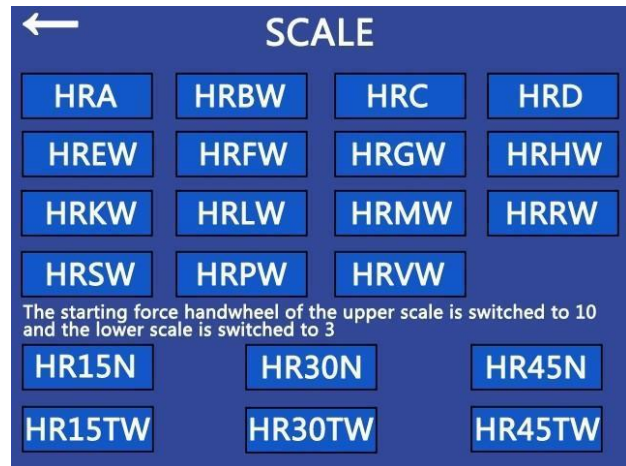




DIGITAL TOUCH SCREEN TWIN ROCKWELL HARDNESS TESTER



- With Rockwell & Superficial Rockwell test function;
- Color touch screen with menu structure, easy operate;
- Status bar show the test process in real time.
- With hardness conversion function (HV, HBW, etc.)
- With printer, test data can print out directly
- Test force - Indenter type show on screen, avoid mistakes
- Brightness is adjustable, to meet different visual habit
- Car paint processing appearance, looking beautiful

BDRS-150T

Our BDRS-150T digital touch screen twin Rockwell hardness tester has high level automation, stable and reliable performance, it is equipped with sophisticated sensors so that can test data more accurate ; Large touch screen provide comprehensive data for quality control.



FEATURES:

1. The color touch screen will display hardness value, conversion value, test force, dwell time, indenter info. etc directly, indicator responses sensitively, show the hardness value accurately, the test value is more accurate than national standard;
2. Automatic loading - dwell - unloading test force, easy operate
3. Support English language, menu structure
4. Built-in printer can print test result directly
5. One-time casted molding shell, stable structure and it is not easy to be out of shape. It can work under harsh environment; the shell coating adopted car paint technology with white color. it has strong scratch resistance capability and still look bright as new after use many years;
6. The screw rod adopts the fine grinding process, which ensures that the machine can be lifted smoothly and without eccentricity, make test accuracy higher and more stable

Working principle of Rockwell hardness test:

The Rockwell scale is a hardness scale based on indentation hardness of a material. The Rockwell test determines the hardness by measuring the depth of penetration of an indenter under a large load compared to the penetration made by a preload. There are different scales, denoted by a single letter, that use different loads or indenters. The result is a dimensionless number noted as HRA, where A is the scale letter.

Application Fields:

Suitable for quenched steel, tempered steel, annealed steel, cold and hard casting, malleable cast iron, hard alloy steel, aluminum alloy, copper alloy, bearing steel etc. Also suitable for surface quenched steel, surface heat treating and chemical treating materials, sheet, zinc layers, chrome layers, tin layers etc.





TECHNICAL SPECIFICATIONS	BDRS-150T
Rockwell Scale	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Conversion Scale	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, H15N, H30N, H45N, H15T, H30T, H45T
Preliminary test force	3kgf (29.4N) for superficial Rockwell 10kgf (98N) for Rockwell
Total test force	15kgf (147.1N) 30kgf (294.2N) 45kgf (441.3N) 60kgf (588.4N) 100kgf (980.7N) 150kgf (1471N)
Indication Resolution	0.1HR
Hardness value range	HRA: 20-96, HRB:20-100, HRC:20-70, HRD:40-77, HRE:70-100, HRF:60-100, HRG:30-94, HRH:80-100, HRK:40-100, HRL:50-115, HRM:50-115, HRR:50-115, HR15N:70-94, HR30N:42-86, HR45N:20-77, HR15T:67-93, HR30T:29-82, HR45T:10-72
Hardness data read	Color touch screen
Loading method	Automatic (Load, Dwell, Unload)
Dwell time	1-99S, each step 1 second
Data output	Built-in printer, RS232 port
Test space	Maximum height: 200mm; Maximum throat depth:160mm
Machine Size / N.W	520X240x720mm (LxWxH); 85kg
Package Size / G.W	600*365*900mm; 100kg
Executive standard	GB/T230.2, BSEN 6508, ASTM E18 , ISO 6508 , JIG112

STANDARD ACCESSORIES	QTY		QTY
Diamond indenter	1	1.5875mm diameter hard alloy steel ball indenter	1
Standard hardness block	6	Large testing table	1
Medium testing table	1	V-shaped testing table	1
Dust-proof cover:	1	Accessory case	1
Manual Book	1	Certificate	1

* Image is for reference purpose only; due to continuous product development and upgradation the image and specification are subject to change.

**Hardness scale, force, Indenter relation of Rockwell scales:**

Scale	Indenter	Preliminary test force (N)	Total test force (N)	Applications
A	Diamond indenter coning angle 120°0.2mm radius of top sphere	98	588	Horniness alloy, cementite steel
D			980	Thin steel, quenched case
C			1471	Quenched steel, thermal refined steel, cast steel
F	Diameter of steel ball 1.588mm (1/16 inch)		588	Anneal copper alloy, thin soft steel
B			980	Soft steel, aluminum alloy, copper alloy, casting
G			1471	Pearliest iron, copper, nickel, zinc, nickel alloy
H	Diameter of steel ball 3.175mm (1/8 inch)		588	annealed copper alloy
E			980	Aluminum and aluminum alloy
K			1471	Non-ferrous metals, hard plastics
L	Ball Indenter φ6.35mm (1/4 inch)		588.4	Hard plastics, hard rubbers, aluminum, tin, copper, mild steel, synthetic resin and friction materials.
M			980.7	
P			1471	
R	Ball Indenter φ12.7mm (1/2 inch)		588.4	
S			980.7	
V			1471	

Hardness scale, force, Indenter relation of Superficial Rockwell scales:

Scale	Indenter	Preliminary test force (N)	Total test force (N)	Applications
15N	Diamond Indenter	29.42 N	147.1(15)	Hard alloy steel, nitride steel, carburized steel, various heavy steel plate, etc



30N	Ball Indenter φ1.5875mm (1/16 inch)	(3kg)	294.2(30)	Surface-quenched steel, carburized steel, knife, thin steel plate, etc
45N			441.3(45)	Quenched steel, tempered steel, hard cast iron and edge of parts, etc
15T			147.1(15)	Annealed copper alloy, mild steel sheet, brass, bronze plate, etc
30T			294.2(30)	Mild steel sheet, aluminum alloy, copper alloy, brass and bronze, malleable cast iron
45T			441.3(45)	Pearlite iron, copper -nickel alloy and zinc-nickel alloy plate, etc

With hardness conversion and quality judgment function:

SCALE CONVERSION

QUALIFIED JUDGMENT

HRC HV HK
HBW HRA HRD
HR15N HR30N HR45N
HR15T HR30T HR45T
HRBW HRFW
BACK ESC

MAX VALUE : MODIFY
MIN VALUE : MODIFY
BACK ESC