## BENCH HARDNESS TESTING



## **Brinell Hardness Tester CV-3000LDB**

Ready-to-test digital Brinell tester with closed loop controlled load application.

#### **Features**

- Sturdy, regular 3000kg Brinell tester
- Rugged construction to withstand the harshest environments
- Accurate reliable and durable tester at a very affordable price
- High rigidity and closed loop load technology to ensure accurate and safe load application
- External microscope with analogue scale for indentation measurement
- Easy to use human interface to set up and operate the tester
- Brinell video microscope system optional





## **TECHNICAL SPECIFICATION**

Brinell scales	HBW 10/3000, HBW 10/1500, HBW 10/1000,
	HBW 10/500, HBW 10/250, HBW 10/125, HBW 10/100,
	HBW 5/750, HBW 5/250, HBW 5/62.5, HBW 2.5/187.5
Test loads	62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf
Display indication	Test force selected, test force actual, dwell time
Test force application	Closed loop controlled load motor
Load duration	Adjustable application and dwell time 5-60 sec (5 sec step)
Accuracy	Conforms to EN-ISO 6506
Specimen accommodation	Vertical space 220mm
	Horizontal space (from centre-line) 135mm
Specimen access	External surfaces roughly ground, Ra <21.6µm
Power supply	220V/50Hz or 110V/60Hz
Measuring microscope	Magnification 20X, resolution 5µm
Machine dimensions	Width 236mm, depth 550mm, height 753mm
Machine weight	Approx. 123kg
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## **Standard Delivery**

- CV-3000LDB main unit
- Measuring microscope 20x
- Ball indenters ø 2.5mm, ø 5mm and ø 10mm
- V-anvil ø 80mm
- Large flat anvil ø 200mm
- Small flat anvil ø 80mm
- Test block 150-250 HBW 10/3000
- Test block 75-125 HBW 10/1000
- Test block 150-250 HBW 2.5/187.5
- Fuse 2A (3 pcs)
- CV Instruments certificate
- Installation and user manual

## **Optional Accessories**

- Spare balls for each indenter
- Brinell video microscope system



# **Brinell Scanning System CV-HB100**

Portable Brinell video scanning system.

#### **Features**

- High end portable video scanning system to automatically measure and determine the Brinell hardness value
- Excellent solution for quick and easy measurement of Brinell hardness values with ball diameters 1, 2, 2.5, 5 and 10mm and applied loads of 1 to 3000kg
- Including magnetic base for accurate and precise measuring
- Easy to use: Position the scanning system on the indentation made in a flat or curved surface, take an image of the indentation and send the image to pc or laptop to determine the relative hardness and diameter of the indentation. Accuracy of the measured diameter is up to 0.001µm
- Possibility to set tolerance value Yes/No
- Possibility to show the last 5 hardness measurements taken
- Automatic storage of images and files
- Storage of operator ID, date/hour, hardness parameters, measured hardness values, location of stored image
- Software for automatic measurement can be used for numerous other applications with different video cameras

#### **Software Features**

- Measures the indentation automatically or by hand
- Saves the image of the indentation in a dedicated format and folder
- Test results can be imported into Excel
- Each measurement is filed with information about the ball diameter, applied load, load duration
- Images taken can be copied

#### PC Requirements

- Processor: Intel Pentium or equivalent 1GHz
- Operating system: Windows 2000 or Windows XP
- Browser: Internet Explorer 5.5 (or higher)
- Memory: 512Mb RAMMinimum disk space: 4Mb
- Video card: 32Mb
- Firewire port

## TECHNICAL SPECIFICATION

Power supply	110V to 240V
Power consumption	300mA
Dimensions	ø 43mm x 270mm
Dimensions carrying case	Ext. 380mm x 265mm x150mm
	Int. 350mm x 250mm x140mm
Weight	650gr



## **Standard Delivery**

- Video-optical head
- Software
- Power supply AC 100-240V, 50/60Hz, 1.0A
- Frame grabber
- Video cable (2.3m)
- RCA-RCA video cable (1.5m)
- Set of USB cable, CD with driver & dongle

## **Optional Accessories**

- Battery charger 12V, 7A
- Battery charger 12V, 1.2A
- Aluminium carrying case for CV-HB100
- PC or laptop