Rebound Leeb Hardness Tester HL-300A

Great care has been taken to ensure faultless quality standards for the electronics and mechanical components. Demanding tolerances ensure that individual components (impact body, impact devices, standard test block and supporting rings) are mutually interchangeable without loss of accuracy!

Highlighted Features

- High Accuracy (0.5%) and Repeatability (4 LD units), operated by normal AA batteries
- Wide Measuring Range with LD hardness value convertible to Brinell, Rockwell, Vicker and Shore scales;
- Menu operation with Large LCD screen (for singer or comparison display of hardness values);
- Automatic detection and application of impact devices (including D, DC, D+15, DL, C, G, E);
- Data acquisition and output by micro-printer with 960 data store capacity;
- Data transferable to PC via RS232 or USB interface and *Foresight*® software;
- Mean value, max value, min value and standard deviation;
- Reference setting (date, work-piece No. etc.);
- Selection of limitation with a sound alarm;
- Conversion table revision;
- Measuring directions selection - even up-side down;
- Measuring calibration;
- **Automatic calibration with standard block** *new!*

Specifications

- Accuracy: +/- 0.5% (referred to L=800)
- Repeatability: 4 (LD-units)
- Measuring range: 200 - 960 (L-units)
- Operation temperature: -10ºC - +45ºC or 14°F - 113°F
- Power supply: 4 X 1.2V - 1.5V normal AA batteries
- Weight: 450g or 1 LB
- Dimension: 195mm X 84mm X 38mm or 7.68 in X 3.31 in X 1.50 in

Applications

- Hardness tests on installed machines or steel structures.
- Rapid testing of multiple measuring areas for examination of hardness variations over larger regions.
- In locations difficult of access and in confined spaces.
- In situ on heavy and large workpieces or on permanently installed components.
- Measuring hardness for produced parts at production line.
- Identifying metallic material stored in a warehouse.
- Ineffectiveness analysis of permanent parts, pressure vessel, turbo generator.

Standard Package:

- **HL-300A main processor**
- **Impact device D**
- **Standard testing block D**
- **4X1.5V AA alkaline batteries**
- **Cleaning brush**
- **Operation manual**
- **Protective Leather Case**
- **Carrying Case**

Optional Accessories:

- Micro-Printer
- Impact device DC, D+15, DL, C, G or E
- Standard test block G
- ***Foresight***® Data Transfer Software
- Special support rings
- Connection cables to PC

Technical Data and Measuring Range for different Impact Devices (Probes)

Impact Device		D	DC	D+15	DL	C	G	E
Impact Energy (Nmm)		11	11	11	11	3	90	11
Length (mm)		150	85	165	202	140	250	155
Diameter (mm)		20	20	20	20	20	30	20
Weight (g)		75	50	80	100	75	250	100
Max hardness of sample		940HV	940HV	940HV	950HV	1000HV	650HB	1200HV
Sample preparation								
Roughness Ra (µm)		2	2	2	2	0.4	7	2
Min coupled thickness (mm)		3	3	3	3	1	10	3
Min thickness of layer (mm)		0.8	0.8	0.8	0.8	0.2	----	0.8
Min weight of compact shape (kg)		5	5	5	5	1.5	15	5
Min weight of solid support (kg)		2	2	2	2	0.5	5	2
Min weight coupled on plate (kg)		0.1	0.1	0.1	0.1	0.02	0.5	0.1
Indentation of test tip								
With 300HV, Diameter (mm)/depth (µm)		0.54/24	0.54/24	0.54/24	0.54/24	0.38/12	1.03/53	0.54/24
With 800HV, Diameter (mm)/depth (µm)		0.35/10	0.35/10	0.35/10	0.35/10	0.30/7	---/---	0.35/10
Measuring Range								
Steel and cast steel	**HV**	**80-940**	**80-937**	**80-950**	**80-996**	**----**	**84-1027**
	HB	**80-647**	**80-638**	**81-646**	**80-683**	**90-646**	**84-656**
	HRB	**38.4-99.5**	**----**	**37.0-99.9**	**---**	**47.7-99.9**	**----**
	HRC	**20.0-68.0**	**19.3-67.9**	**20.6-68.2**	**20.0-69.5**	**----**	**21.9-70.5**
	HSD	**32.5-99.5**	**33.3-99.3**	**30.6-96.8**	**31.9-102.3**	**----**	**35.5-102.8**
Alloy tool steel	**HV**	**80-898**	**80-935**	**----**	**100-941**	**----**	**83-1009**
	HRC	**20.4-67.1**	**19.8-68.2**	**----**	**20.7-68.2**	**----**	**22.2-70.2**
Stainless steel	**HV**	**85-802**	**----**	**----**	**----**	**----**	**----**
	HB	**85-655**	**----**	**----**	**----**	**----**	**----**
	HRB	**46.5-101.7**	**----**	**----**	**----**	**----**	**----**
	HRC	**19.6-62.4**	**----**	**----**	**----**	**----**	**----**
Grey cast iron	**HB**	**93-334**	**----**	**----**	**----**	**92-328**	**----**
Spheroidal iron	**HB**	**131-387**	**----**	**----**	**----**	**127-364**	**----**
Cast aluminium	**HB**	**20-159**	**----**	**----**	**----**	**----**	**----**
Brass	**HB**	**40-173**	**----**	**----**	**----**	**----**	**----**
	HRB	**13.5-95.3**	**----**	**----**	**----**	**----**	**----**
Bronze	**HB**	**60-290**	**----**	**----**	**----**	**----**	**----**
Wrought Copper	**HB**	**45-315**	**----**	**----**	**----**	**----**	**----**