



# WEBSTER HARDNESS TESTER

- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*



**BW-SERIES**



**DESCRIPTION:**

Webster Hardness Tester is an instrument that can promptly on-site test the hardness of aluminum alloy material, including section bar, tubes, plates, aluminum parts and hardness of other soft metal. It is such an instrument convenient in usage, with a simple “clamp” and direct result-reading, that it always receives good feedback of high efficiency and strong stability.

Webster Hardness Tester is the best choice for mechanical testing on aluminum alloy material.

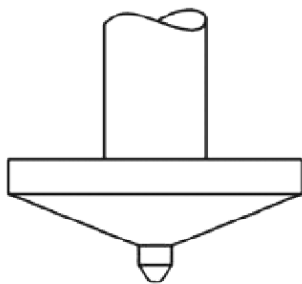
**USING SCOPE:**

Especially suitable in production site, sales site or construction site for quickly testing on bulk products with non-destructive quality inspection piece by piece.

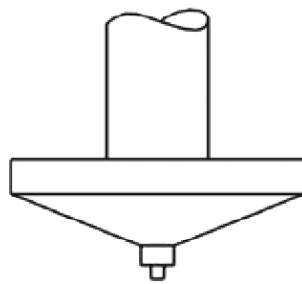
Besides aluminum alloy material, it is also suitable to test red copper, brass, soft copper etc.

**APPLICATION:**

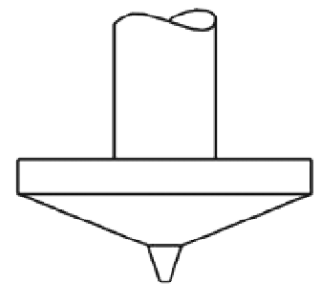
- **BW-20:** General Model, suitable for common aluminum materials.
- **BW-20A:** Suitable for aluminum materials with thickness  $\leq 13\text{mm}$ .
- **BW-20B:** Suitable for aluminum tube with inner dia.  $\geq 6\text{mm}$ .
- **BW-B75:** Suitable for brass tube, brass strip.
- **BW-BB75:** Suitable for red copper tube, red copper strip.
- **BW-B92:** Suitable for soft stainless steel, cold-rolled strip.



a. W-20



b. W-B75, W-BB75



c. W-B92



**FEATURES:**

- Indenter: Re-engineered with advanced material and new production technology manufactured, higher hardness, long service life, good interchangeability.
- Indicator Hand: High strength indicator hand, less likely to be bent by long-term using or mis-operation.
- Dial Glass: High strength, high toughness, uneasy to be broken or scratched.
- Handle: Forged aluminum alloy handle with fine anodized finishing, high resistance to abraision and stain.
- Hardness Blocks: Tested by standard Rockwell hardness tester, attached with test report.
- Good Stability: Stable full-scale point, stable calibration point, indicator never glides.
- Easy Conversion: Results can be converted to Vickers, Rockwell and Brinell.

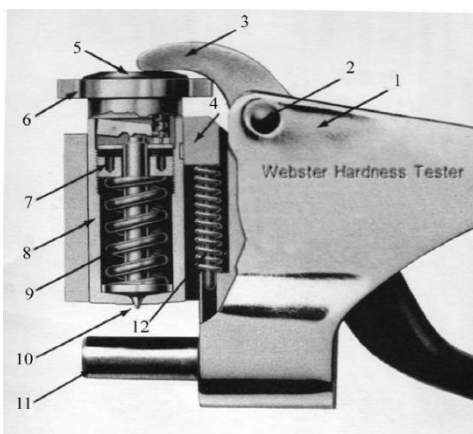


**TECHNICAL SPECIFICATION:**

<b>Model No.</b>	<b>BW-20</b>
<b>Testing Range</b>	0~20HW (equivalent to 20 ~ 110 HRE,58-131HRV)
<b>Accuracy</b>	0.5HW (5 ~ 17 HW)
<b>Repeatability</b>	0.5 HW (5 ~17 HW)
<b>Dimension</b>	31*22*10cm(L*W*H)
<b>Weight</b>	0.5kg
<b>Packing Weight</b>	2.0KG



APPLICATION				
Item	Type	Applicable Materials	Hardness Range	Specimen Size/mm
1	BW-20	Aluminum alloy	25-110 HRE 58-131 HV	Thickness 0.4-6 Inner diameter >10
2	BW-20a			Thickness 0.4-13 Inner diameter >10
3	BW-20b			Thickness 0.4-8 Inner diameter >6
4	BW-B75	Brass in hard or half hard state, super-hard aluminum alloy	63-105 HRF	Thickness 0.4-6 Inner diameter >10
5	BW-B75b			Thickness 0.4-8 Inner diameter >6
6	BW-BB75	Soft brass, pure copper	18-100 HRE	Thickness 0.4-6 Inner diameter >10
7	BW-BB75b			Thickness 0.4-8 Inner diameter >6
8	BW-B92	Cold-rolled steel sheet, stainless steel	50-92 HRB	Thickness 0.4-6 Inner diameter >10

**STRUCTURE OF THE INSTRUMENT:**

- 1 - Frame 2 - Pivot screw 3 - Handle 4 - Reset key  
 5 - Adjusting screw 6 - Dial head 7 - Adjusting nut  
 8 - Indenter cylinder 9 - Load spring 10 - Indenter  
 11 - Anvil 12 - Return spring



**OPERATING METHOD:**

Put the specimen between the anvil and the indenter and press down the handle until the bottom is felt. At the time the dial indicator will point at a reading which is the hardness value obtained. Excessive pressure beyond this limit will not damage the tester, but it is unnecessary. Hold tight the handle when reading the value. Any torsion or movement will make the reading incorrect during the test.

**CALIBRATION OF FULL SCALE:**

Hold tight the handle directly to the bottom without putting the specimen in the opening of the hardness tester. As shown in Fig. 3, regulate the full-scale adjusting screw with a small screwdriver to bring the indicator at Scale 20. If the pointer pointing at a smaller value than 20, the adjusting screw should be regulated clockwise; if the indicated value is greater than 20, the adjusting screw should be regulated anticlockwise. If the pointer cannot be set to the full scale 20 by regulating the adjusting screw, replace the indenter according to the steps in Section 5.



**Regulate the adjusting screw**



**Regulate the adjusting nut**

**STANDARD ACCESSORIES:**

No.	Item Name
1	Manual / Certificate/Warranty card
2	Calibration block
3	Wrench
4	Spare needle
5	Screw driver
6	Caring case



\* Due to continuous product development, Image & specification can be upgrade.