Main features:

● This machine is a motor-driven multi-function hardness tester with weight force,which can simultaneously perform Brinell,Rockwell,and Vickers hardness testing functions;
● Optimized mechanical structure and diamond-shaped design,
● Strong structure,good rigidity,reliable,durable,and high testing efficiency;
● The test process is automated,without human error;
● Rockwell hardness is directly read on the dial gauge,while Brinell and Vickers hardness are obtained by looking up the table
● The accuracy meets GB/T230.2,GB/T231.2,GB/T4340.2;ISO6508-2,ISO6506-2,ISO6507-2,and ASTM E18,ASTM E10,ASTM E92 in the United States.

Application scope:

Brinell

● Determination of Brinell hardness of ferrous and non-ferrous materials;
● Determination of Brinell hardness of bearing alloy materials such as lead-based alloys,Babbitt alloys,and tin-bismuth alloys;
● Determination of Brinell hardness of certain non-metallic materials such as rigid plastics and bakelite;
● The Brinell hardness of parts produced by casting,forging,rolling,and other processes is measured.

Rockwell

● Determining the Rockwell hardness of ferrous and non-ferrous materials;
● To measure the Rockwell hardness of high-hardness alloy materials such as cemented carbides;
● Determination of Rockwell hardness of quenching,tempering and other heat treatment materials;
● It is used to measure the Rockwell hardness of some non-metallic materials such as plastics and bakelite.

Vickers

● Determination of Vickers hardness of ferrous metals,non-ferrous metals,surface coatings,laminated metals,etc;
● Determination of Vickers hardness of cemented carbides,glass,ceramics,agate,precious stones,etc;
● Determining the depth and gradient of the hardened layer,nitrided layer,and carburized layer using Vickers hardness test;
● Determination of Vickers hardness of thin plates,sheets,and other small parts.

Technical parameters:

● Measuring range:4-650HBW,5-3000HV,20-95HRA,10-100HRBW,10-70HRC
● Rockwell test force 1471,588.4,980.7(N)
60、100,150(kgf)
● Brinell test force:294.2,306.5,612.9,980.7,1839(N)
30,31.25,62.5,100,187.5(kgf)
● Vickers test force:294.2,980.7(N)
0,100(kgf)

● Specifications of indenter:diamond Rockwell indenter,diamond Vickers indenter,Φ1.588mm,Φ2.5mm,Φ5mm tungsten carbide alloy ball indenter
● Measuring scales:HRA,HRBW,HRC,HBW2.5/31.25,HBW2.5/62.5,HBW2.5/187.5,HBW5/62.5,HBW1/30,HBW10/100,HV30,HV100
● Microscope magnification:Brinell:37.5X,75X;Vickers:75X,150X
● Resolution:Rockwell:0.5HR;Brinell:2μm,4μm;Vickers:1μm,2μm
● Hold time:1~60s
● Maximum allowable height of test sample:Rockwell:210mm;Brinell:140mm;Vickers:140mm
● Distance from the center of the indenter to the wall:165mm
● Power supply:AC220V,50/60Hz
● Overall dimension:522x265x729(mm)
● Weight:about 100kg

Main attachments:

● Diamond Rockwell indenter:1pc.
● Diamond Vickers indenter:1pc.
● Tungsten carbide ball indenter:one each ofΦ1.588,Φ2.5,andΦ5mm
● Slid test bench:1pc.
● Small flat,big flat,V-shaped test bench:1 each
● 15X micrometer eyepiece:1pc.
● Objective lens 2.5X,5X,10X:1 each
● Micrometer stand:1pc.
● Standard Rockwell hardness block:5 pcs.
● Standard Vickers hardness block:1pc.
● Standard Brinell hardness block:1pc.