



**BANBROS ENGINEERING PVT. LTD.**

The Precision Measurement People

# TOUCH SCREEN DIGITAL DISPLAY MICRO VICKERS HARDNESS TESTER

- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*



**BHVS-1000TS**

**FEATURE:**

- Simplified version without printer and interface, single lens for measurement.
- Manual turret shifting between indenter and objective lens
- Standard 8-level force, from 10gf (0.098N) to 1kgf (9.8N), 2Kgf (19.6N) is optional, users can customize the test force.
- After measuring the indentation diagonal length, the system will automatically calculate and display the hardness value.
- Based on the standard block of different forces, the hardness value can be corrected automatically.
- " Touch-screen interface, easy to operate, multi-language is available.
- Testing data can be saved into U disk directly in EXCEL format, which is convenient for easy editing and processing (Optional USB interface).
- The information of test samples, operator etc. can be input and saved.
- Password can be set to protect setting parameters.
- Measured hardness value can be automatically converted to other scales.
- Modular design, easy maintenance, large space for sample.
- Optional image measuring system can be equipped with this hardness tester so as to connect with computer for automatic operation.

**APPLICATION:**

- Heat treatment, carbide, quench hardened layer, the surface coating layer, steel, non-ferrous metal and small and thin shape parts, etc.

**TECHNICAL SPECIFICATIONS:**

Model No.	BHVS-1000TS
Test force	10gf (0.098N), 25gf (0.245N), 50gf (0.49N), 100gf (0.98N), 200gf (1.96N), 300gf (2.94N), 500gf(4.9N), 1kgf (9.8N)
Standard Conformed to	GB/T 4340.2, ISO 6507-2, ASTM E384
Min measuring unit	0.01μm
Conversion Scale	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Hardness measuring range	8~2900HV
Method of testing force applied	Automatic (Loading, Dwelling, Unloading)
Turret Type	Manual
Test microscope magnification	400X (Measuring), 100X (observation) (Optional 50X, 200X, 500X, Maximum 1000X)
Test force dwell time	1~99s
X-Y test sets	Dimension: 100*100mm Maximum travel 25*25mm
Data output	Touch-screen display, RS232 interface & Printer. USB disk interface is optional to replace printer
Maximum specimen height	100mm
Distance from the center to the outer wall of the indenter	135mm
Power supply	AC 220V or 110V, 50 or 60Hz
Dimensions	540*260*650mm
Net Weight	About 50Kg



## Operation Interface

Main Interface

Operator

Sample

Range  To

Load(kg)  Dwell Time(S)

Turret

Brightness

D1  D2

Conversion

Conversion Scale Interface

Conversion scale

<input type="button" value="HRA"/>	<input type="button" value="HRB"/>	<input type="button" value="HRC"/>	<input type="button" value="HRD"/>
<input type="button" value="HRF"/>	<input type="button" value="HV"/>	<input type="button" value="HBW"/>	
<input type="button" value="HR15N"/>	<input type="button" value="HR30N"/>	<input type="button" value="HR45N"/>	
<input type="button" value="HR15T"/>	<input type="button" value="HR30T"/>	<input type="button" value="HR45T"/>	

Calibration Interface

Calibration

Magnification:

Load(Kg):

Pulses: X  Y

Scale

Hardness

Data interface

DATA

NO.	Hardness-S	Hardness-V	Conversion-S	Conversion-V

MAX	MIN	AVE	VAR

**STANDARD ACCESSORIES:**

Item	Qt'y	Item	Qt'y
Axle weight	1	Weight	6
Cross test sets	1	10X eyepiece test	1
Vickers hardness block (high block, low block)	1 each.	USB disk (Optional)	1
Level	1	Plastic dust cover	1
Screwdriver	2	Adjusting screw	4 Pcs.
Power line	1	Spare fuse (2A)	2 pcs.
Product Manual	1	Product certification	1

**Note:** Special accessories can be provided.

- Knoop indenter: can measuring some high hardness materials.
- Video measuring apparatus can be provided. It can display the testing indentation image on the screen and make the measurement.
- CCD image processing system can be provided. It will clearly show indentation image on a computer screen, and make automatic or manual measurement through PC.
- Digital micrometer can be provided to be equipped on X-Y stage to realize digital movement control.