



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY AUBURN HILLS
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ACOUSTICS AND VIBRATION

Valid To: May 31, 2026

Certificate Number: 1123.08

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.

Test Type	Test Parameters	Test Method/ Standard
Acoustics Testing¹ Semi Anechoic Acoustics Testing Pressure Pulsation Rotational Noise Evaluation Injector Bench Testing	Ambient Noise Level < 20 dBA Sound Pressure Level (dB) and Loudness (Sones): 150 Hz cut off frequency to 20 kHz	TL-6180; TL-6935; TL-7015
Random Vibration¹ Single Axis Vibration Testing. Electro-dynamic vibration tables. Controllers using client methods within the following parameters:	Displacement: up to 2in pk-to- pk Force: Up to 12,000 force-lbs Frequency: 5Hz to 3,000Hz Temperature: (-50 to +150) °C. Ramp rate 20°C/min max. Humidity: 30% to 95% RH	TL-6172; TL-6550; EPS-24126248; EPS-24138553; Ford CETP:00.00-E-412; ASTM D4728; FCA CS.00056; Ford CEPT:00:00-E-412; GMW 3172 ² ; GMW 3191; Hyundai/KIA ES95400-10; IEC 60068-2-27; IEC 60068-2-64; ISO 16750-3; JDQ 53.3; JIS D 1601; MIL-STD-202 (G,H) methods 201, 214;

Test Type	Test Parameters	Test Method/ Standard
		MIL-STD-810(G,H) method 514; Nissan 28401NDS01; SAE J 1455; TSC 7000G; USCAR-2; USCAR-21
<p>Sine Vibration¹</p> <p>Single Axis Vibration Testing. Electro-dynamic vibration tables. Controllers using client methods within the following parameters:</p>	Displacement: up to 2in pk-to-pk Force: Up to 15,000 force-lbs Frequency: 5Hz to 3,000Hz Acceleration: Up to 100g (depending on product and fixture design & mass) Temperature: (-50 to +150) °C Ramp rate 20°C/min max. Humidity: 30% to 95% RH	TL-6172; TL-6550; EPS-24126248; EPS-24138553; Ford CETP:00.00-E-412; ASTM D4728; FCA CS.00056; Ford CEPT:00:00-E-412; GMW 3172 ² ; GMW 3191; Hyundai/KIA ES95400-10; IEC 60068-2-27; IEC 60068-2-64; ISO 16750-3; JDQ 53.3; JIS D 1601; MIL-STD-202 (G,H) methods 204; MIL-STD-810 (G,H) methods 514; Nissan 28401NDS01; SAE J 1455; TSC 7000G; USCAR-2; USCAR-21
<p>Mechanical Shock¹</p> <p>Electro-dynamic vibration tables with mechanical shock controller using client methods within the following parameters:</p>	Displacement: Up to 2 in pk-to-pk Force: Up to 26,000 lbf (half-sine) Acceleration: Up to 100g (depending on product and fixture design, mass, and pulse duration) Temperature: (-50 to +150) °C Ramp rate 20°C/m max.	EPS-24138553; EPS-24126248; Ford CETP:00.00-E-412; ASTM D4728; FCA CS.00056; Ford CEPT:00:00-E-412; GMW 3172 ² ; GMW 3191; Hyundai/KIA ES95400-10; IEC 60068-2-27; IEC 60068-2-64; ISO 16750-3; JDQ 53.3; JIS D 1601;



Test Type	Test Parameters	Test Method/ Standard
	Humidity: 20% to 95% RH Up to 100g (electrodynamic) (depending on product and fixture design, mass, and pulse duration)	MIL-STD-202 (G, H) methods 203, 213; MIL-STD-810 (G, H) method 514; Nissan 28401NDS01; SAE J 1455; TSC 7000G; USCAR-2; USCAR-21
Vibration Transmissibility ¹	Frequency: 5Hz to 3,000Hz	GMW3172 ²
Handling Drop ¹		EPS-24126248; GMW3172 ² ; USCAR-2; ISO 16750-3; IEC 60068 2-32, Procedure 1; CS00056 section 5.4.6
Mechanical Impact ¹		TL-6987; EPS-24138553; EPS-24126248

¹Also using customer specifications 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 AUBURN HILLS

Auburn Hills, MI

for technical competence in the field of

Acoustic 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.

A blue ink signature of Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1123.08
Valid to May 31, 2026

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