Webster Hardness Tester

W-20(0.6-6mm)

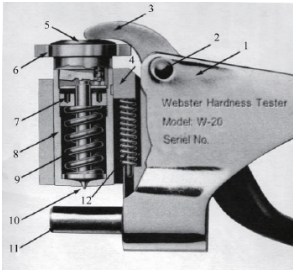
W-20a(0.6-13mm)

W-20b(0.6-8mm)

Features

- Mainly used to measure the aluminum alloy (1100 ~ 7075)
- hardness Measuring range 0 ~ 20HW (aluminum and aluminum alloy 25 ~ 110HRE)(Copper alloy 60 ~ 90HRF)
- Accurate measurement range 5 ~ 18HW (determined by the instrument design principle)
- Accuracy ± 0.5HW
- Resolution 1HW
- Measuring thickness:
  W–20:0.6~ 6mm (anvil diam 10mm)
  W–20a: 0.6~ 13mm (anvil diam 10mm)(anvil cylinder diam 23.5mm)
  W–20b: 0.6~ 8mm (anvil diam 6mm)

Instruments Instruction



1. Upper Handle
2. Supporting Screw
3. Lower Handle
4 .Reset Key
5. Adjusting Screw
6. Dial Head
7. Adjusting Nut
8. Indenter Cylinder
9. Load Spring
10. Indenter
11. Anvil
12. Reset Spring

How It Works

Webster hardness tester is a kind of indentation hardness tester. Under certain force, press the indenter into the test sample surface, the pressing depth is in inverse proportion of the hardness. Webster hardness tester symbol is HW. For the over–range sample test, the pointer indicates at 20 under force; for the low range sample test, the pointe does not move and indicates still against the left side of the case when under force.

How To Use

Put the measured object in the position between anvil and indenter,then hold the upper and lower handle, press with force, and draw the lower handle close to the upper handle, at the same time, the indenter components and dial head components will move towards anvil. Keep pressing when the indenter touch the measured object, until it does not move any more. Now the indicator readout is the Wechsler hardness value. It can be converted into Vickers and Rockwell etc hardness values according to the appendix table.

Instrument calibration

The instrument calibration has full scale calibration and standard test block calibration. There are 20 graduation on the dial plate. Full scale calibration means adjusting the pointer at 20 position, through adjusting the adjusting screw in the cover after the pointer don’t move under empty stroke. Standard test block calibration means adjusting the pointer at the positon indicating at the same value with that of the standardized test block, through adjusting the adjusting nut in the instrument cylinder, when putting and testing the standard te

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