

General Features

- » Instrument specifically designed for calibrating Brinell hardness testing machines
- » Accurate design and quality manufacturing ensure high repeatability and stability over time
- » Comes with a certificate of calibration to deadweight Primary Standards
- » Supplied with an instrument case
- » Low-profile version (4 in. high) available when an opening less than 6 inches is required

Morehouse Instrument Company, Inc 1742 Sixth Ave., York, PA, 17403 - 2675 USA Phone: (717) 843-0081 www.mhforce.com Rev. 2/2024



Technical Specifications

Specifications	Brinell Calibrator	
	Standard	Low Profile Version
Accuracy		
Accuracy	0.1 % of reading	0.1 % of reading
Deflection at Capacity	Approx. 0.06 in.	Approx. 0.06 in.
Divisions at Capacity	Approx. 600 division	Approx. 600 division
Sensitivity	1/10th division	1/10th division
Readability	1/10th division	1/10th division
Calibration Forces	500, 1000, 1500, 2000, 2500, and 3000 kgf	500, 1000, 1500, 2000, 2500, and 3000 kgf
Dimensions		
Diameter (Maximum Width)	5.25 in.	4 in.
Thickness	2 in.	2 in.
Total Height	5.785 in.	5.785 in.
Instrument Weight	4 lbs	4 lbs
Shipping Weight (including case)	10 lbs	10 lbs

Calibration Information

To calibrate a hardness tester, the Morehouse Brinell Calibrator is inserted into the tester instead of the usual metal specimen. The load is applied to the Brinell Calibrator, and the resulting deflection is read on the indicator. The error of the hardness tester load is determined by dividing the deflection of the Brinell Calibrator under load into the difference between the actual deflection and the deflection for the calibrated load.

» Example:

A. Load applied according to hardness tester reading	3,000 kgf.
B. Deflection of the Brinell Calibrator under load	575.8 div.
C. Deflection of Brinell Calibrator at 3,000 kgf should be (according to average on certificate)	610.5 div.
D. Difference between B and C	34.7 div.
E. Error of Brinell Hardness Tester in applying load	5.8 %.

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