



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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MECHANICAL

Valid To: September 30, 2012

Certificate Number: 1089.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on fasteners, metals, alloys, adhesives and sealants, aircraft components, automotive components, coatings, films, packaging; gaskets, seals and packings; composites; plastics and polymers; pipes, hoses, rubber and rubber products.

<u>Test</u>	<u>Test Methods</u>
<u>Metallurgical Testing</u>	
Tension	ASTM A370 (sections 5-13), A770, B557, E8
Bend	API 1104, 1107; ASME Section IX; ASTM A6, A370 (section 14), E290; AWS D1.1, 1.5, 17.1; AMS-1595 (superseded); NAVSEAS9074-AQ-G1B-010-95
Hardness	
Brinell	ASTM A370 (section 16), E10
Rockwell (A, B, C, E, H)	ASTM E18, A370 (section 17); NASM-1312-6
Superficial (15N, 30N, 45N, 15T, 30T, & 45T)	
Vickers	ASTM E92
Charpy Impact (-325 to 80) °F (U- and V- Notch)	ASTM A370 (section 19), E23; ISO 148
Flattening	API 1104; ASTM A370 (section A.2.5.1.1)
Flare & Flange Test	ASTM A370 Section (A.2.5.1.4)
<u>Tensile Test of Fasteners</u>	
Axial Tensile (to ½ in)	ASTM A370 (A3.2), E8, F606, F606M; (MIL-STD) NASM-1312-8; SAE J429
Proof Load (interior & exterior thread)	ASTM F606, F606M; NASM-1312-8
Wedge Tensile (to ½ in)	ASTM A370 (A3.2.1.6), F606, F606M; SAE J429

<u>Test</u>	<u>Test Methods</u>
<u>Shear Test of Fasteners</u>	
Single	ASTM B565, F606, F606M; (MIL-STD) NASM-1312-20
Double	ASTM B565, F606, F606M; (MIL-STD) NASM-1312-13
<u>Torque Tests of Fasteners</u>	
Torque Out	NASM-1312-15, 1312-31 NASM-25027, 85730
Torsional Strength	NASM-25027, NASM-1312-15, 1312-31
Blind Rivet Tests	MIL-R-7885; NAS 1687
Solid Rivet Drivability Test	BPS-R-131; NASM-5674
Panel Fastener Tests	NASM-1312-22, 1312-23
<u>Metallographic Evaluation</u>	
Metallographic Preparation	ASTM E3
Grain Size	ASTM E112
Macro Etching	ASTM E340, E381
Micro Etching	ASTM E407
Inclusion Content	ASTM E45, Method A
Case Depth	SAE J423
Macroscopic Examination of Welds	AMS-STD-1595 (superseded); AWS 17.1
Microhardness	
Knoop	ASTM E384
Vickers	ASTM E384
Microscopic Determination of Constituent Percent	ASTM E562
Plating Thickness	ASTM B487; NASM-1312-12
Failure Analysis	MAP-G200
Hydrostatic Pressure Testing	MAP G202
Scanning Electron Microscope	ASTM E766, E1508

<u>Test</u>	<u>Test Methods</u>
<u>Environmental Exposure Simulation</u>	
Conditioning of Plastics	ASTM D618
Effects of Liquids (rubber)	ASTM D471
Resistance to Chemicals (plastics)	ASTM D543 Practice A
Oven Ageing (rubber)	ASTM D573
<u>Hardness</u>	
Durometer Type: A, M, D	ASTM D2240
Rockwell Scales: R, L, M, E, K	ASTM D785
<u>Impact</u>	
Gardner	ASTM D2794
Izod/Charpy	ASTM D256, D4812, D6110; ISO 179, 180
<u>Tensile/ Compression</u> (-70 to 500) °F	
	ASTM C297, D412, D638, D695, D1414, D1708, D3039; ISO-527-1
Peel	ASTM D1781, D1876, D3167
Shear	ASTM D732, D1002, D2344
Tear	ASTM D624
Compression Set	ASTM D395 (Method B)
Flexural Properties of Plastics	ASTM C393, D790; ISO-178
<u>Physical Properties</u>	
Brittleness	ASTM D746 (A), D2137 (A); ISO-974
Density/Specific Gravity	ASTM D792, D297, D1875
Flammability/Burn Rate	ASTM D635, D3801, D5132; FMVSS 302; NFPA 701-1; UL 94 (section 8)
Gel Time	ASTM D3532
Resin Flow	ASTM D3531
Taber Abrasion	ASTM D4060
<u>Corrosion/Environmental Testing</u>	
Coating Evaluation	ASTM D610, D714, D1654, D3359
Humidity	ASTM D1735, D4585
Salt Spray (Fog)	ASTM B117, G85 Annex A1
UV (Xenon, Fluorescent)	ASTM G151, G154, G155

Dimensional Testing

Parameter	Range	CMC* (\pm)	Technique	Standards
Linear	(0 to 1) in (0 to 1) in (0 to 6) in	0.0009 in 0.0008 in 0.001 in	Dial Indicator Digital Indicator Calipers	ASME Y14.5

*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.



The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

SHERRY LABORATORIES OF OKLAHOMA, LLC

Broken Arrow, OK

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 10th day of August 2010.





Peter Meyer

President & CEO
For the Accreditation Council
Certificate Number 1089.01
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For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.