SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

TRIALON CORPORATION
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MECHANICAL

Valid To: May 31, 2020 Certificate Number: 1123.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests using the parameters and methods listed below on the following products and materials: abrasives; automotive components; coatings; glass and glass products; textiles; instrument clusters; and circuit boards.

Capabilities*:
Altitude: to 100,000 ft.
Altitude Temperature: -70°C to 170°C to 60,000 ft.
Force: Up to 30 kN
Temperature: (-50 to 150) ºC
Temperature and Humidity: (20 to 95) %RH
Temperature Cycling: (-50 to 150) ºC
Thermal Shock: (-50 to 150) ºC
Vibration
Random:
Force Ratings: 15,000 force-lbs
Frequency Range: (4 to 3,000) Hz
Shock:
Force: 40,000 force-lbs
Waveforms: half-sine, saw tooth, trapezoidal
Maximum Levels: Up to 100 g's (electrodynamic)
Maximum Levels: Up to 500 g's (shock amplifier-pneumatic)

Tests*	**Test Methods**
Force	
Connector Tests	GMW 3172
Terminal Retention Force	GMW 3172
Connector Mating Force	GMW 3172
Connector Retention Force	GMW 3172
Connector Disengagement Force	GMW 3172
Crush Test	GMW 3172

Tests*	**Test Methods**
Environmental Simulation	
Accelerated Weathering Exposure (Xenon)	SAE J1885; SAE J2412
Temp Exposure (*with and without humidity*)	
Altitude	MIL-STD-810G 500.5 Procedure I, II only, IEC 60068-2-13, SAE J1455 4.9
Altitude Temperature	MIL-STD-810G 500.5 Procedure I, II only, IEC 60068-2-13, SAE J1455 4.9
Dust Exposure	GMW 3172
Fluid Compatibility	GMW 3172 (Dec 2001)
Humidity	GMW 3172
Humidity Heat, Cyclic (HHC)	GMW 3172
Humidity Heat, Constant (HHCC)	GMW 3172
Immersion/Water	IEC 60529; DIN 40050-9e; ISO 20653
Low Temperature Testing	GMW 3172
High & Low Temperature Durability	GMW 3172
Moisture Susceptibility (Frost)	GMW 3172
Dew Test	GMW 3172
Salt Fog/Mist	GMW 3286; GMW 3172; ASTM B117
Thermal Shock	GMW 3172
Thermal Shock & Water Splash	GMW 3172
Power Temperature Cycle	GMW 3172
Thermal Shock in Air (TS)	GMW 3172
Tri-Temperature/Parametric	GMW 3172
Vibration	
Drop	GMW 3172
Free Fall	GMW 3172
Temperature/Humidity	
High Temperature	MIL-STD-810, Rev C - G, Method 501
Low Temperature	MIL-STD-810, Rev C - G, Method 502
Temperature Shock	MIL-STD-810, Rev C - G, Method 503
Humidity	MIL-STD-810, Rev C - G, Method 507
Salt Fog	MIL-STD-810, Rev C - G, Method 509
Immersion	MIL-STD-810, Rev C - G, Method 512
Salt Fog	MIL-STD-202, Rev G, Method 101
Humidity	MIL-STD-202, Rev G, Method 103
Immersion	MIL-STD-202, Rev G, Method 104
Moisture Resistance	MIL-STD-202, Rev G, Method 106
Thermal Shock (Air to Air)	MIL-STD-202, Rev G, Method 107
Life Testing	MIL-STD-202, Rev G, Method 108
Resistance to Solvents	MIL-STD-202, Rev G, Method 215
Immersion	MIL-STD-883, Rev G - H, Method 1002, a - c
Moisture Resistance	MIL-STD-883, Rev G - H, Method 1004.7
Steady State Humidity	MIL-STD-883, Rev G - H, Method 1005.9
Salt Atmosphere	MIL-STD-883, Rev G - H, Method 1009.8
Thermal Cycle	MIL-STD-883, Rev G - H, Method 1010.8
Thermal Shock (Air to Air)	MIL-STD-883, Rev G - H, Method 1011
Dew Testing	MIL-STD-883, Rev G - H, Method 1013
Burn In	MIL-STD-883, Rev G - H, Method 1015

Tests*	**Ford Test Methods**
Environmental Simulation	
Connector Lead/Lock Strength	Ford CETP:00.00-E-412
Mechanical Wearout	Ford CETP:00.00-E-412
Controls Durability	Ford CETP:00.00-E-412
Low Temperature Exposure	Ford CETP:00.00-E-412
Low Temperature Operation	Ford CETP:00.00-E-412
High Temperature Exposure	Ford CETP:00.00-E-412
High Temperature Operation	Ford CETP:00.00-E-412
Power Temperature Cycle	Ford CETP:00.00-E-412
Thermal Shock in Air (TS)	Ford CETP:00.00-E-412
Humidity-Temperature Cycle	Ford CETP:00.00-E-412
Water/Fluid Ingress	Ford CETP:00.00-E-412
Dust	Ford CETP:00.00-E-412
Chemical Resistance	Ford CETP:00.00-E-412
Salt Mist	Ford CETP:00.00-E-412
High Temp/Humidity Endurance	Ford CETP:00.00-E-412
High Temperature Endurance	Ford CETP:00.00-E-412
Vibration	
Mechanical Shock/Drop	Ford CETP:00.00-E-412
Powered Vibration	Ford CETP:00.00-E-412

Tests*	**Chrysler Test Methods**
Environmental Simulation	
Environmental Specification	
Shipping/Storage Temp Exposure	CS-11982
Low Temp Operating Endurance	CS-11982
High Temp Operating Endurance	CS-11982
Powered Temp Cycling Endurance	CS-11982
Thermal Shock	CS-11982
Thermal Humidity Cycle	CS-11982
High Temp/Humidity Endurance	CS-11982
Solar Radiation Soak	CS-11982
Solids/Fluids	
Dust	CS-11982
Water Intrusion	CS-11982
High Pressure Steam Jet	CS-11982
Salt Water Immersion	CS-11982
Chemical Resistance	
Salt Fog	CS-11982
Chemical Exposure (cabin)	CS-11982
Chemical Exposure (exterior)	CS-11982
Mechanical Stresses	
Vibration	CS-11982
Mechanical Shock	CS-11982
Mechanical Shock Endurance	CS-11982
Package Drop	CS-11982

**Also using customer-specified methods directly related to the types of tests and parameters listed above.*

Accredited Laboratory

A2LA has accredited

TRIALON CORPORATION

Burton, MI

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 April 2017*).

Presented this 17th day of July 2018.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1123.03
Valid to May 31, 2020

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