

TLRH-Curve - Rockwell Hardness Tester TLRSH-Curve - Rockwell Cum Superficial Hardness Tester





- 1. Load cell based Rockwell Hardness Tester.
- 2. **Touch Screen operation.**
- 3. Load/Scale selection through touch panel
- 4. Automatic high-speed response closed-loop sensor loading system.
- Real time display of Force Time, Depth-Time curve. 5.
- Testing cycle starts just after touching the specimen with Indentor (no need to 6. apply initial test load).
- 7. Pass/Fail Tolerance judgement.
- 8. Hardness Scale Conversion HR, HB, HV.
- 9. Built, in thermal printer.
- 10. External illumination light to focus on test surface.
- 11. Permanent depth of penetration display on screen.



TLRH-Curve/TLRSH-Curve adopted the international advanced closed-loop sensor control technology, to achieve full automatic control and hardness testing process. The load system uses high-precision force value sensor and central controller to form a closed-loop loop to achieve full microsecond level tracking and control of the booster process.

The measurement system uses high-precision displacement sensor with a hardness value resolution of 0.1 HR for accurate hardness results.

PRODUCT CHARACTERISTICS

- 1. Meet the standards ASTM E18, ISO 6508-2, IS 1586 (Part-2)
- 2. The frame structure is strong and rigid.
- 3. Automatic closed-loop sensor loading.
- 4. High speed step control, test speed is extremely fast.
- 5. The high precision loading system effectively avoids the overloading of the measuring force, and at the same time greatly improves the loading speed.
- 6. The curve of test process is displayed, which can display the material characteristics intuitively, which is convenient for observation and learning.
- 7. All Dwell time during the test cycle can adjusted.
- 8. Automatic loading and unloading, keeping time adjustable.
- 9. Correction of test values of cylindrical and spherical specimen.
- 10. The force selection and hardness scale selection are coupled.







TECHNICAL PARAMETER	TLRH - Curve	TLRSH Curve
Initial test force (N)*	98.07N (10kgf) for Rockwell	29.42 N (3kgf) for Superficial 98.07N (10kg) for Rockwell
Main test force (N)	588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)	147.1N (15kgf), 294.2N (30kgf), 441.3N (45kgf)
Hardness Scales	Rockwell HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV	Rockwell HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL,HRM, HRP, HRR, HRS, HRV Rockwell Superficial HR15N, HR30N, HR45N, HR15T, HR30T HR45T
LCD touch screen display	Hardness value, Hardness scale, Force time curve, Depth time curve, Total test force, Permanent Indentation depth, Holding time, Upper and lower limit setting value, Last five hardness values, Minimum, maximum and their average, Date, Time, Day	
Load and Unload Mode	Ultra high response speed closed-loop loading control Technology (Loading, Dwell, Uploading)	
Conversion Scale	HR (Rockwell), HB (Brinell), HV (Vickers)	
Dwell time	0~99s	
Data output	Built-in printer, RS232 interface	
Accuracy	ASTM E18, ISO 6508 - 2, IS 1586 (Part 2)	
Allow sample height/Throat	170mm/165mm	
Dimension (mm)	490X165X740 (length x width x height) approx.	
Weight	70 kg approx.	
Power	220V AC, 50Hz	

* Unit of test forces used is newton (N) as per IS/ASTM standard.

STANDARD ACCESSORIES	TLRH-Curve	TLRSH-Curve
Diamond Indenter	1 No	1 No
1.5875mm (1/16") ball indenter	1 No	1 No
Flat Testing Table (Ø 60 mm)	1 No	1 No
V shaped testing table (Ø 40 mm)	1 No	1 No
Hardness Test Block HRC	1 No	1 No
Hardness Test Block HRBW	1 No	1 No
Hardness Test Block HR30N	_	1 No
Printer Paper	1 No	1 No
Dust Proof Cover	1 No	1 No
Spare fuse 0.5A	2 Nos	1 No
Manual Book	1 No	1 No

^{*}TRUEMET reserves the reights to changes the above specification due to constant improvements in design.

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