

HST-HB3000AZF-5Z Automatic turret vision Brinell hardness tester



Main purposes and scope of use:

1. Suitable for hardness testing of metallic materials with large grain size, capable of reflecting the comprehensive performance of the material;
 2. Cast iron, steel, and non-ferrous metals, especially for softer metals such as pure aluminum, lead, tin, etc
- It can be used for the determination of hardness of certain non-metallic materials such as hard plastics and bakelite with a hardness tester

Product description:

The HST-HB3000AZF-5Z dual-objective, three-indenter touchscreen digital display automatic brick tower Brinell hardness tester utilizes computer intelligent programming and optoelectronic sensing technology. With independent selection of testing conditions, all parameters can be directly selected, modified, and analyzed through operation on a multi-functional PC. The PC terminal is connected to the hardness tester via a communication protocol, enabling control of the mechanical moving parts of the hardness tester. It can achieve

automatic multi-function tower positioning, automatic identification of objectives and indenters, automatic ascent and descent, automatic focusing, automatic loading, automatic load holding, automatic unloading, automatic measurement, and adjustment of light brightness. By linking to the built-in CCD measurement acquisition system, clear indentation images can be displayed dynamically on the PC in real time. It also allows for direct locking of the indentation for automatic measurement of hardness values, automatic saving of test data, and generation of reports. The optical system utilizes high-magnification LED optical objectives, providing high image clarity and preventing fatigue during prolonged operation. The hardware system employs advanced electronic sensor loading technology. Through a closed-loop control system, the system controls the sensor to collect signals, and a high-speed stepper motor automatically loads and unloads test forces, with automatic compensation for test forces to ensure more precise force values and more stable indications. Additionally, it is equipped with an emergency stop device, meeting the EU CE safety standards. It features user-friendly operability, enhanced reliability, stability, and safety.

Technical Parameter:

Product Model	HST-HB3000AZF-5Z
Bourdon scale	HBW2.5/31.25、HBW2.5/62.5、HBW2.5/187.5、HBW5/62.5、HBW5/125、HBW5/250、HBW5/750、HBW10/100、HBW10/250、HBW10/500、HBW10/1000、HBW10/1500、HBW10/3000
Test force (11 levels)	31.25kgf(306.5N)62.5kgf(612.9N)100kgf(980.7N)125kgf(1226N)187.5kgf(1839N)250kgf(2452N)500kgf(4903N)750kgf(7355N)1000kgf(8907N)1500kgf(14710N)3000kgf(29420N)
Hardness reading	automatic measurement
Conversion of hardness value units	Automatic conversion: Vickers, Rockwell
screen	12-inch display screen
loading process	Display the loading process in real time, with a loading time of less than 8 seconds
Load control	Automatic (loading/holding/unloading)
workstation	Five workstations, capable of simultaneously equipping with 2

	objectives and 3 indenters
lift	Automatic lifting, jog lifting, one-button testing
focus	Auto-focusing, no need for manual focusing with a lifting screw rod.
turret	Automatic turret, automatic rotation of the indenter and objective lens
Maximum height of test piece	320mm
Pressure head outer wall distance	170mm
objective lens	1X, 2X
eyepiece	20X
Total magnification factor	20X, 40X
Hardness resolution	0.1HBW
Duration Time	1-99s
Hardness testing range	3.18~653HBW
execution standard	EN ISO 6506, , ASTM E-10-08, GB/T231.2, JJG150 -2005
data output	An optional feature is the ability to connect a printer for report printing
power supply	AC220+5%,50~60Hz
Dimensions (mm)	595*245*1000mm
host weight	About 135kg

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