

Rockwell Hardness Tester Series



Fully-Automatic Rockwell Hardness Tester THRS-150DDigital Rockwell & Superficial Rockwell Hardness Tester THR-45/150D

Features	Basic	Motorized	Digital	Twin Digital
Models	THR-150, THR45	THR150M, R-45M, THR-150M(H)	THR-150D, THR-45D, THR150D(H)	THR-45/150D
Easy load force selection by robust dial knob	•	•		
Electronic control of load duration (dwell time)		•		
Motorized testing procedure		•		
Large digital LCD screen with menu operation keyboard			•	•
Conversion between different hardness scales			•	•
Automatically save & transfer, with RS232-USB output and built-in mini-printer			•	•
Easy obtain Average, Min./Max.			•	•
Upper/Lower Limit Setting			•	•
Curved surface auto correction			•	•
21 kinds of Rockwell, Superficial Rockwell, Plastic Rockwell hardness scales selectable				•
Error of hardness value can be rectified by key input				•
Closed-loop sensor technology with indenter descend automatically to complete loading/dwell/unloading				•

Among these models, THR-45/150D applies closed-loop testing, which is a revolutionary technology that utilizes motor/encoder control and a load cell or force transducer to apply and regulate the load. A closed-loop system can constantly monitor and adjust the applied force, virtually eliminating force errors and increasing tester accuracy and repeatability. Inherent in our closed-loop system is a simpler base design, devoid of the levers and deadweights of open-loop types. System repeatability and accuracy is further increased by the in-line design. Indenter, load cell and measurement system are aligned on a single test axis, eliminating mechanical linkages and levers. The resultant benefit is extremely precise hardness tests with unmatched repeatability.

Specifications

Model	THR-150 THR-150M THR-150P	THR-150M(H)	THR-150D	THR-150D(H)	THR-45 THR-45M	THR-45D	THR-45/150D
Pre-test Load	N : 98.07 Kgf : 10				N: 29.42 Kgf: 3		N : 98.07, Kgf : 10 N: 29.42 , Kgf: 3
Total test Load	N: 588 980 1471 Kgf: 60 100 150				N:147.1, 294.2, 441.3 Kgf: 15, 30, 45		N: 147.1, 294.2, 441.3, 588, 980, 1471 Kgf: 15, 30, 45, 60, 100, 150
Loading Mechanism	Manual Automatic	Automatic	Automatic	Automatic	Manual Automatic	Automatic	Automatic
Dwell Time	0~60s				0~60s	2~60s	0~60s
Max.Height of Specimen	175mm	400mm	175mm	400mm	175mm	160mm	175mm
Max.Depth of Specimen	160mm	160mm	160mm	160mm	160mm	160mm	160mm
Available Hardness Scales	HRA,HRB,HRC,HRD,HRE,HRF,HRG,HRH,HRK				HR15N,HR30N,HR45N,HR15T,HR30T,HR45T		HRA,HRB,HRC,HRD,HRE,H RF,HRG,HRH,HRK, HR15N,HR30N,HR45N,HR15T,HR30T,HR45T
Hardness Measuring Range	HRA:20-88, HRB:20-100 HRC:20-70, HRD:40-77 HRF:60-100, HRG:30-94 HRH:80-100, HRK:40-100		HRA:20-88, 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			HRA:20-88 HRB:20-100 HRC:20-70 HRD:40-77 HRE:70-100 HRF:60-100 HRG:30-94 HRH:80-100 HRK:40-100	HRA:20-88, 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
Conversion Scale	-----		Superficial Rockwell, Brinell, Vickers		-----	Rockwell, Brinell, Vickers	Rockwell, Brinell, Vickers
Data Output	Dial display		Large LCD screen display		Dial display	Large LCD screen display	
Data Output	-----		Built-in Printer, RS-232 port		-----	Built-in Printer, RS-232 port	
Dimensions	520×240×880 mm	520×240×880 mm	520×240×700 mm	520×240×880mm	520×240×700mm		520×240×70mm
Weight	App. 55Kg						App. 70Kg
Note	“M” represents Motorized, “D” represents Digital, “P” represents Plastic, “H” represents Height						