Portable Hardness Tester TMK-140C

Functions & Features

- With built-in thermal printer
- PC Software for data transmission, analysis and measurement reports printing
- Direct calibrate on HL,HRC,HB, and freely switch to 6 different hardness scales
- Test at any angle and direction, even upside down
- Large LCD screen with back-light, showing all functions and parameters
- Conversion to tensile strength (U.T.S)
- Rechargeable Li-ion battery
- Meet or exceed the standards ISO 16859

Measuring Materials

Steel and cast steel, alloy tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminum alloy, copper zinc alloys (brass), an alloy of copper and tin (bronze), copper, forged steel

Technical Parameters

Model	TMK-140C
Measuring Range	(170-960)HLD, (17.9-69.5)HRC, (19-683)HB, (80- 1042)HV, (30 6- 102 6)HS, (59 1-88)HRA, (13 5- 101 7)HRB
Hardness parameter	HL,HRC,HRB,HRA,HS,HB,HV
Accuracy	±6HLD/±1.5HRC
Display	LCD with back-light
Memory	600 groups
PC Connection	Available
Printer	Build- in High- speed Thermal Printer (printer paper: 44.5±0.5 mm)
Battery	Rechargeable Li- ion battery
Operating Temperature	- 20 C~ + 6 0 C
Dimensions	230×86×46mm
Impact Device Type	D,DC,DL,D+15,G,C,E
Weight	400g
Standard Configuration	Main unit, Impact Device type D, Calibration block, Power adapter, Cleaning brush, Small supporting ring, Operation manual, Certificate, Paper of printer
Optional Accessories	Optional Impact Devices, Shaped support ring, Paper for printer

Pictures

Optional Accessories

Optional Impact Devices (Probes)

Supporting Rings

Application Fields

● The bearings and other parts, heavy work-pieces, metal material, pressure vessel, failure analysis of turbine generator unit and equipment

● Mechanical or permanent assembly components have been installed, the test space is very narrow, requires the original record regular test results

● Large work- piece within a wide range of more rapid test measurement site

Requirments of Test Piece

● The weight of test piece ≥ 2kg.

● The thickness ≥ 25mm.

● The surface roughness ≤ 2.0 μm Ra.

Tips: If the test piece does not meet the conditions above, please couple it with rigid support before test.
Please follow detail requirements in the standard ***ISO 16859-1 Leeb Hardness Test***

Special Supporting Ring (use for different shaped surface)

Model	Notice	Model	Notice
Z10- 15	Outside cylinder R10-15	K10-15	Outside sphere R10-15
Z14.5-30	Outside cylinder R14.5-30	K14.5-30	Outside sphere R14.5-30
Z25-50	Outside cylinder R25-50	HK11- 13	Inside sphere R11- 13
HZ11- 13	Inside cylinder R11- 13	HK12.5-17	Inside sphere R12.5- 17
HZ12.5-17	Inside cylinder R12.5- 17	HK16.5-30	Inside sphere R16.5-30
HZ16.5-36	Inside cylinder R16.5-30	UN	Outside cylinder, R10- ∞

Measuring Range

Material	Hardness	Impact Device (Probe)					
		D/DC	D+15	C	G	E	DL
Steel & Cast Steel	HRC	17. 1~68.5	19.3~67.9	20.0~69.5		22.4~70.7	20.6~68.2
	HRB	59.6~99.6			47.7~99.9		37.0~99.9
	HRA	59. 1~85.8				61.7~88.0	
	HB	80 ~651	80 ~638	80 ~683	90 ~646	8 3 ~663	81 ~646
	HV	83 ~976	80 ~937	80 ~996		84 ~1042	80 ~950
	HS	32.2~99.5	33.3~99.3	31.8~102. 1		35.8~ 102.6	30.6~96.8
Forged Steel	HB	142~651					
Alloy Tool Steel	HRC	17. 1~67. 1	19.8~68.2	20.0~69.5		22.6~70.2	
	HV	83 ~976	80 ~935	80 ~996		82 ~1009	
Stainless Steel	HRB	59.6~99.6					
	HB	140~651					
	HV	83 ~976					
Gray Cast Iron	HB	140~334			92 ~326		
Nodular Cast Iron	HB	140~387			140~364		
Cast Aluminium Alloy	HB	3 0 ~159		2 3 ~210	32 ~168		
	HRB	23.8~84.6		22.7~85.0	23.8~85.5		
	HV	83.2~648.2					
Copper-zinc Alloy	HB	4 0 ~173					
	HRB	13.5~95.3					
Copper- tin Alloy	HB	60 ~290					
Copper	HB	4 5 ~315					