

HBST-3000Z

Computerized Image Brinell Hardness Tester



Product presentation:

HBST-3000Z It is suitable for hardness determination of cast iron, steel, non-ferrous metals and soft alloys, as well as hard plastics, bakelite Determination of hardness of certain non-metallic materials.



The HBST-3000Z computer-based image Brinell hardness tester is made of casting, with strong rigidity and high measurement accuracy; it adopts precise structural design, and the test force is directly controlled by the force sensor, which makes the structure of the whole machine compact, and the loading and unloading test force is stable and accurate.



The test process is controlled electrically by the CPU, the objective lens and the indenter are automatically switched, and the switching positioning adopts the double cooperation of mechanical and electronic, so that the positioning accuracy is improved. Built-in touch screen and microcomputer make parameter setting and result display more intuitive and operation more convenient.



An industrial tablet computer is installed on the side of the fuselage, with a built-in industrial-grade camera, which is processed by CCD image software, and can directly export data and images, and complete the manual and automatic measurement of images, which is convenient and fast.

Main Technical Parameter:

Name	HBST-3000Z
Test force	31.25kgf , 62.5kgf , 100kgf , 125kgf , 187.5kgf , 250kgf , 500kgf 750kgf , 1000kgf , 1500kgf , 3000kgf (306.45N , 612.9N , 980.7N , 1266N ,1839N , 2452N , 4903N , 7355N , 9807N , 14710N , 29420N)
Measuring ruler	HBW2.5/31.25 , HBW2.5/62.5 , HBW5/31.25 , HBW5/62.5 , HBW5/125, HBW10/100 , HBW10/125 , HBW2.5/187.5 , HBW5/250 ,HBW10/250 , HBW10/500 , HBW5/750 , HBW10/1000 , HBW10/1500 , HBW10/3000
Hardness test range	8~650HBW
Test force application method	Automatic (automatic loading/dwelling/unloading)
Hardness reading	8-inch built-in touch screen, 14-inch touch screen computer all-in-one
Pixel camera	3 million pixels
Convert ruler	HRA, HRB, HRC, HRD, HRF, HV , HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Data output	Built-in printer, R232 interface
Objective and indenter switching	Auto switch
Micrometer	20 X Digital micrometer eyepiece
Micrometer drum minimum	0.001mm

scale value	
Dwell time	0~60S
Distance from the center of the indenter to the machine wall	150mm
Maximum height of sample	280mm
CCD measurement method	Automatic or manual
Power supply	AC220V 50HZ
Executive standard	ISO 6506, ASTM E10, JIS Z2243, GB/T 231.2
Dimensions	580*560*930mm
Weight	135kg

Product advantages:

01. This instrument has 11 levels of test force, 15 kinds of Brinell hardness test scales, and 14 kinds of conversion scales, suitable for testing various metal materials.



02. The objective lens and the indenter are automatically switched, and the software control of the objective lens and the indenter switch is realized.

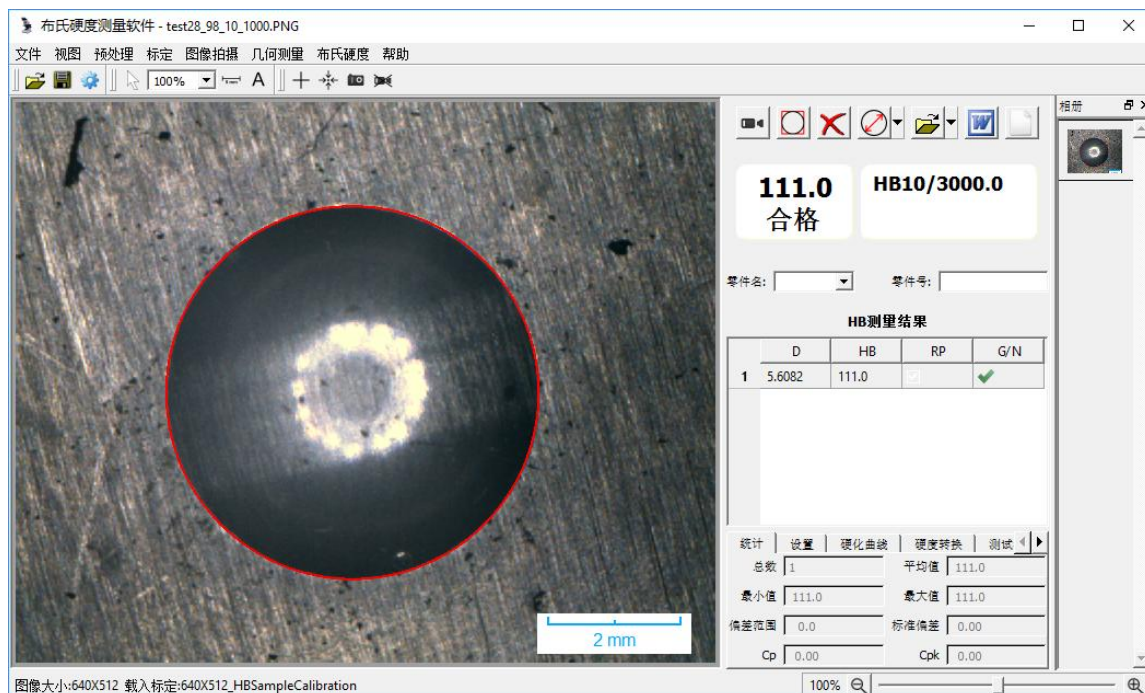
03. The hardness tester and the computer are integrated, equipped with Win7 system, with all the functions of the computer, and the hardness test results can be directly generated WORD or EXCEL report, which can be directly saved or printed out.

布氏硬度检测报告

送检单位		送检日期	
零件名称		零件号	
样品数量		样品说明	
合格上限	280	合格下限	120
设备编号		标准编号	
球径 (mm)	10	压力 (Kg)	3000.0
测量结果			
序号	直径	HB	转换 HRA
1	5.6312	110.0	40.4
2	4.1121	215.9	58.9
压痕图			
 1.  2.			
统计结果			
最大值	215.9	最小值	110.0
平均值	162.9	标准偏差	37.44
CP	0.71	CPK	0.38
试验员	日期	审核	日期
	2015年11月9日		...年...月...日

Introduction to Measurement Software:

The iVision-HB Brinell hardness measurement software is mainly used to automatically measure the indentation and calculate the hardness value. It has a high speed of digital image acquisition. It adopts the advanced automatic tracking and processing technology of aerial digital image remote sensing, and can accurately distinguish the complex background. Brinell indentation image; using computer digital image software processing technology, designing excellent image processing algorithm, making full use of the computer's image data cloud computing capability, self-dynamic real-time measurement and calculation, can accurately and reliably measure the Brinell hardness value, Greatly improve the measurement accuracy and reliability.



Packing list:

Name	Qty	Name	Qty
Brinell hardness tester	1 Set	Large flat, small flat, V-shaped table	1 ea.
Carbide all indenter: $\phi 2.5$, $\phi 5$, $\phi 10\text{mm}$	1 ea.	Standard Brinell hardness block ($200\pm 50\text{HBW}$)	1 ea.
Manual and certificate	1 sheet	$100\pm 25\text{ HBW}$	1 Set
Micrometer	1 pc	Industrial grade tablet	1 pc