

# Webster Hardness Tester

## Features

- A portable instrument which can perform on-site hardness test on soft metals in accordance with American Standard ASTM B647.
- Used to check the result of heat treatment and determine if the mechanical performance of the workpiece is acceptable.
- Suitable for testing the hardness of aluminium profiles, tubings, sheets and other shapes.
- Used for testing the with long or heavy workpieces or assemblies inconvenient to be sent to the labs.
- Ideal for qualification inspection on the production site.
- Different models available for testing aluminum alloys, brass, copper alloy and copper.



## Technical Parameters

Measuring Scope: 0-20HW  
 Resolution: 0.5HW  
 Weight: 0.5kg

## Application

- W-20,W-20a and W-20b are used to test aluminum profiles on the production site and application.
- W-B75 Webster hardness tester is used to test brass tubings.
- W-BB75 Webster hardness tester is used to test copper tubings.
- W-B92 Webster hardness tester is used to test stainless steel sheets and cold-rolled steel sheets in the manufacturing plant.

## Standard Package

Tester  
 Standard hardness blocks  
 Spare indenter  
 Calibration wrench  
 Small screwdriver  
 Carrying case

## Optional Accessories

Standard hardness blocks  
 Calibration wrench  
 Spare indenter  
 Dial Glass  
 Spare dial head

## Model Selection

Model	Application Range	Hardness Range	Specimen Dimension(mm)
W-20	aluminum alloy	25~110HRE 58~131HV	Thickness 0.4~6 inner diameter >10
W-20a			Thickness 0.4~13 inner diameter >10
W-20b			Thickness 0.4~8 inner diameter >6
W-B75	brass	63~105HRF	Thickness 0.4~6 inner diameter >10
W-B75b			Thickness 0.4~8 inner diameter >6
W-BB75	copper	18~100HRE	Thickness 0.4~6 inner diameter >10
W-BB75b			Thickness 0.4~8 inner diameter >6
W-B92	Stainless steel trips , thin cold-rolled steel trips	50~92HRB	Thickness 0.4~6 inner diameter >10

# 934-1 Barcol Impressor

## Features

- Single hand operation, no operating experience required, can test any workpiece which is reachable in any site.
- Wide valid testing range equivalent to Brinell hardness 25-150HBW. Used to test the hardness of all kinds of Aluminum, from very soft Aluminum to very hard Aluminum alloys.
- Extended application. Model 934-1 is applied to test the hardness of Aluminum, Aluminum alloys, Copper, Copper alloys, Fiber Reinforced Plastics and rigid plastics etc. The improved model of it is available to test very soft metals such as lead and tin and other soft materials such as soft plastics, rubber, felt and leather etc.
- High sensitivity. Featured with 100 scales, much more sensitive than Webster hardness testers applied in Aluminum alloys industry.
- No supporting required. Can test from only one side of the workpiece. No need to move or support the workpiece. Used to test super large and thick workpieces and assembly parts.
- Easy conversion. The test results can be converted to HB, HR, HV and HW easily through conversion table.
- Comply to standard ASTM B648-2000.



## Technical Parameters

Indenter:	26°panhead cone, head face diameter 0.176mm
Testing Range:	0~100HBa, equivalently to 25~150HBW
Resolution:	0.5HBa
Indication error:	hardness range 42~52HBa, ±2HBa hardness range 84~88HBa ±1HBa
Repeatability error:	hardness range 42~52HBa, ±2HBa hardness range 84~88HBa ±1HBa
Net weight:	0.5kg

## Application

- Barcol Impressor is mainly applied to test Aluminum and Aluminum alloys. Webster is used to test Aluminum alloy extrusions, sheet and tubings. Barcol Impressor is suitable to test pure Aluminum, soft Aluminum alloys, super thick Aluminum alloys, Aluminum alloys bars and assembled Aluminum alloys parts (e.g. Al-alloy door & window, scaling ladder etc.) Relevant Standard: ASTM B648 (Test Method for Indentation Hardness of Aluminum Alloys by Means of a Barcol Impressor)
- Barcol Impressor is also used to test Fiber Reinforced Plastics and rigid plastics etc. Relevant Standard: ASTM D2583-07 (Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor)
- The improved model of the Barcol Impressor is available to test softer plastics, very soft metals, rubber and leather etc.

## Standard Package

- Tester
- Spare indenters (2 pcs)
- High value Standard hardness block (2 pcs)
- Low value Standard hardness block (2 pcs)
- Calibration wrench
- Supporting foot
- Carrying case