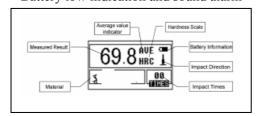


Hardness Tester TH140



- Developed Model of HLN-11A
- Automatic identification of Impact devices
- On-Board memory holds 48-350 groups of data
- Software to connect with PC
- Upper and lower limit and sound alarm
- Large LCD with backlight, showing all functions and parameters
- Press HELP key can obtain operating tips in any displaying interface
- Direct display of hardness scales HRB, HRC, HV, HB, HS,HL
- Conversion to tensile strength (U.T.S)
- For all metallic materials
- Test at any angle, even upside down
- Removable printer included
- Wide measuring range (see next page)
- Six Impact Devices are available for special application
- Battery low indication and sound alarm



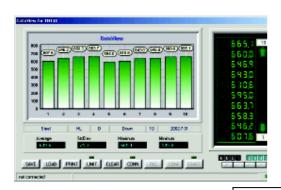
Technical specifications

Hardness scale	HL, HRC, HRB, HRA, HV, HB, HS			
Memory	48-350 group (Impact times:32-1)			
Measuring range	See next page			
Tensile strength U.T.S. range	374~2652 MPa			
Accuracy	±6HLD (760±30HLD) error of displayed value			
	6HLD (760±30HLD) repeatability of displayed value			
Standard Impact Device	D			
Optional Impact Devices	DC/D+15/G/C/DL (see page 8)			
Max. Workpiece Hardness	996HV(For Impact Devices D/DC/DL/D+15/C)			
	646HB(For Impact Device G)			
Min. Radius of Workpiece (convex/concave)	Rmin = 50mm (with special support ring Rmin= 10mm)			
Min. Workpiece weight	2~5kg on stable support			
	0.05~2kg with compact coupling			
Min. Workpiece thickness	5mm (Impact Devices D/DC/DL/D+15)			
	1mm (Impact Device C)			
	10mm (Impact Device G)			
Min. thickness of hardened layers	0.8mm			
Power	Rechargeable NiMH Battery, 5×1.2V 600mAh			
Continuous Working time	About 50h, (without printing and backlight)			
Charging time	2~3.5 hours			
Operating temperature	0~40°C			
Relative humidity	±90%			
Overall dimensions	268×86×50mm			
Weight	530 g (including Impact Device and printer)			

Hardness Tester TH140

Measuring range

Material	Hardness	D/DC	D+15	C	DL	
	Scale	LD: 170-900	LD+15:	LC: 350-960	LDL:	G
			330-900		560-950	LG: 200-750
Steel &	HRC	20-68.4	19.3-67.9	20-69.5	20.6-68.2	
cast steel	HRB	59.6-99.5			37-99.9	47.7-99.9
	HRA	59.1-858.8				
	НВ	127-651	80-638	80-683	81-646	90-646
	HV	81-955	80-937	80-996	80-950	
	HS	32.5-99.5	33.3-99.3	31.8-102.1	30.6-96.8	
Stainless	HRB	46.5-101.7				
	НВ	85-655				
	HV	85-802				
CWT/St	HRC	20.4-67.1	19.8-68.2	20.7-68.2		
	HV	80-898	80-935	100-941		
GC.Iron	HRC					
	НВ	93-334				92-326
	HV					
NC.Iron	HRC					
	НВ	131-387				127-364
	HV					
C.Alum	НВ	19-164		23-210		32-168
	HRB	23.8-84.6		22.7-85.0		23.8-85.5
Brass	НВ	40-173				
	HRB	13.5-95.3				
Bronze	НВ	60-290				
Copper	НВ	45-315				



Dataview for TH140



Standard delivery

- Main unit with removable printer
- Impact Device type D
- Test block with HLD value
- Charger
- Cleaning brush
- Table support for main unit
- TIME certificate
- Instruction manual
- Warranty card
- Carrying case

Optional accessories

- Printing paper
- Special Impact Devices
- Support rings
- Dataview and cable