

Fred V. Fowler Company, Inc.

Fowler® *Digital Hardness Tester*



▲ No. 54-700-300

Robustly constructed, featuring a rugged cast iron housing and quality components, these hardness testers will provide years of service on the shop floor or in the inspection lab.

Sophisticated, menu-driven electronics guide the operator through simple selection of scales, test process and measurement functions. Process statistics and automatic engagement are standard.

High contrast, backlit LCD allows optimal viewing even in harsh lighting conditions.

Both units feature a protruding indenter design that allows for testing of internal and external components:

- Internal: not less than 0.900" (23mm)
- External: greater than 0.120" (3mm)

Model 300 covers all Rockwell hardness scales (total 15 scales).

Model 320 covers both Rockwell and Superficial scales (total 30 scales).

Direct RS-232 output for connection to computer, printer or SPC data collector.



▲ No. 54-700-320

All testers include:

- Main unit
 - Test block HRC
 - Test block HRB
 - 120° cone diamond indenter
 - 1/16" steel ball indenter + 5 spare balls
 - Round flat anvil Ø 70mm (2.75")
 - Small V-shaped anvil
 - Power cable
 - Instruction manual
- (Model 320 includes 15N, 30N & 30T blocks)

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Miscellaneous Gaging
Hardness Testing

	Model 300 No. 54-700-300	Model 320 No. 54-700-320
Hardness Scales	Rockwell A,B,C,D,E,F,G,H,K,L,M,P,R,S,V.	Rockwell A,B,C,D,E,F,G,H,K,L,M,P,R,S,V.
	Total of 15 scales	15N,30N,45N,15T,30T,45T,15W,30W,45W,15X,30X,45X,15Y,30Y,45Y. Total of 30 scales
Resolution	0.1 Rockwell Unit	
Pre-load	98.07N/10kgf	98.07N/10kgf, 29.42N/3kgf
Total load	588.4N/60kgf, 980.7N/100kgf, 1471N/150kgf	588.4N/60kgf, 980.7N/100kgf, 1471N/150kgf 147.1N/15kgf, 294.2N/30kgf, 441.3N/45kgf
Display	LCD Matrix - Backlit	
Operation	Menu selectable, membrane keypad	
Test process	Automatic	
Load duration	1-50 seconds, can be set, dynamics displayed and stored	
Functions	Upper/lower hardness limits setting and alarming Data statistics: Ave, Max., Min., S, R Scales conversion: convert tested value to Vickers, Brinell, Leeb, σ_b Curvature correction: cylinder and sphere	Upper/lower hardness limits setting and alarming Data statistics: Ave, Max., Min., S, R Scales conversion: convert tested value to Vickers, Brinell, Leeb, Rockwell superficial, σ_b Curvature correction: cylinder and sphere
Tester standard	ISO6508-1999, ASTM E-18	
Testing space	Vertical: 8.66" (220mm) Horizontal: 6.00" (150mm)	
Workpiece size	External cylinder: minimum \varnothing 0.120" (3mm) Internal cylinder: minimum \varnothing 0.900" (23mm)	
Output	Direct RS-232 for printer, computer or SPC data collector	
Power supply	110V/220V, 50-60Hz, 4A	
Dimensions	28" x 9" x 31" (715 x 225 x 790 mm)	29" x 10" x 32" (725 x 245 x 820 mm)
Weight	265 lbs/120 kilos	

Order No.	Description
54-700-300	Model 300 Hardness Tester
54-700-320	Model 320 Hardness Tester
<i>Accessories:</i>	
54-700-317	Short Diamond Indenter
54-700-318	Flat Diamond Indenter
54-700-319	Slim Diamond Indenter
54-700-322	1/8" Steel Ball Indenter & Spare Ball
54-700-323	1/4" Steel Ball Indenter & Spare Ball
54-700-324	1/2" Steel Ball Indenter & Spare Ball
54-700-325	Round Flat Anvil \varnothing 8.85" (225mm)
54-700-326	Round Flat Anvil \varnothing 6.00" (155mm)
54-700-327	Large V-shaped Anvil
54-700-328	Flat/V-shaped Anvil
54-700-329	Assistant Support
54-700-330	Assistant Joist
54-700-220	Mini-Printer
54-700-221	Data Communications Cable