SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

KING TESTER CORPORATION
308 Schell Lane
Phoenixville, PA 19460
James Knight Phone: 610 279 6010

CALIBRATION

Valid To: May 31, 2026 Certificate Number: 4877.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the organization's compliance with A2LA's Calibration Program Requirements), accreditation is granted to this laboratory to perform the following calibrations[1]:

I. Mechanical

Parameter/Equipment	Range	CMC[2] (±)	Comments
Direct Verification of Brinell Hardness Testers[3] –			Direct verification per ASTM E10, ISO 6506
Verification of the Test Force	187.5 kgf 500 kgf 750 kgf 1000 kgf 1500 kgf 3000 kgf	1.6 kgf 1.2 kgf 1.1 kgf 1.5 kgf 1.3 kgf 1.4 kgf	Brinell proving ring
Verification of the Device for Measuring Indentation Diameters	Up to 7 mm	0.001 mm	Stage micrometer

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Parameter/Equipment	Range	CMC[2] (±)	Comments
Indirect Verification of Brinell Hardness Testers at Test Condition(s)[3] –			
HBW 10/3000	(95 to 224) HBW (225 to 650) HBW	0.48 HBW 2.6 HBW	Indirect verification method per ASTM E10, ISO 6506
HBW 10/1500	(47.7 to 113) HBW (114 to 327) HBW	0.8 HBW 4.1 HBW	
HBW 10/1000	(31.8 to 75) HBW (75.2 to 218) HBW	0.6 HBW 2.8 HBW	
HBW 5/750	(95 to 224) HBW (225 to 650) HBW	2.4 HBW 2.7 HBW	
HBW 10/500	(15.9 to 37.5) HBW (37.5 to 109) HBW	1.2 HBW 0.9 HBW	
HBW 2.5/187.5	(95 to 224) HBW (225 to 650) HBW	2.3 HBW 4.7 HBW	
Verification of Brinell Measurement Device[3] –			
Type A Device Type B Device	(1 to 7) mm (1 to 7) mm	0.001 mm 0.1 mm	Verification method per ASTM E10, ISO 6506
Calibration of Standardized Brinell Hardness Test Blocks – Mean Hardness Value	≤ 225 HBW >225 HBW	1.0 HBW 2.4 HBW	Standardization method per ASTM E10, ISO 6506

SATELLITE LOCATION

KING TESTER CORPORATION DBA TENSITRON
135 Industry Drive
Pittsburgh, PA 15275

CALIBRATION

I. Mechanical

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments
Force – Measure	(0 to 125) gf (125 to 1000) gf (1000 to 5000) gf (5 to 20) lbf (20 to 100) lbf (100 to 500) lbf (500 to 1200) lbf (1200 to 2000) lbf	0.04 % + 0.29 gf 0.062 % + 3.5 gf 0.085 % + 8.8 gf 1.7 % + 0.12 lbf 0.25 % + 2.5 lbf 0.83 % + 0.57 lbf 0.38 % + 4.8 lbf 0.68 % + 2.7 lbf	ASTM E4, NIST Class F dead weights Cable, wire, fiber, strap, band, web tension meters

[1] This laboratory offers commercial calibration service.

[2] Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

[4] The stated measured values are determined using the indicated instrument (see Comments). This capability is suitable for the calibration of the devices intended to measure or generate the measured value in the ranges indicated. CMCs are expressed as either a specific value that covers the full range or as a percent or fraction of the reading plus a fixed floor specification.

Accredited Laboratory

A2LA has accredited

KING TESTER CORPORATION

Phoenixville, PA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 21st day of May 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4877.01
Valid to May 31, 2026

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.