



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BURTON

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MECHANICAL

Valid To: June 30, 2026

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:<sup>3</sup>

**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 <sup>1</sup>	(-65 to 175) °C	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 <sup>2</sup> 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

Test Type	Test Parameters	Test Method/Standard
Temperature Capability with Humidity <sup>1</sup>	(-65 to 175) °C (20 to 95) %RH	FCA CS.00056 sections 5.3.6, 5.3.7; Ford CEPT:00:00-E-412 sections 5.8, 5.20 ; GMW 3172 <sup>2</sup> 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 <sup>1</sup>	(-70 to 200) °C Air to Air	FCA CS.00056 section 5.3.5; Ford CEPT:00:00-E-412 sections 5.6, 5.7; GMW 3172 <sup>2</sup> 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; IEC 60068-2-14 UNECE R100 rev3 section 9B
Altitude with Temperature <sup>1</sup>	To 100,000 ft. (-50 °C to 150 °C to 60,000 ft.)	MIL-STD-810(G,H) 500.5 Procedure I, II only; IEC 60068-2-13; SAE J1455 4.9
Force Testing Tension and Compression <sup>1</sup>	Up to 30 kN	FCA CS.00056 section 5.4.2; Ford CEPT:00:00-E-412; GMW 3172 <sup>2</sup> section 9.3.7; GMW 3191; USCAR-2; USCAR-21;
Impact/Crush	Up to 220kN	SAE J2462 §4.3.6 UL 2580 §38 UN 38.3.4.6.3
Nail Penetration	Up to 20kN 1mm/minute - 40mm/minute	SAE J2464 §4.3.3 UN 38.3 Annex C3.3
Pressure	Up to 3,000 psi	GMW 31722 section 9.5.2; GMW 3191 section 4.4.11; USCAR-2 section 5.6.74; IEC 60529; ISO 16750-4;
Flow	Up to 50gal/min	GMW 31722 section 9.5.2; GMW 3191 section 4.4.11; USCAR-2 section 5.6.74; IEC 60529;

ISO 16750-4;

Test Type	Test Parameters	Test Method/Standard
Water Spray <sup>1</sup>		DIN 40050-9e; FCA CS.00056 section 5.5.3; Ford CEPT:00:00-E-412 section 5.9; GMW 3172 <sup>2</sup> section 9.5.2; GMW 3191 section 4.4.11; USCAR-2 section 5.6.74; IEC 60529; ISO 16750-4; JIS D0203; ISO 20653 except 4K Method 3 except swivel nozzle Method 4 except swivel nozzle
Water Immersion <sup>1</sup>	Submersion to 48 inches  Air Temperature (-65 to 175) °C  Fluid Temperature (0 to 35) °C	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 <sup>2</sup> section 9.5.3; GMW 3191 section 4.4.9; USCAR-2 section 5.6.5; IEC 60529; ISO 16750-4; JIS D0203
Mud Resistance	Submersion to 12 inches (-65 to 175) °C	FCA CS.00056 section 5.5.2
Chemical Exposure/Resistance <sup>1</sup>		FCA CS.00056; Ford CETP 00.00-E-412; ISO 16750-5; GMW 14334; GMW 16449
Dust Intrusion <sup>1</sup>		DIN 40050-9e; FCA CS.00056 section 5.5.1; Ford CEPT:00:00-E-412 section 5.10.1; GMW 3172 <sup>2</sup> section 9.5.1; IEC 60529; SAE J1455 2017, Alternate Method only; ISO 20653
Salt Fog / Spray <sup>1</sup>		ASTM B117; FCA CS.00056 section 5.5.5; Ford CEPT:00:00-E-412 section 5.15; GMW 3172 <sup>2</sup> 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

Test Type	Test Parameters	Test Method/Standard
Cyclic Corrosion <sup>1</sup>		GMW14872; SAE J 2334; GMW 3172 <sup>2</sup> section 9.4.8; ISO 9227; GMW3286; IEC 60068-2-52
Gravel Impact <sup>1</sup>		CS-00056; ASTM D3170; SAE J400; GMW 14700
Visual Inspection		USCAR 2

<sup>1</sup>Also using customer specifications directly related to the types of tests and parameters listed.

<sup>2</sup> 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)

<sup>3</sup> This scope meets A2LA's P112 Flexible Scope Policy.



# 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 25<sup>th</sup> day of July 2024.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 1123.03  
Valid to June 30, 2026  
Revised May 18, 2026

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