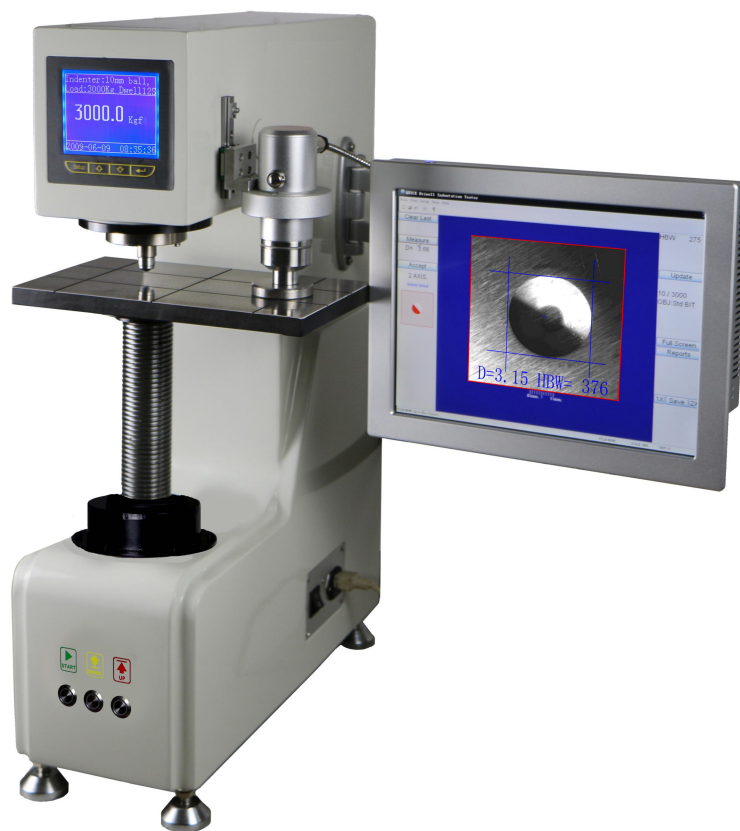


## Automatic Brinell Hardnestester MODEL:KHT600-A

- Auto Z-axis make the testing more easily. Just press START key once, the sample will be auto-lifted to approach the indenter and finishing testing automatically. No matter the size of the sample, the distance between the indenter and sample surface.
- Equipped with CCD camera and PC make the indentation measuring automatically.
- Touch screen, keyboard and mouse 3 ways operation methods available.



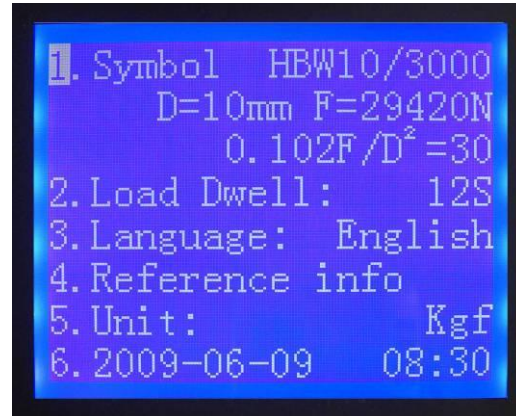
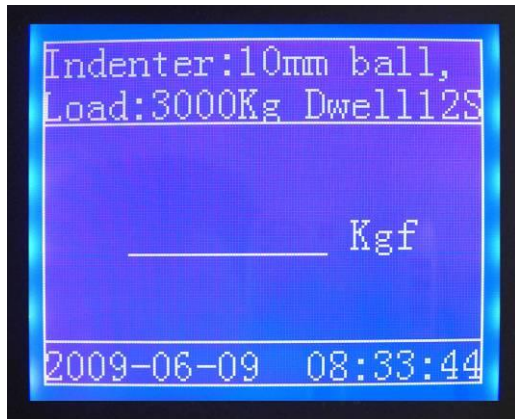
**Auto Z Axis!**  
**Load Cell!**

### Specification:

- The tester incorporates the latest load cell technology. The test load is applied via a closed-loop control unit with a load cell, a DC motor and an electronic measurement and control unit. The result is highly accurate measurements at all test loads up to 0.5%.
- PnP tech. Simple plug - and - play tech allows for much more quick and easy installation than traditional weights type machine.
- The whole weight of the tester is 50% less than the traditional dead weights type tester.
- Test load selection by keyboard and LCD screen. No need of handling heavy weights or cleaning

the messy oil.

- Fully automatic test cycles. Just press START key once, the hardness tester will finish the whole test cycle automatically--the sample elevating, load application, load dwelling, unloading.



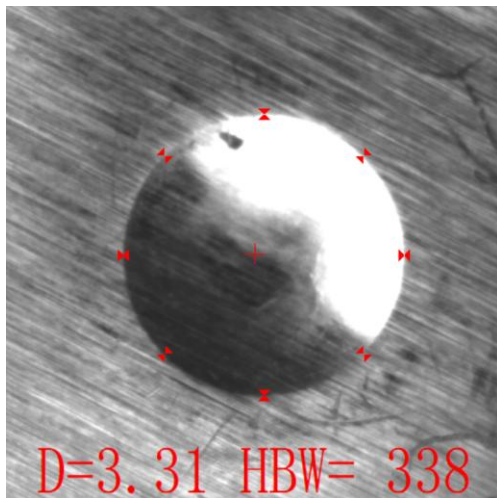
- Selectable dwell times by screen. The indenter, load, and other test informations are showing clearly on the large LCD screen.
- The directions for  $0.102F/D^2$  ratios selecting according to the materials and hardness range can be showing on the screen.

Material	HBW	F/D <sup>2</sup>
Steel	95-650	30
Iron	<140	10
	>140	30
Ni-alloy	95-650	30
Cu-alloy	<35	5
	35-200	10
	>200	30

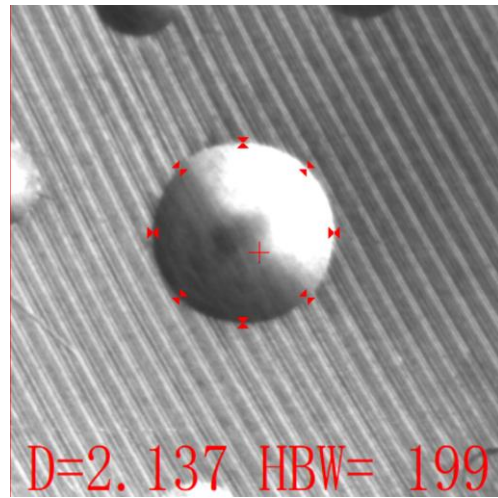
Material	HBW	F/D <sup>2</sup>
Ti-alloy	95-650	30
Al	<35	2.5
	35-80	5/10/15
	>80	10/15
Pb		1
Sn		1

- Equipped with the computer and special Brinell indentation measure software which can measure the Brinell indentation accurately, quickly, reliably. It is a new measuring method by using CCD camera to capture the indentation image, instead of reading diameter from optical microscope by operator then calculating the test value.
- The software can measure Brinell hardness value less than 0.01 seconds automatically. It has high recognition rate for the indentation on rough surface. As the following examples, the surface processed by turning, milling, grinding; even the sawing sections, surfaces filed by hand, or grinding by abrasion wheel, and rusty surfaces, and even damaged indentation, can be identified automatically.
- It is especially suitable for actual industrial field testing due to high speed, and high recognition rate on rough surface.
- The operation is very simple, just press the button on CCD once. It is no longer need to drag the

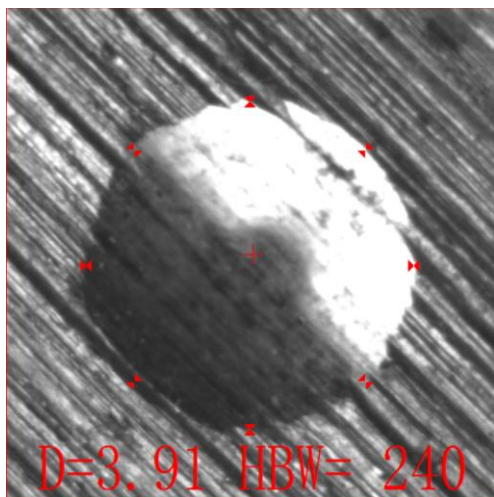
mouse. Realize real automatic measurement.



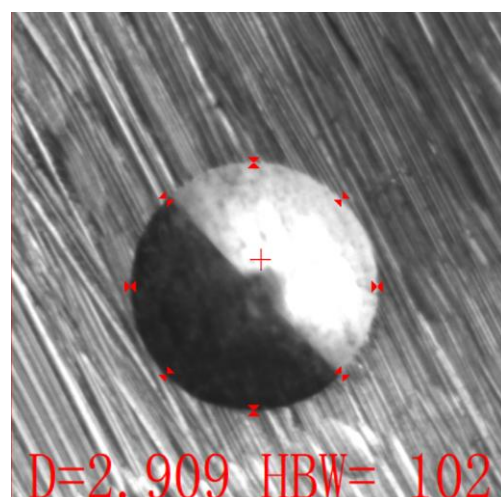
Grinding surface



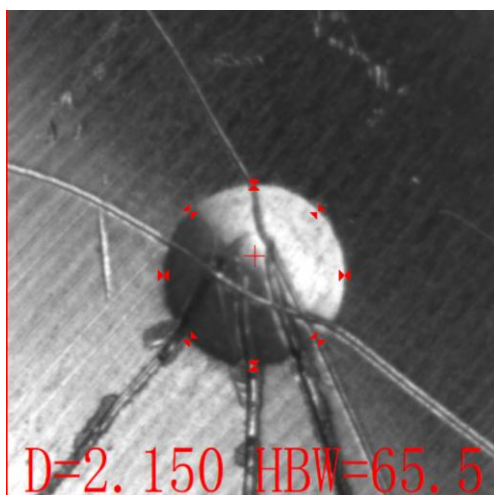
Turning surface



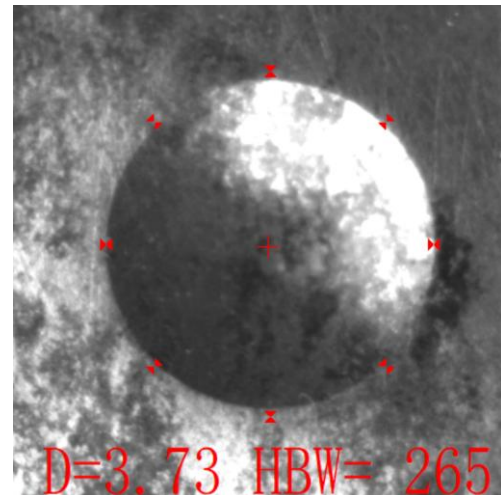
Grinding surface by abrasion wheel



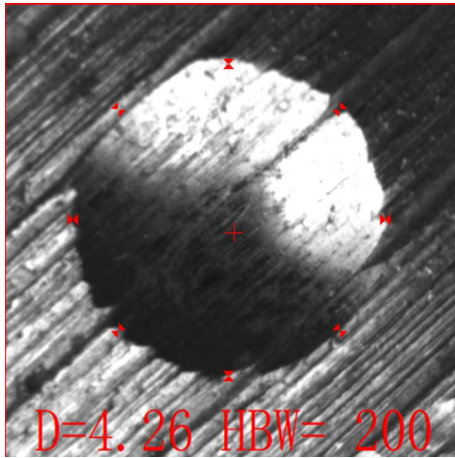
Filed surface



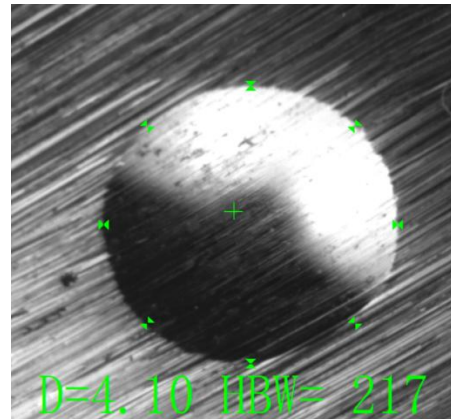
Scratched surface



Rusty surface



Sawed section



Sanding surface

Technical data :

Loads : 3000kgf (29400N), 1500Kgf (14700N), 1000Kgf (9800N), 750Kgf (7355N) ,

500Kgf (4900N), 250Kgf (2452N), 187.5Kgf (1839N), 125Kgf (1226N),

100Kgf (980N), 62.5Kgf (612.9N)

Load dwell duration: 5s~50s, can be set and stored

Tungsten Carbide Ball indenter: 10mm, 5mm, 2.5mm

Measuring range: 3.18HBW~658HBW

Accuracy of indentation measuring:  $\pm 0.5\%$

Accuracy of Brinell Hardness Value:

Hardness Range(HBW)	Error (%)	Repeatability(%)
$\leq 125$	$\pm 2.5$	$\leq 3.0$
$125 < \text{HBW} \leq 225$	$\pm 2.0$	$\leq 2.5$
$> 225$	$\pm 1.5$	$\leq 2.0$

Max measurable height: 220 mm

Max measurable depth: 150 mm

Dimensions: 530mm×260mm×750mm

Power supply: 220/110 V, 50/60 Hz, 4A

Weight: 130kg

**Standard configuration**

Host machine	1
Standard block 125-350HBW10/3000	1
Standard block 90-150HBW10/1000	1
Φ10mm Tungsten Carbide Ball indenter	1
Φ5mm Tungsten Carbide Ball indenter	1
Φ2.5mm Tungsten Carbide Ball indenter	1
Mounting screws for indenter	1
Flat anvil, 300mmx180mm	1
Power supply wire	1
Dust cover	1

**Optional accessories:**

“V ”shape anvil  
Standard blocks of other value  
Φ10mm Tungsten Carbide Ball  
Φ5mm Tungsten Carbide Ball  
Φ2.5mm Tungsten Carbide Ball