

## **Hardness Tester TH150**



- Developed model of TH130, more fashionable appearance!
- Impact Device D integrated: no cables!
- •Memory up to 256 data
- Delete the misplay result automatically or artificially
- •Battery low indication
- •Large LCD with backlight
- ●Data output RS232
- Wide measuring range in HLD and direct display of converted hardness values in HRB, HRC, HV, HB, HS
- •Measuring range for most metals (see table below)
- •Test at any angle, even upside down
- •Simple handling and low test expenditure
- •Optional printer TA220S available

#### Measuring range

Material	HLD	HRB	HRC	HB	HV	HS
Steel &	300~900	38.4~99.8	20.4~68.4	81~654	81~955	32.5~99.5
cast steel						
CWT.ST	300~840		20.4~67.1	85~655	80~898	
Stainless	300~800	46.5~101.	19.6~62.4		85~802	
steel		7				
GC.	360~650			93~334		
IRON						
NC.IRON	400~660			131~38		
				7		
C.ALUM	170~570	23.8~84.6		19~164		
BRASS	200~550	13.5~95.3		40~173		
BRONZE	300~700			60~290		
COPPER	200~690			45~315		

#### **Technical specifications**

Standard Impact Device	D integrated	
Hardness scales	HLD, HB, HRC, HRB, HV, HS	
Measuring range / materials	See table above	
Accuracy	±6HLD(760 ±30HLD)	
Memory	256 average readings	
Output	RS 232 to printer	
Min. Surface Roughness of Work piece	1.6μ ( Ra)	
Max. Work piece Hardness	900HLD	
Min. radius of Work piece	Rmin = 11mm (with support ring	
(convex/concave)	Rmin= 10mm)	
Min. Work piece weight	2~5kg on stable support	
	0.05~2kg with compact coupling	
Min. Work piece thickness coupled	5mm	
Min. Thickness of hardened layers	0.8mm	
Indentation depth	Impact Devices data	
Continuous working time	300 h (without backlight)	
Power	Batteries 3V Lithium CR1/2 AA	
Operating temperature	0~40	
Overall dimensions	158×60×39mm	
Weight	150 g	

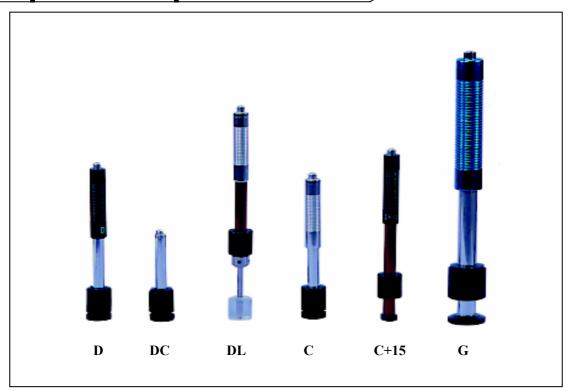
#### **Standard delivery**

- Main Unit integrated with Impact Device D
- impact Device D
- •Test block with HLD value
- •Cleaning brush
- •Battery 3V Li CR1/2 AA
- •TIME certificate
- •Instruction manual
- Warranty card
- Carrying case

#### **Optional accessories**

- Support rings (see next page)
- Printer TA220S with cable

# **Optional Impact Devices**

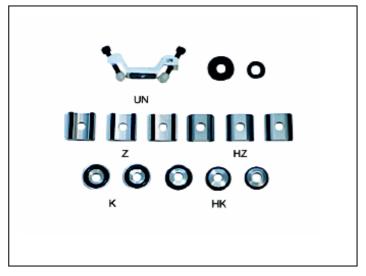


Optional Impact Devices

### **Technical specifications**

Application range of		D type for general	D+15 type for	C type for	G type for	
Impact Devices		pieces DC type for	measuring in	measuring light and	measuring	
		hole or cylinder DL	grooves or	small piece and	heavy and rough	
		type for long and	recessed	surface hardened	cast and forged	
T (D		narrow channel or hole	surfaces	layer	pieces	
Impact De		D/DC/DL	D+15	C	G	
Impacting energy		11mj	11mJ	2.7mJ	90mJ	
	npact body	5.5g/5.5g/73g 7.8g		3.0g	20g	
	of spherical test	1600HV	1600HV	1600HV	1600HV	
tip					_	
	of spherical test	3mm	3mm	3mm	5mm	
tip	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				m 111	
	f spherical test tip	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	
	of Impact Device	20mm	20mm	20mm	30mm	
Length of	Impact Device	147/86/75mm	162mm	141mm	254mm	
Weight of	Impact Device	50g	80g	75g	250g	
	ness of workpiece	940/940/950HV	940HV	1000HV	650HB	
Average s of the test	surface roughness piece	Ra: 1.6 µ m	Ra: 1.6µm	Ra: 0.4µm	Ra: 6.3µm	
Min.	Direct measuring	5kg	5kg	1.5kg	15kg	
weight of	On stable support	2kg	2kg	0.5kg	5kg	
test piece	With compact coupling	0.05kg	0.1kg	0.02kg	0.5kg	
Min.	Compact coupling	5mm	5mm	1mm	10mm	
thickness of test piece	Min.case hardened depth	0.8mm	0.8mm	0.2mm	1.2mm	
Size of indentation of spherical test tip						
Hardness 300HV	Indentation diameter	0.54mm	0.54mm	0.38mm	1.03mm	
	Indentation depth	24μm	24µm	12μm	53μm	
Hardness 600HV	Indentation diameter	0.54mm	0.54mm	0.32mm	0.90mm	
	Indentation depth	17μm	17μm	8µm	41μm	
Hardness 800HV	Indentation diameter	0.35mm	0.35mm	0.35mm	-	
	Indentation depth	10μm	10μ	7μ		

## **Optional Support Rings**





Support Rings

No.	Туре	Sketch of non-conventional supporting ring	Remarks
1	Z10-15		For testing cylindrical outside
			surface R10 ~ R15
2	Z14.5-30	+++++++++++++++++++++++++++++++++++++++	For testing cylindrical outside
			surface R14.5 ~ R30
3	Z25-50		For testing cylindrical outside
			surface R25 ~ R50
4	HZ11-13		For testing cylindrical inside
			surface R11 ~ R13
5	HZ12.5-17		For testing cylindrical inside
			surface R12.5 ~ R17
6	HZ16.5-30		For testing cylindrical inside
			surface R16.5 ~ R30
7	K10-15		For testing spherical outside
			surface SR10 ~ SR15
8	K14.5-30		For testing spherical outside
		Aug.	surface SR14.5 ~ SR30
9	HK11-13		For testing spherical inside
		$\triangle$	surface SR11 ~ SR13
10	HK12.5-17		For testing spherical inside
			surface SR12.5 ~ SR17
11	HK16.5-30	₩ p	For testing spherical inside
			surface SR16.5 ~ SR30
12	UN	\$ \$	For testing cylindrical outside
			surface, radius adjustable $R10 \sim \infty$
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