



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BURTON

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MECHANICAL

Valid To: May 31, 2028

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 <sup>1,2</sup>                     | Test Parameters | Test Method/Standard                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High/Low/Cyclic Temperature without Humidity | (-65 to 175) °C | FCA CS.00056, sections, 5.3.1, 5.3.2, 5.3.3, 5.3.4;<br>Ford CEPT:00:00-E-412, sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.17;<br>GMW 3172 <sup>2</sup> , sections 9.4.1. 9.4.3;<br>GMW 3191, section 4.4.1;<br>USCAR-2, section 5.6.3;<br>MIL-STD-810(G,H), methods 501,502;<br>MIL-STD-202(G,H), method 108;<br>JDQ 53.3;<br>ISO 16750-4;<br>Hyundia/KIA ES95400-10;<br>IEC 60068-2-14 |



| Test Type <sup>1,2</sup>              | Test Parameters                           | Test Method/Standard                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature Capability with Humidity  | (-65 to 175) °C<br>(20 to 95) %RH         | FCA CS.00056, sections 5.3.6, 5.3.7;<br>Ford CEPT:00:00-E-412 sections, 5.8, 5.20 ;<br>GMW 3172 <sup>2</sup> , sections 9.4.5, 9.4.6;<br>GMW 3191, section 4.4.3, 4.4.4;<br>USCAR-2, section 5.6.2;<br>USCAR-21, section 4.5.4;<br>MIL-STD-810(G,H), method 507;<br>MIL-STD-202(G,H), methods 103, 106;<br>JDQ 53.3;<br>Hyundia/KIA ES95400-10;<br>ISO 16750-4;<br>IEC 60068-2-38;<br>IEC 60068-2-78 |
| Thermal Shock                         | (-70 to 200) °C<br>Air to Air             | FCA CS.00056, section 5.3.5;<br>Ford CEPT:00:00-E-412, sections 5.6, 5.7;<br>GMW 3172 <sup>2</sup> section 9.4.2;<br>GMW 3191 section 4.4.2;<br>USCAR-2 section 5.6.1;<br>USCAR-21 section 4.5.5;<br>MIL-STD-810(G,H), method 503;<br>MIL-STD-202(G,H), method 107;<br>JDQ 53.3;<br>ISO 16750-4;<br>IEC 60068-2-14<br>UNECE R100 rev3, section 9B                                                    |
| Force Testing Tension and Compression | Up to 30 kN                               | FCA CS.00056, section 5.4.2;<br>Ford CEPT:00:00-E-412;<br>GMW 3172 <sup>2</sup> , section 9.3.7;<br>GMW 3191;<br>USCAR-2;<br>USCAR-21;                                                                                                                                                                                                                                                               |
| Impact/Crush                          | Up to 220kN                               | SAE J2464, section 4.3.6<br>UL 2580<br>UN 38.3                                                                                                                                                                                                                                                                                                                                                       |
| Nail Penetration                      | Up to 20kN<br>1mm/minute -<br>40mm/minute | SAE J2464, section 4.3.3<br>UN 38.3, Annex C3.3                                                                                                                                                                                                                                                                                                                                                      |



| Test Type <sup>1,2</sup>     | Test Parameters                                                                                      | Test Method/Standard                                                                                                                                                                                                                                                                                                         |
|------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Thermal Propagation          | (23 to 500) °C                                                                                       | IEC 62619, section 7.3.3 Annex C<br>SAE J2464, section 4.4.3 <i>excluding gas analysis</i><br>SAE J2929, section 4.11<br>UL 9540A, sections 7, 8, 9, <i>excluding gas analysis</i><br>GB/T 38031, Appendix C                                                                                                                 |
| Pressure                     | Up to 3,000 psi                                                                                      | GMW 31722, section 9.5.2;<br>GMW 3191, section 4.4.11;<br>USCAR-2, section 5.6.74;<br>IEC 60529;<br>ISO 16750-4;                                                                                                                                                                                                             |
| Flow                         | Up to 50gal/min                                                                                      | GMW 31722, section 9.5.2;<br>GMW 3191, section 4.4.11;<br>USCAR-2, section 5.6.74;<br>IEC 60529;<br>ISO 16750-4;                                                                                                                                                                                                             |
| Water Spray                  |                                                                                                      | DIN 40050-9e;<br>FCA CS.00056, section 5.5.3;<br>Ford CEPT:00:00-E-412, section 5.9;<br>GMW 3172 <sup>2</sup> , section 9.5.2;<br>GMW 3191, section 4.4.11;<br>USCAR-2, section 5.6.74;<br>IEC 60529;<br>ISO 16750-4;<br>JIS D0203;<br>ISO 20653 except 4K<br>Method 3 except swivel nozzle<br>Method 4 except swivel nozzle |
| Water Immersion              | Submersion to 48 inches<br><br>Air Temperature (-65 to 175) °C<br><br>Fluid Temperature (0 to 35) °C | DIN 40050-9e;<br>FCA CS.00056, section 5.5.3;<br>FCA CS.00056, section 5.5.4;<br>Ford CEPT:00:00-E-412, section 5.9;<br>GMW 3172 <sup>2</sup> , section 9.5.3;<br>GMW 3191, section 4.4.9;<br>USCAR-2, section 5.6.5;<br>IEC 60529;<br>ISO 16750-4;<br>JIS D0203                                                             |
| Mud Resistance               | Submersion to 12 inches<br>(-65 to 175) °C                                                           | FCA CS.00056 section 5.5.2                                                                                                                                                                                                                                                                                                   |
| Chemical Exposure/Resistance |                                                                                                      | FCA CS.00056;<br>Ford CETP 00.00-E-412;<br>ISO 16750-5;<br>GMW 14334;<br>GMW 16449                                                                                                                                                                                                                                           |



| Test Type <sup>1,2</sup> | Test Parameters | Test Method/Standard                                                                                                                                                                                                                                                 |
|--------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dust Intrusion           |                 | DIN 40050-9e;<br>FCA CS.00056, section 5.5.1;<br>Ford CEPT:00:00-E-412, section 5.10.1;<br>GMW 3172 <sup>2</sup> , section 9.5.1;<br>IEC 60529;<br>SAE J1455 2017, Alternate Method only;<br>ISO 20653                                                               |
| Salt Fog / Spray         |                 | ASTM B117;<br>FCA CS.00056, section 5.5.5;<br>Ford CEPT:00:00-E-412, section 5.15;<br>GMW 3172 <sup>2</sup> , section 9.4.7;<br>GMW3191, section 4.4.7SAE J1455;<br>MIL-STD-202(G,H), method 101;<br>MIL-STD-810(G,H), method 509;<br>ISO 16750-4;<br>IEC 60068-2-11 |
| Cyclic Corrosion         |                 | GMW14872;<br>SAE J 2334;<br>GMW 3172 <sup>2</sup> , section 9.4.8;<br>ISO 9227;<br>GMW3286;<br>IEC 60068-2-52                                                                                                                                                        |
| Gravel Impact            |                 | CS-00056;<br>ASTM D3170;<br>SAE J400;<br>GMW 14700                                                                                                                                                                                                                   |
| Visual Inspection        |                 | USCAR 2                                                                                                                                                                                                                                                              |

<sup>1</sup> This scope meets A2LA's P112 Flexible Scope Policy.

<sup>2</sup> When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories.

In addition to the requirements of Section 1 of A2LA R101. The laboratory may perform testing to historical versions of the standards listed above if those standard versions were previously accredited by A2LA. These tests are covered under the scope of accredited testing listed above.



# 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 29<sup>th</sup> day of June 2026.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 1123.03  
Valid to May 31, 2028

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