

## Máy Đo Độ Cứng

# Digital Double Rockwell Hardness Tester

**1. Name of product:** Digital Double Rockwell Hardness Tester

**2. Model:** 560RSS

**3. Brand:** SCTMC

**4. Specification:**



1. Hardness is one of the often-used mechanic characteristics of the material while the hardness testing is an important method to judge the quality of the metal material or its component parts. The hardness of the metal is correspondent to its other mechanic characteristics, and so its mechanic characteristics such as the strength, tiredness, wriggling and wearing out can be tested out approximately through its hardness testing.

2. Digital Double Rockwell Hardness Tester with a novel and pleasing appearance, full functions, easy operation, clear and direct-viewing display, and stable performance is a high-tech and new product combining the mechanic and electric features. This tester is able to measure the Rockwell and superficial Rockwell hardness value with all scales. Its main function is as follows:

2.1 The Selection of all hardness scales for Rockwell and superficial Rockwell.

2.2 The hardness values exchange among various hardness scales.

2.3 The selection of dwell time for hardness test.

2.4 The revising of the value for year, month and date.

2.5 The RS232 serial communication is supplied to clients for the functional expansion.

The Present hardness tester with the storage function can be browsed the hardness testing page and output the hardness testing results with printer.

## Technical Specifications

1. The Power Source and the Voltage: AC220V±5%, 50-60 Hz
2. Time-delayed control: 2-60 seconds, adjustable
3. The Max. Height of the Testing Specimen: 175 mm
4. The Distance from the Indenter Center to the Instrument Body: 165mm.
5. Overall Dimension (Length×Width×Height): 551×260×800 mm
6. The Net Weight of the Tester: 80kg (Approx).

## Rockwell Hardness

### 7. The Technical Specifications of Rockwell Hardness

Rockwell Hardness						
Test Force	Initial Test Force ( N)	98.07 (10kg )			Tolerance±2.0%	
	Total Test Force ( N)	588.4 (60 kg )			Tolerance±1.0%	
		980.7 (100 kg )				
		1471 (150kg )				
Indenter	Diamond Cone Indenter					
	Φ1.5875mmBall Indenter					
Scale	HRA	HRB	HRC	HRD	HRE	
	HRF	HRG	HRH	HRR	HRM	
	HRP	HRS	HRK	HRL	HRV	

### 8. The allowed tolerances of the Rockwell hardness displaying values

Scales	Hardness Range of the Standard Hardness Blocks	Allowed Tolerance of Displaying Value	Allowed Repeatability of Displaying Value <sup>a</sup>
A	(20~≤75)HRA	±2HRA	≤0.02 (100-H)
	(>75~≤88) HRA	±1.5HRA	or 0.8 Rockwell unit <sup>b</sup>
B	(20~≤)45HRB	±4HRB	≤0.04 (130-H) or 1.2 Rockwell unit <sup>b</sup>
	(>45~≤80)HRB	±3HRB	
	(>80~≤100)HRB	±2HRB	
C	(20~≤70)HRC	±1.5HRC	≤0.02 (100-H) or 0.8 Rockwell unit <sup>b</sup>

a : H means average hardness value      b : select a larger value

## Superficial Rockwell hardness

### 9. The technical specifications of superficial Rockwell hardness

Superficial Rockwell		
Test Force	29.42 (3 kg)	Allowed Tolerance ±2.0%
	147.1 (15 kg)	
	294.2 (30 kg)	Allowed Tolerance ±1.0%
	441.3 (45 kg)	
Indenter	Diamond Cone Indenter	
	Φ1.5875mm Ball Indenter	
Scales	HR15N, HR30N, HR45N	
	HR15T, HR30T, HR45T	
	HR15W, HR30W, HR45W	
	HR15X, HR30X, HR45X	
	HR15Y, HR30Y, HR45Y	

10. The repeatability of the superficial Rockwell hardness displaying values and allowed tolerance of displaying value

Scales	Hardness Range of the Standard Hardness Blocks	Allowed Tolerance of Displaying Value	Allowed Repeatability of Displaying Value <sup>a</sup>
15N	(0~77) HR 15N	±2 HRN	≤0.04(100 – H) or 1.2 Rockwell unit <sup>b</sup>
	(78~88) HR 15N		
	(89~91) HR 15N		
	(42~54) HR 30N		
	(55~73) HR 30N		
	(74~80) HR 30N		
45N	(20~31) HR 45N	±2 HRN	≤0.04(100 – H) or 1.2 Rockwell unit <sup>b</sup>
	(32~61) HR 45N		
	(63~70) HR 45N		
15T	(73~80) HR 15T	±3 HRT	≤0.06(100 – H) or 2.4 Rockwell Unit <sup>b</sup>
	(81~87) HR 15T		
	(88~93) HR 15T		
30T	(43~56) HR 30T	±3 HRT	≤0.06(100 – H) or 2.4 Rockwell Unit <sup>b</sup>
	(57~69) HR 30T		
	(70~82) HR 30T		
45T	(12~33) HR 45T	±3 HRT	≤0.06(100 – H) or 2.4 Rockwell Unit <sup>b</sup>
	(34~54) HR 45T		
	(55~72) HR 45T		
<p>a : H means average hardness value</p> <p>b : select a larger value</p>			

**Contact us:**



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