SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BURTON
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MECHANICAL

Valid To: May 31, 2024 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 or types of products:
Automotive, Aerospace, Military and Electrical/Electronic/Mechanical components and assemblies.

Test Type	Test Parameters	Test Method/Standard
High/Low/Cyclic Temperature without Humidity[1]	(-65 to 175) ºC	Including but not limited to the following: FCA CS.00056 sections 5.3.1, 5.3.2, 5.3.3, 5.3.4 Ford CEPT:00:00-E-412 sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.17 GMW 3172[2] sections 9.4.1. 9.4.3, GMW 3191 section 4.4.1 USCAR-2 section 5.6.3 MIL-STD-810(G,H) methods 501,502 MIL-STD-202(G,H) method 108 JDQ 53.3 ISO 16750-4 Hyundia/KIA ES95400-10 IEC 60068-2-14

Temperature Capability with Humidity[1]	(-65 to 175) ºC (20 to 95) %RH	Including but not limited to the following: FCA CS.00056 sections 5.3.6, 5.3.7 Ford CEPT:00:00-E-412 sections 5.8, 5.20 GMW 3172[2] sections 9.4.5, 9.4.6 GMW 3191 section 4.4.3, 4.4.4 USCAR-2 section 5.6.2 USCAR-21 section 4.5.4 MIL-STD-810(G,H) method 507 MIL-STD-202(G,H) methods 103, 106 JDQ 53.3 Hyundia/KIA ES95400-10 ISO 16750-4 IEC 60068-2-38 IEC 60068-2-78
Thermal Shock[1]	(-70 to 200) ºC Air to Air	Including but not limited to the following: FCA CS.00056 section 5.3.5 Ford CEPT:00:00-E-412 sections 5.6, 5.7 GMW 3172[2] section 9.4.2 GMW 3191 section 4.4.2 USCAR-2 section 5.6.1 USCAR-21 section 4.5.5 MIL-STD-810(G,H) method 503 MIL-STD-202(G,H) method 107 JDQ 53.3 ISO 16750-4
Altitude with Temperature[1]	To 100,000 ft. (-50 °C to 150 °C to 60,000 ft.)	Including but not limited to the following: MIL-STD-810(G,H) 500.5 Procedure I, II only IEC 60068-2-13 SAE J1455 4.9
Force Testing Tension and Compression[1]	Up to 30 kN	Including but not limited to the following: FCA CS.00056 section 5.4.2 Ford CEPT:00:00-E-412 GMW 3172[2] section 9.3.7 GMW 3191 USCAR-2 USCAR-21

Water Spray[1]		Including but not limited to the following: DIN 40050-9e FCA CS.00056 section 5.5.3 Ford CEPT:00:00-E-412 section 5.9 GMW 3172[2] section 9.5.2 GMW 3191 section 4.4.11 USCAR-2 section 5.6.74 IEC 60529 ISO 16750-4 JIS D 203
Water Immersion[1]	Submersion to 48 inches Air Temperature (-65 to 175) ºC Fluid Temperature (0 to 35) ºC	Including but not limited to the following: DIN 40050-9e FCA CS.00056 section 5.5.3 FCA CS.00056 section 5.5.4 Ford CEPT:00:00-E-412 section 5.9 GMW 3172[2] section 9.5.3 GMW 3191 section 4.4.9 USCAR-2 section 5.6.5 IEC 60529 ISO 16750-4 JIS D 203
Mud Resistance	Submersion to 12 inches (-65 to 175) ºC	CS.0056 section 5.5.2
Chemical Exposure/Resistance[1]		FCS CS.00056; Ford CETP 00.00-E-412; ISO 16750-5; GMW 14334; GMW 16449
Dust Intrusion[1]		Including but not limited to the following: DIN 40050-9e FCA CS.00056 section 5.5.1 Ford CEPT:00:00-E-412 section 5.10.1 GMW 3172[2] section 9.5.1 IEC 60529 SAE J1455 2017, Alternate Method only ISO 20653
Salt Fog / Spray[1]		Including but not limited to the following: ASTM B117 FCA CS.00056 section 5.5.5 Ford CEPT:00:00-E-412 section 5.15 GMW 3172[2] section 9.4.7 GMW3191 section 4.4.7SAE J1455 MIL-STD-202(G,H) method 101

		MIL-STD-202(G,H) method 509 ISO 16750-4 IEC 60068-2-11

Cyclic Corrosion[1]		Including but not limited to the following: GMW14872 SAE J 2334 GMW 3172[2] section 9.4.8 ISO 9227 GMW3286 IEC 60068-2-52

[1]Also using customer specified methods directly related to the types of tests and parameters listed.

[2] 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 including but not limited to GMW 3172 (2008, 2010, 2012, 2015,2018)

Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY BURTON

Burton, MI

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *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 3rd day of May 2022.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1123.03
Valid to May 31, 2024
Revised Septemeber 22, 2023

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