

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BURTON

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ACOUSTICS and VIBRATION

Valid To: May 31, 2026 Certificate Number: 1123.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following <u>vibration tests</u> using the parameters and methods listed below:³

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
	Displacement: up to 2.5in pk-to-	TL-6172;
	pk	TL-6550;
		ASTM D4728;
	Force: Up to 15,000 force-lbs	FCA CS.00056;
		GMW 3172 ² ;
Random Vibration ¹	Frequency:	GMW 3191;
	5 Hz to 2,500 Hz	Hyundai/KIA ES95400-10;
Single Axis Vibration Testing.		IEC 60068-2-64;
Electro-dynamic vibration	Temperature:	ISO 16750-3;
tables. Controllers using client	(-50 to +150) °C. Ramp rate	JDQ 53.3;
methods within the following	10 °C/min max.	MIL-STD-202(G,H) methods
parameters:		214;
	Humidity:	MIL-STD-810(G,H) method
	30% to 95% RH	514;
		Nissan 28401NDS01;
	Maximum Acceleration:	SAE J 1455;
	100gRMS	USCAR-2

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Test Type	Test Parameters	Test Method/Standard
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Sine Vibration ¹	Displacement: up to 2.5in pk-to-pk	TL-6172; TL-6550; Ford CETP:00.00-E-412;
	Force: Up to 15,000 force-lbs	FCA CS.00056; GMW 3172 ² ;
	Frequency:	GMW 3191;
	5 Hz to 2,500 Hz	Hyundai/KIA ES95400-10; IEC 60068-2-6;
Single Axis Vibration Testing.	Temperature:	ISO 16750-3;
Electro-dynamic vibration	(-50 to +150) °C. Ramp rate	JDQ 53.3;
tables. Controllers using client	10 °C/min max.	JIS D 1601;
methods within the following	11: 1:4	MIL-STD-202(G,H) methods
parameters:	Humidity: 30% to 95% RH	201, 204;
	30% to 93% KH	MIL-STD-810(G,H) method 514;
	Maximum Acceleration:	Nissan 28401NDS01;
	140gRMS	SAE J 1455;
	Tiograms	TSC 7000G;
	Velocity Continuous:	USCAR-2
	71 inches/second	UNECE R100 rev3 section 9A
Mechanical Shock ¹ Electro-dynamic vibration tables with mechanical shock controller using client methods within the following parameters:	Displacement: Up to 2.5 in pkto-pk Force: Up to 40,000 lbf (half-sine) Acceleration: Up to 1500g (depending on product and fixture design, mass, and pulse duration) Temperature: (-50 to +150) °C Ramp rate 10°C/m max. Humidity: 30% to 95% RH Up to 100g (electrodynamic) (depending on product and fixture design, mass, and pulse duration) Up to 1500g (shock amplifier-pneumatic) (depending on product and fixture design,	Ford CETP:00.00-E-412; FCA CS.00056; GMW 3172 ^{2;} GMW 3191; Hyundai/KIA ES95400-10; IEC 60068-2-27; ISO 16750-3; JDQ 53.3; MIL-STD-202(G,H) methods 213; MIL-STD-810(G,H) methods 516; Nissan 28401NDS01; SAE J 1455; TSC 7000G; USCAR-2

Test Type	Test Parameters	Test Method/Standard
Vibration Test Fixture ¹ Transmissibility	Frequency: 5 Hz to 2,500 Hz	GMW 3172 ²
Free Fall, Handling Drop		GMW3172 ² ; USCAR-2; ISO 16750-3; IEC 60068-2-32, Procedure 1; CS00056 section 5.4.6

¹ Also using customer specifications based on the parameters listed above.

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)

³ 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

Acoustics and Vibration 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 25th day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council

Certificate Number 1123.01

Valid to May 31, 2026

Revised October 21, 2025