

Table 1: measuring range of TIME Leeb hardness tester

Material	Hardness scale	Impace device					
		D/DC	D+15	C	G	E	DL
Steel and cast steel	HRC	17.9~68.5	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	127~651	80~638	80~683	90~646	83~663	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
Steel	HB	143~650					
CWT, ST	HRC	20.4~67.1	19.8~68.2	20.7~68.2		22.6~70.2	
	HV	80~898	80~935	100~941		82~1009	
Stainless steel	HRB	46.5~101.7					
	HB	85~655					
	HV	85~802					
GC,IRON	HRC						
	HB	93~334			92~326		
	HV						
NC,IRON	HRC						
	HB	131~387			127~364		
	HV						
C,ALUM	HB	19~164		23~210	32~168		
	HRB	23.8~84.6		22.7~85.0	23.8~85.5		
BRASS	HB	40~173					
	HRB	13.5~95.3					
BRONZE	HB	60~290					
COPPER	HB	45~315					

Table 2: Tolerance and repeatability

No.	Impact device	Standard test block values	Tolerance	Repeatability
1	D	760±30HLD 530±40HLD	±6HLD ±10HLD	6HLD 10HLD
2	DC	760±30HLDC 530±40HLDC	±6HLDC ±10HLDC	6HLDC 10HLDC
3	DL	878±30HLDL 736±40HLDL	±12HLDL	12HLDL
4	D+15	766±30HLD+15 544±40HLD+15	±12HLD+15	12HLD+15
5	G	590±40HLG 500±40HLG	±12HLG	12HLG
6	C	822±30HLC 590±40HLC	±12HLC	12HLC