

BRINELL HARDNESS TESTER CV-HB120™

Portable hydraulic system featuring Brinell indentations up to 3000kgf

The well known CV-HB120 Brinell tester is designed to make impressions that are used to measure the hardness of metal.

This universally recognized tester has a number of advantages:

- **Permanence** Impression can be checked and rechecked anytime
- **Accuracy** Calibrated to 0.5 of 1% of load ;
Can be used for higher loads up to 3000kg
Breaks through surface heat treatment to get to the core of the material
- **Versatility** Can be used in virtually any position;
right-side up, upside down or sideways
- **Durability** Some portable Brinell testers have been working over 60 years

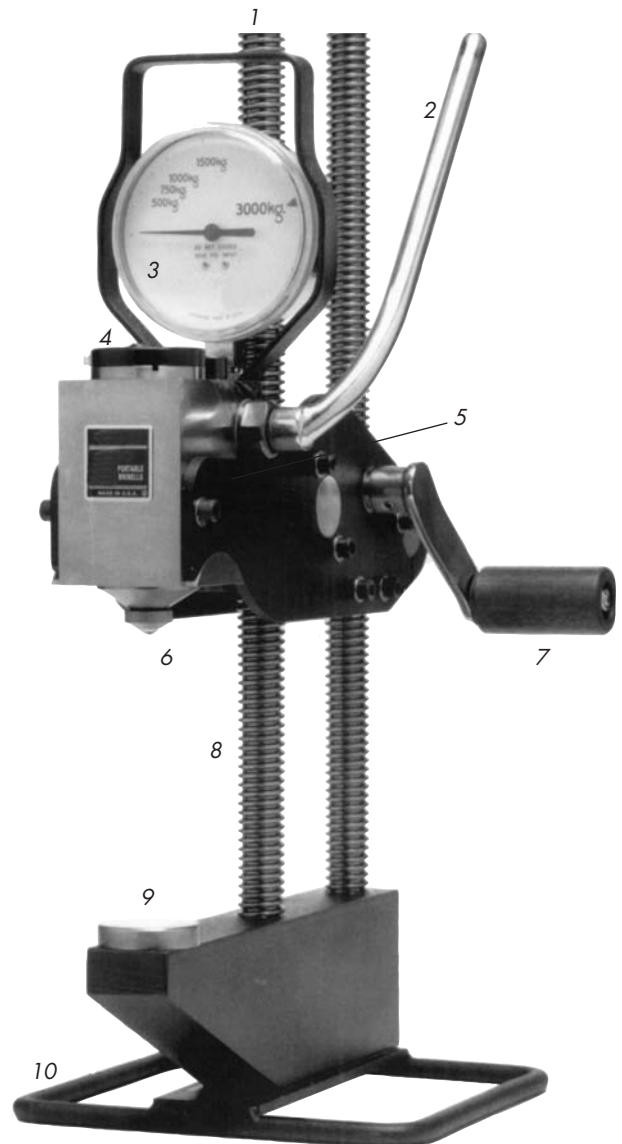
CV-HB120 Brinell hardness testers are lightweight, easy to manoeuvre and require only one operator, making them ideal for use as portable or bench units. Versatile enough to test virtually any size and shape of metal specimen.

These Brinell testers are easy to use. The operator simply places the specimen between the anvil and the test head, cranks the test head down onto the specimen, locking the tester in place, closes the pressure release valve, and pulls the hydraulic lever until desired load is reached.

The tester applies up to a 3000kg load on a 10mm ball, making a lasting impression, which is available for re-reading at any time.

A by-pass valve is automatically activated at the calibrated load, eliminating the chance of overloading. The impression is then read and recorded by the operator using a Brinell microscope such as the deep reading microscope or a Brinell scanning system CV-HB100.

The CV-HB120 meets all international standards for Brinell testing



- 1 Alloy steel-threaded posts – Wear longer, resist distortion
- 2 Pressure lever – Used to apply up to a true 3000kg load
- 3 Bourdon-type pressure gauge – Indicates true load exerted by pump and when full load has been reached
- 4 Stainless steel test head – Contains sealed hydraulic pump and reservoir. Calibrated to release load at 3000kg. Fully interchangeable with optional bases. Also available in a low pressure version for testing softer metals and in a long ram version
- 5 Gear train with hand crank – Allows easy, positive adjustment of opening to any size specimen up to 14" 20' optional
- 6 Standard 10mm brinell ball – Can be easily changed to 2.5mm and 5mm ball or reverse direction load head
- 7 Handle – Made of walnut wood for easy grip and durability
- 8 Throat – Standard is 4" with 6" optional
- 9 Flat, dome and vee – Supplied as standard equipment to test various shaped specimens. Also accepts reverse direction impression adapters
- 10 Wire basket – Rounded corners and no sharp edges for maximum safety

Complete testers

Standard Brinell hardness tester –

The Brinell hardness tester has a base with a 14" gap and 4" throat: head and gauge calibrated for a 0-3000kg load:

filled hydraulic reservoir; 10mm steel ball, flat, dome and vee shaped anvils instruction and maintenance manuals.

BRINELL HARDNESS TESTER CV-HB120™

Portable hydraulic system featuring Brinell indentations up to 3000kgf

Standard test head

Calibrated accurate to 1/2 of 1% load.
Releases at 3000kg automatically.
Capable of incremental loads.



Standard test head with long ram

Same features as standard test head plus a long ram that puts impression head at end of 2" extension for easy access into recessed areas or over raised edges.



Low pressure test head

Applied load and indicator dial are coordinated for softer metals.
Can be calibrated to release at loads of 62-1/2kg, 125kg, 250kg, 500kg, or 1000kg.



Low pressure test head with long ram

Same features as low pressure test head plus a long ram that puts impression head at end of 2" extension for easy access into recessed areas or over raised edges.



Adapter to hold test head upright without base

For testing large flats it enables test heads to be used under large drill presses, boring mills, arbor presses and beams that are capable of withstanding 3000kg load.



Chain adapter

Used for large cylinders it fits onto a standard test head and wraps around specimens that are too big for regular tester. High strength chrome/molybdenum steel arms hold the chain to the test head and allow it to stay rigid while the chain takes the full thrust of the load. Supplied with 4" chain.



Base

14" base with 14" test height opening and 4" throat is standard. Optional 6" throat with either 14" or 20" test height opening available, 20" base also available with 4" throat and 20" test height opening.



2.5mm and 5mm ball adapter

Used on softer materials or where a smaller impression is desired.



Stage micrometer

Used to check calibration of Brinell Microscope by placing the microscope on the stage micrometer and aligning the grid on the stage micrometer with the grid on the microscope. If the grids doesn't match perfectly, the microscope is out of calibration and should be re-calibrated. Meets ASTM 50, and is traceable to NIST standards.



Brinell microscope

Constructed from stainless steel, the rugged and optically reliable Brinell microscope is the most versatile on the market today. Featuring a 20x pre-focused lens, the microscope has a narrow nosepiece which easily fits into tight recesses, resulting in less grinding on castings, billets and dies. For added stability when performing flat work, a slip-on base adapter is included. A side opening in the microscope allows plenty of natural light for viewing, and a cordless movable pen light can be used in dim conditions. Calibrated on equipment traceable to NIST standards, the Brinell microscope meets ASTM 5-10 specifications. It is ready to use and comes equipped with a handy storage case

