LD 3000 BRINELL - VICKERS

The LD 3000 hardness tester is a very practical and strong instrument designed to perform Brinell hardness tests at 3000 kg and other loads starting from 10Kg and also to perform Vickers tests. The integral AFFRI system assures high performance using automatic selection and application of loads through a simple touch panel. Digital readout of load force and dwell time help the operator during the test. The test force is closed loop controlled through an electronic load cell connected to the indenter. All errors linked to weight systems are eliminated, the test is fast and there is an absolute increase in accuracy in every condition. It includes a clamping cap for secure stability of large parts. The indenter moves through 30 mm into auto contact with the sample. The operator is required only to push the twin start buttons to initiate the complete test sequence: auto contact with the test surface ,clamping, application of the test loads, release of sample. At the end of the cycle, the operator can easily measure the indentation in different systems:

Four different measurement systems

- **Through the microscope** we supply, in order to obtain Brinell Vickers values (standard).
- **AUTOSCAN**, which is the electronic microscope for automatic measure (option).
- **Integrated automatic measure**, without a microscope for fast and serial tests HBT system (option)
- **Integrated optical direct readout** through camera system and automatic Brinell (option).

It can be operated in areas subject to vibration.
No need to level.
It can work even if inclined.
It can be operated at different temperature ranges from 0 to 50°C.

Technical data		
Standards		EN-ISO 6506-2 / EN-ISO 6507-2 / EN-ISO 6508-2 / ASTM E10 / ASTM E18 / ASTM E92
Programmed test forcethrough touch panel and closed loop and load cell inside:		
Force Range	Brinell	98.1 - 147 - 294 - 306 - 613 - 1226 - 1839 - 2452 - 4905 - 7357 - 9810 - 29430 N (10 - 15 - 30 - 31.2 - 62.5 - 187.5 - 250 - 500 - 750 - 1000 - 3000 kgf)
	Vickers / Knoop	98.1 - 147 -294 - 490.5 - 981 N (10 - 15 - 30 - 50 - 100 kgf)
	At request Rockwell	588 - 981 - 1471N (60 - 100 - 150 kgf)
Dwell Time forces		from 5 to 60 seconds programmable
Digital display		of the selected force, selected test time
Cycle		only one single start input including travel of indenter and self loading
Clamping		movable cup and adjustable clamping force till 4000N
Measure		Through the microscope; Easy Brinell; Integrated automatic measure; Integrated optical direct readout
Field of use		all metals from 10 to 600 HB 10 to 2600 HV
Head stroke / Depth capacity		300 mm / 160 mm
Dimensions / Weight		45 x 70 x 90 cm / 350 kg
Power supply		110V-220V 50÷60 Hz

Standard Equipment included in the price

Instruction manual, calibration certificate, dust cover, conversion table, warrantee certificate, electrical connection cable 220V 50/60 Hz. 0.01 mm high resolution microscope with 6 mm drum scale for Vickers Brinell indentations

Optional accessory: Clamping base for large or unstable pieces

Optional: Automatic Brinell measure, for fast test on production department, it doesn't need any microscope

Optional: **Easy Brinell** (Automatic Optical measure through autoscan Probe)

Extra accessories

- Clamping base for secure lock samples
- Big flat anvil 150 mm
- Large square table 400 x 300
- Indenter 10 mm
- Indenter 5 mm
- Indenter 2.5 mm
- HRC indenter
- HRB Indenter
- Flat anvil 60 mm diameter for medium pieces
- "V" anvil 60 mm diameter for round pieces
- Test block HB W - 3000 kg
- Test block HB W - 750 kg
- Test block HB W - 187.5 kg
- HRC test block
- HRB Test block
- Vickers 136° Indenter
- Vickers Test block HV 30
- Automeasure
- Automatic HBT Brinell measure
- Easy Brinell
- Integrated screen automeasure
- Autofocus
- Integrated screen and automatic Brinell measure
- Through camera and software to measure in fast and automatic procedure the brinell and Vickers indentations
- Objective 20x for load 187.5 - 250
- Obiettive 44x for load 30 - 187.5
- Obiettive 70x for loads 10 - 30