



ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ATRONA Test Labs, Inc.
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TESTING

Valid to: March 29, 2017

Certificate Number: AT-1119

I. Mechanical

ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*KEY EQUIPMENT OR TECHNOLOGY
Metals and Metallic Components	Metallographic Evaluation Preparation Banding / Orientation of Microstructure Depth of Decarburization Macro / Microetch Inclusion Rating Grain Size Intergranular Corrosion Photomicrography / Light Microscopy Case Depth	ASTM E3, ASTM E1268, ASTM E1077, ASTM E340, E381, E407, ASTM E45 (Method A), ASTM E112, ASTM A262 (Practice A and E), ASTM E883, SAE J423	Microscopes with Automatic Stages, Image Characterization and Automatic Microhardness Testers with Mapping
Metals and Metallic Components	Average Grain Size Using Semi-automatic and Automatic Image Analysis	ASTM E1382	Image Analysis Microscopes and Software
Ductile Iron and Ductile Iron Components	Determining Nodularity and Nodule Count Using Image Analysis	ASTM E2567	Image Analysis Microscopes and Software
Metals and Metallic Components	Hardness Testing Rockwell (A, B, C, E, N, T) Brinell (500 kg to 3 000 kg) Micro-hardness Vickers, Knoop, Leeb	ASTM E18 ASTM E10 ASTM E384 ASTM A956	Digital Automatic Testers
Metals, Metallic Components, Systems and Assemblies	Failure Analysis	Utilizing Listed Test Technologies and MET-08	SEM / EDS
Internal and External Threaded Fasteners, Washers and Rivets	Mechanical Testing	ASTM F606 ASTM F606M ISO 898	Digital Testers with Various Load Cells



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All Metals Carbon, low and high alloy steels, cast irons, tool steel, stainless steel, aluminum, copper, and nonferrous	Optical Emission Spectrochemical Analysis	ASTM E415, E1086, E1251, E1999	OES/AES Analyzer
Steel, Iron, Nickel and Cobalt	Infrared Absorption Carbon and Sulfur Analysis	ASTM E1019 Method A	IR Analyzer
Automotive Seating Systems, Assemblies and Components, Structural Components and Assemblies and Stampings	High / Low Temperature Humidity	Customer-supplied or Lab-developed but Client-approved Test Methods	
Automotive Seating Systems, Assemblies and Components, Structural Components and Assemblies and Stampings	Durability Mechanical Cycling Life Cycle Testing	Customer-supplied or Lab-developed but Client-approved Test Methods	
Automotive Seating Systems, Assemblies and Components, Structural Components and Assemblies and Stampings	Durability Axial and Bending Fatigue	Customer-supplied or Lab-developed but Client-approved Test Methods	
Metallic and Plastic Components	Ultimate Strength	Customer-supplied or Lab-developed but Client-approved Test Methods	
All types of Metals, Components, and Assemblies	Salt Fog	ASTM B117, GMW3286	Salt Fog Chamber
All types of Metals, Components, and Assemblies	Water Fog	GM4465P	
Metals and Metallic Components	Corrosion Resistance	Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	
All types of Metals and Non Metal Components, and Assemblies	Cleanliness Evaluation	JDS-G169, IE2500 and Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	
Metal and Metallic Components	Magnetic Particle Inspection	ASTM E1444	Ferrous Metals

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Metal and Metallic Components	Liquid Dye Penetrant Examination	ASTM E165	
Metal and Metallic Components	Compression Testing	ASTM E9 and Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	Digital Testers with Various Load Cells
Metal and Metallic Components	Wear Testing	Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	
Metal and Metallic Components	EDS Quantitative Analysis	ASTM E1508	EDAX
Metal and Metallic Components	Elevated Temperature Tension Test	ASTM E21	Tension tester
Metal and Metallic Components	Notched Bar Impact Test (Charpy)	ASTM E23	Full Size and Sub-Size
Powder Metals	Apparent Hardness of Powdered Metals	MPIF Standard 43/ASTM B962	
Powder Metals	Determination of Density of Compacted and Sintered Powder Metallurgy (PM) Products	MPIF Standard 42	Mettler Balance and Density Kit
Metals, Wires, Rods, Fasteners, Plates, Plastics, Components, and Assemblies	Tensile Testing	ASTM A370, E8/E8M	Tensile tester
Metal and Metallic Components	Tension Testing	Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	Tension tester
Aluminum Magnesium	Tension Testing	ASTM B557	Tension Tester
Components, Fixtures, and Assemblies	Dimensional Inspection	Customer-supplied or Lab-developed but Client-approved Test Methods	

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Fasteners, Components, and Assemblies	Torque Testing	Customer-supplied or Lab-developed but Client-approved Test Methods	Torque tester
Fasteners, Components, and Assemblies	Surface Discontinuity	ASTM F788/F788M, F812/F812M	
Fasteners, Components, and Assemblies	Carburization and Decarburization	ASTM F2328, F2328M	
Metal and Metallic Components	Shear Testing	ASME B18.8.2, MIL-STD-1312 Test 13, MIL-STD-1312 Test 20, and Using Customer Supplied Test Methods or Methods Developed by the Lab and Approved by the Client directly related to tests listed	
Coating properties of component parts	Water Resistance of Coatings	ASTM D2247	
Coating properties of component parts	Tape Adhesion	GM9071P	
Plating properties of component parts	Plating Thickness	GMW4205, GMW4700	Microscope
Automotive Seating Systems, Assemblies and Components, Structural Components and assemblies and Stampings	Effort Testing	Using Customer Supplied Test Methods or Methods Developed By the Lab and Approved by the Client directly related to tests listed	Efforts (hand) Efforts (machine)
Organic and Inorganic Solids, Liquids and Gases	Material Identification	ASTM E1252 ASTM D3677 ASTM E204 ASTM E334	Infrared Spectrometer Bio-Rad Excalibur w/ UMA500 Microscope Internal ATR
Organic and Inorganic Solids, Liquids and Polymers	Enthalpies of Fusion, Crystallization, Melting Temperature, Glass Transition Temperature, Oxygen Index	ASTM D3418 ASTM E793 ASTM E794 ASTM E1356 ASTM D3895	Differential Scanning Calorimeter TA DSC Q2000 TA Modulated DSC 2910
Organic and Inorganic Solids, and Polymers	Material Composition, Volatile Materials, Combustion, Ash, Filler Content Carbon Black	ASTM E1131 ASTM D1603	Thermogravimetric Analyzer TA TGA Q500 TA TGA 2950

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Organic and Inorganic Solids, and Polymers	Glass Transition CTE	ASTM E831	Thermal Mechanical Analyzer TA TMA 2940
Polymers, Plastics and Composites	Ash Content	ASTM D482 ASTM D5630	High Temperature Furnace
Polymers	Melt Flow Rate	ASTM D1238	Tinius Olsen Flow Indexer
Organic and Inorganic Solids	Density Specific Gravity	ASTM D792	Precision Balance Mettler AE163
Polymers	Durometer Hardness	ASTM D2240	Durometer A and D
Polymers	Hardness Rockwell R, L and M	ASTM D785	HR500 Mitutoyo Hardness Tester
Polymers	Tensile Properties	ASTM D412 ASTM D638 ASTM D882	Digital Testers with Various Load Cells
Polymers	Tear Resistance Properties	ASTM D624 ASTM D1004	Digital Testers with Various Load Cells
Polymers	Flexural Modulus	ASTM D790	Digital Testers with Various Load Cells
Polymers	Water Absorption of Plastics	ASTM D570	Mettler Balance and Oven Mettler AE163

Notes:

1. * = As Applicable
2. This scope is formatted as part of a single document including the Certificate of Accreditation No. AT-1119



Vice President

