ADVANCED TOUCH SCREEN DIGITAL VICKERS HARDNESS TESTER

- *VALUE*

- *VERSATILITY*

- *PERFORMANCE*

BVH-ALT SERIES

- Close Loop high precision **load cell** structure.
- **Dual optical** systems design (eyepiece + camera path), both paths can work at same time, no need switch knob
- 8'' **touch screen**, menu structure, easy operate
- Quality automatic **judgement function**
- **Automatic** turret, automatic loading, dwell, unloading
- With **USB port**, test data can save to USB flash automatically in Excel format
- Work table can change to **XY cross work table (optional)**

APPLICATION:

- Widely used to test the hardness of all kinds of metal materials (steel, nonferrous metals, tinsel, cemented carbide, sheet metal, etc.)
- Surface layer / coating (Carburization, nitriding, decarburization layer, surface hardening layer, galvanized coating, etc.)
- Glass, chip, ceramic, plastic and rubber, etc.

FEATURES:

- Closed loop design with high accuracy load cell, no need to install dead weights, let installation more easy and loading - dwell - unloading automatically, easy operation
- With load automatic correct function, greatly improved test accuracy and let calibration more easy
- Hardness value automatic corrected according to different hardness block
- Touch screen interface with menu structure, make test very simple
- Modular design, simple maintenance
- With hardness conversion function, from HV hardness value can covert to HR, HB, etc.
- With HV/HK test function
- Support to set a password protection settings
- Test data can save to USB flash disk as EXCEL format, edit and process more easy
- Available to upgrade to full automatic Vickers hardness tester

XY cross work table for optional purchase

TECHNICAL SPECIFICATIONS:

Model No.		BVH-5ALT / BVH-10ALT / BVH-30ALT / BVH-50ALT
Turret		Automatic (motorized switch)
Force loading		Automatic loading - dwell - unloading
Test Force	BVH-5ALT	0.1Kgf(0.98N), 0.2Kgf(1.96N), 0.3Kgf (2.94N), 0.5Kgf (4.90N), 1.0 Kgf (9.8N), 2.0Kgf(19.6N), 2.5Kgf(24.5N), 3.0Kgf(29.4N), 5.0Kgf(49.0N)
	BVH-10ALT	0.3Kgf (2.94N), 0.5Kgf (4.90N), 1.0 Kgf (9.8N), 2.0Kgf(19.6N), 2.5Kgf(24.5N), 3.0Kgf(29.4N), 5.0Kgf(49.0N), 10.0Kgf(98.0N)
	BVH-30ALT	0.5Kgf(9.8N), 1.0 Kgf (9.8N), 2.0Kgf(19.6N), 2.5Kgf(24.52), 3.0Kgf(29.4N), 5.0Kgf(49.0N), 10.0Kgf(98.0N), 15Kgf(147N), 20.0Kgf(196N), 30.0Kgf(294N); (0.3Kgf for optional)
	BVH-50ALT	1.0 (9.8N), 2.0Kgf (19.6N), 2.5Kgf(24.52), 3.0Kgf (29.4N), 5.0Kgf (49.0N), 10.0Kgf (98.0N), 15Kgf(147N), 20.0Kgf(196N), 30.0Kgf(294N), 40Kgf(392N), 50.0Kgf(490N); (0.5Kgf for optional)
Hardness Scale	BVH-5ALT	HV0.1, HV0.2, HV0.3, HV0.5, HV1, HV2, HV2.5, HV3, HV5
	BVH-10ALT	HV0.3, HV0.5, HV1, HV2, HV2.5, HV3, HV5, HV10
	BVH-30ALT	HV0.5, HV1, HV2, HV2.5, HV3, HV5, HV10, HV15, HV20, HV30
	BVH-50ALT	HV1, HV2, HV2.5, HV3, HV5, HV10, HV15, HV20, HV30, HV40, HV50
Conversion Scales		HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Min measuring unit		0.01μm
Hardness range		8-2900HV (or 8-4000HV)
Eyepiece		10X digital eyepiece with built-in encoder, automatic calculate data
Objective		10X, 20X
Magnification		100X (measurement), 200X (measurement) Both lens can do observe and measurement work directly
XY work table		For optional purchase: Dim.:100x100 mm, Max. Travel Range: 25x25mm, Moving Resolution Ratio: 0.01mm
Dwell time		1-99S (1 second per step)
Data output		8'' touch screen; USB port (can save to U-flash in Excel format);
Test space		180mm x 160mm (Height x Depth)
Power supply		AC220V±5%，50-60Hz
Standard		ISO 6507, ASTM E92, JIS Z2244, GB/T 4340.2
Overall Dimension		580*240*660mm
Net weight		About 50Kg
Packing size		800x470x800
Gross weight		76KG

STANDARD ACCESSORIES:

Item Name	Q'ty	Item Name	Q'ty
Main Instrument	1	USB flash disk	1
Middle, Large, V shape testing table	Each 1	Power Cord	1
Vickers hardness block	2	10^x Digital Micro Eyepiece	1
10X objective lens	1	Spare Fuses (2A)	2
20X objective lens	1	Production certificate	1
Regulating Screw	4	Warranty card	1
Dust cover	1	Manual book	1

HARDNESS TESTER PANEL INTERFACE:

Main interface

Data statistics function

Magnification and Hardness automatic correct

Load automatic correct

Our standard Vickers hardness Tester with **USB interface**, standard parts come with USB flash disk. All the test data can be save to USB flash disk automatically in Excel format. Easy save data to computer.

PS: Tester / product name / conversion scale all can be setting before test, then all data can be saved to Excel.

DATA	TIME	TESTER	PORDUCT NAME	RANGE TOP	RANGE DOWN	HARDNESS TYPE	CONVERSION	FORCE(kgf)
2019/6/12	15:02:30			6553	6553	HV	?!	HV1
2019/6/12	15:02:35			6553	6553	HV	?!	HV1
2019/6/12	15:02:38			6553	6553	HV	?!	HV1
2019/6/12	15:02:41			6553	6553	HV	?!	HV1
2019/6/12	15:02:44			6553	6553	HV	?!	HV1
2019/6/12	15:02:48			6553	6553	HV	?!	HV1
2019/6/12	15:12:44			6553	6553	HV	?!	HV1
2019/6/12	15:12:47			6553	6553	HV	?!	HV1
2019/6/12	15:12:50			6553	6553	HV	?!	HV1
2019/6/12	15:12:52			6553	6553	HV	?!	HV1
2019/6/12	15:12:54			6553	6553	HV	?!	HV1

FEATURES:

10X digital eyepiece with built-in encoder, just click button on encoder, the diagonal length of indentation D1, D2 will display on touch screen directly, and make hardness test very easy; Avoid errors in human readings, greatly improved test accuracy.

LED Cold light source (can be continuous use for 24 hours, no heat generate ensure stable working, servicing life can reach 100,000 hours); Lightness can be adjusted, avoid visual fatigue of operator.
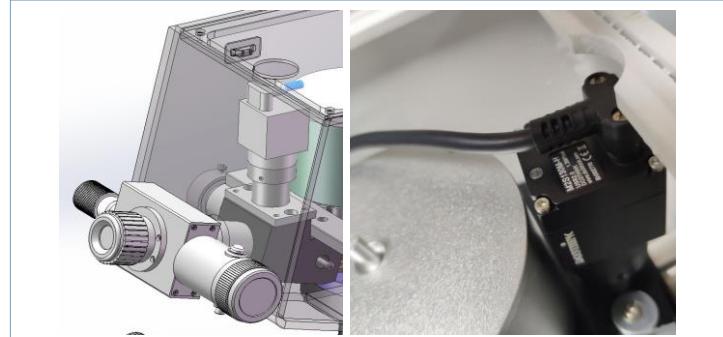
Optional purchase: Built-in camera work with our standard HV-HK measure and analysis software. Software on computer to measure indentation image and get hardness value, generate hardness report.

Professional HV-HK Hardness Automatic Measurement Software: Optional Purchase
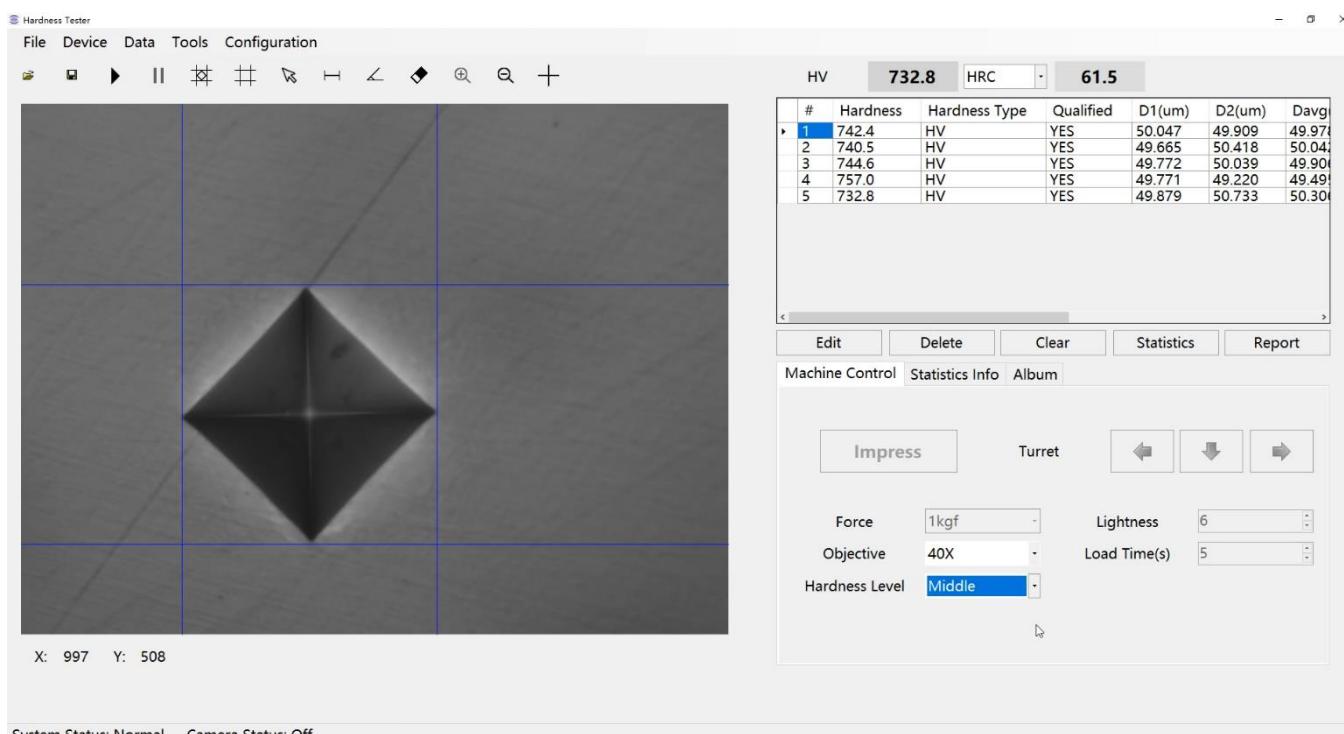
1. Auto hardness measurement: With a click of a button, the software automatically measures the diagonals of the indentation, calculates the hardness value and the statistics (also support manual measurement)

2. Hardness curve: With the depths of test points by user input, the software automatically plots the hardness curve(s), User may save and load the depths in a depth template file for later testing for convenience.

3. Hardness Conversion: Converts HV to other hardness scales (HRA, HRB, HRC, HBW, HK, etc.)

HV   550

HRC   52
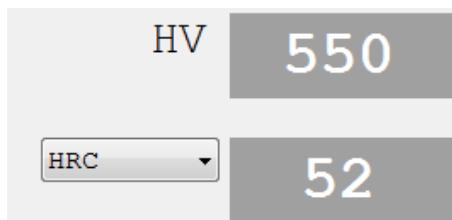
4. Data remember / Store function: All data in the process of measurement will be saved in the right bottom sheet.

5. Statistics: Automatically updates the statistical values such as average, min and max, standard deviation.

6. Test report: Automatically generates WORD report with customizable template.

Select template of report

○ Simple report template
○ Report template with images
◉ Report template with hardness layer

Apply   Cancel
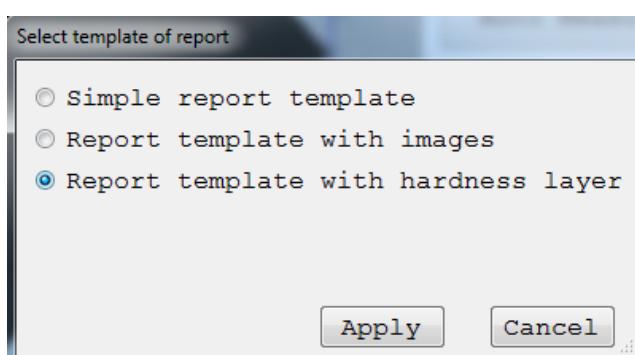
7. Data archiving: Measurement data and images can be saved in one file for later retrieval.

8. Knoop Scale: Can be configured for Knoop Scale measurement.

THVS-EN

Open_Image Save_Image Camera_Dynamic Camera_Static Camera_Set Calibration Sample_Info

Force 500gf
Dwell 0 s
Magni 40x

Turret
Light 0

Indent

Manual Measurement

Auto Measurement

HK 343

Edit   Delete   Stat.   Report

Seq	Mea.Time	D1 (μm)	D2 (μm)		HK	XPos (mm)
1	09:11:02	143.96	143.96	143.96	343.00	0.000
2	09:11:45	143.96	143.96	144.18	343.00	0.000
						0.000

Original Size   Normal Size   X: 570 Y: -454

9. Other Functions: Includes the basic functions of imaging system such as image capture, camera calibration, image processing, etc.