

TIME® 5100/5102/5104

PORTABLE HARDNESS TESTER

Standard Delivery

•Main unit	1
•Test block HLD	1
•USB connecting cable	1
•Cleaning brush	1
•Battery AAA 1.5V	2
•TIME certificate	1
•Warranty card	1
•Instruction manual	1

Optional Accessory

- Support rings
- Dataview software

Features

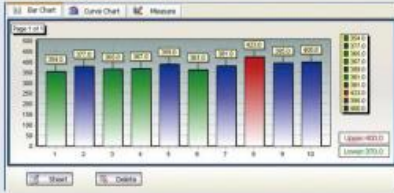
- Light Mini Unit with simple menu, easy and convenient to use
- Conversion of hardness scales(HL, HV, HB, HRC, HRB and HS)
- USB interface to connect the PC, assisted by Software Dataview TH51X (especially for TH51X series Hardness Test) with both online measurement and offline data analysis mode: curve chart, data sheet, setting of tolerance limit and data report are available.
- Connected to Printer by RS 232 and test values can be printed directly
- Measuring Direction:Any direction 360°
- Automatic identification of impact test direction
- Memory of 270 data in 9 group
- Backlight for convenience in darkness
- Upper / lower limits setting
- AAA 1.5V battery, whose capacity shown in display
- Auto power off
- TIME®5100: integrated with D impact device for the majority of hardness testing requirements
- TIME®5102: integrated with C impact device for hardness testing on thin, light and surface hardened components
- TIME®5104: integrated with DL impact device for hardness testing of deep grooves and tooth surface



Technical Specification

Model	TIME®5100	TIME®5102	TIME®5104
Impact device	D integrated	C integrated	DL integrated
Hardness scales	HLD, HB, HRC, HRB, HV, HS	HLC, HB, HRC, HRB, HV, HS	HLDL, HB, HRC, HRB, HV, HS
Accuracy	±6HLD(760 ±30HLD)	±12HLC	±12HLDL
Memory	270 average readings in 9 group files		
Output	RS 232 to printer	RS232 to printer	RS232 to printer
Min. surface roughness of work piece	1.6µm (Ra)	0.4µm (Ra)	1.6µm (Ra)
Max. work piece hardness	960HLD	960HLC	950HLDL
Min. radius of work piece (convex/concave)	Rmin = 50mm (with support ring Rmin= 10mm)	Rmin=11mm (with support ring)	Rmin = 10mm (with support ring Rmin= 10mm)
Min. work piece weight	2~5kg on stable support 0.05~2kg with compact coupling	0.5~1.5kg on stable support 0.02~0.5kg with compact coupling	2~5kg on stable support 0.05~2kg with compact coupling
Min. work piece thickness coupled	5mm	1mm	5mm
Min. thickness of hardened layers	0.8mm	0.2mm	0.8mm
Indentation depth	Impact devices data	Impact devices data	Impact devices data
Continuous working time	8h (without backlight)		
Power	AAA 1.5V batteries		
Operating temperature	0~40℃	0~40℃	0~40℃
Dimensions (mm)	155×55×25	160×60×25	215×60×25
Weight (g)	180	180	180

Online measurement



Data analysis

Bar chart



Dataview TH51X is special software for TH51X series Hardness Tester. The data stored in the Hardness Tester TH51X series can be transferred to the PC for further analysis with Dataview TH51X. It has online measurement mode and offline analysis mode, data analysis, graphics display and print output functions are all available.

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SOFTWARE

Curve chart



Data sheet

SI	Value	Tolerance Limit
1	204.0	
2	205.0	
3	242.0	
4	330.0	
5	336.0	
6	342.0	
7	342.0	
8	342.0	
9	512.0	
10	514.0	

Setting of tolerance limit

Data report

SI	Value	SI	SI	SI	SI	SI	SI	SI	SI
1	204.0	SI	SI	SI	SI	SI	SI	SI	SI
2	205.0	SI	SI	SI	SI	SI	SI	SI	SI
3	242.0	SI	SI	SI	SI	SI	SI	SI	SI
4	330.0	SI	SI	SI	SI	SI	SI	SI	SI
5	336.0	SI	SI	SI	SI	SI	SI	SI	SI
6	342.0	SI	SI	SI	SI	SI	SI	SI	SI
7	342.0	SI	SI	SI	SI	SI	SI	SI	SI
8	342.0	SI	SI	SI	SI	SI	SI	SI	SI
9	512.0	SI	SI	SI	SI	SI	SI	SI	SI
10	514.0	SI	SI	SI	SI	SI	SI	SI	SI