



Accredited Laboratory

A2LA has accredited

ALL-PRO LABORATORY

Arlington, TX

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. 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 8 January 2009).



Presented this 7th day of September 2016.

A handwritten signature in blue ink, reading "Jim C. Bunt".

Senior Director of Quality and Communications
For the Accreditation Council
Certificate Number 1159.01
Valid to October 31, 2018

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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ALL-PRO LABORATORY
1915 Peyco Drive North
Arlington, TX 76001
Mr. Roderick L. Williams Sr. Phone: 817 467 5700

MECHANICAL

Valid To: October 31, 2018

Certificate Number: 1159.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following fastener and metals tests:

<u>Test</u>	<u>Standard(s)</u>
Sampling	ASME B18.18.1 (Superseded) ³ , B18.18.2M (Superseded) ³ , B18.18.3M (Superseded) ³ , B18.18; ASTM F1470 or per product specification
Hardness	
Rockwell (B & C)	ASTM E18, F606/F606M
Brinell (HBW)	ASTM E10
Rockwell Superficial (15N & 30N)	ASTM E18
Tensile Testing	
Wedge and Axial Tensile	ASTM F606/F606M; NASM 1312-8; ISO 898-1
Machined Pieces	ASTM A370, E8/E8M, F606/F606M
Proof Load, Internally Threaded Fasteners	ASTM A370, F606/F606M
Proof Load, Externally Threaded Fasteners	ASTM A370, F606/F606M
Torque Testing	
Torque-Tension	IFI 100, 107; ASME B18.16.6
Wrenching Torque	NASM 25027
Locking Torque	NASM 25027
Breakaway Torque	NASM 25027
Plating Thickness	ASTM B499
Rotational Capacity	ASTM A325 (Superseded) ³ , F3125/F3125M; TXDOT Tex-452-A; AASHTO (A325)
Plating Adhesion	ASTM B571 (Sections 5, 10, 11,12, 13)
Positive Material Identification	ASTM E1476
Charpy V-Notch Impact Testing (Room Temperature to -320°F)	ASTM A370, E23

I. Dimensional Testing¹

Parameter	Range	CMC ² (±)	Technique	Standards
Linear (1D)	(Up to 1) in (1 to 2) in (Up to 6) in (Up to 8) in (Up to 12) in	0.0003 in 0.0010 in 0.0013 in 0.0010 in 0.0020 in	Micrometers Micrometers Calipers Calipers Calipers	MIL-STD-120 (Canceled 1996)
Straightness	(Up to 12) in	N/A	Straightness gage	ANSI B1.2.1
Threads Pitch Diameter	(Up to 2) in	0.0002 in	Pitch micrometers	ASME B1.2, B1.3M (Systems 21, 22 & 23) (Superseded) ³ , B1.3;
Functional Diameter	#0 to 1 ¾ in (80 to 8 threads) per inch #4 to 1.0 in (40 to 8 threads) per inch	N/A N/A	Ring gages (Go/No Go) Thread plug gage (Go/No Go)	MIL-STD-120 (Canceled 1996)

¹ This laboratory does not offer commercial dimensional testing services. These tests are not equivalent to that of a calibration.

² Calibration and Measurement Capability (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine measurements of nearly ideal measurement standards or nearly ideal measuring equipment. Calibration and Measurement Capabilities 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 measurement 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 measurement.

³ This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.