

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

#### ELEMENT MATERIALS TECHNOLOGY KOKOMO 1815 Touby Pike Kokomo, IN 46901 Gregory Stetkiw // Phone: 810-341-7980 // Email: greg.stetkiw@element.com Website: http://www.element.com

#### ACOUSTICS & VIBRATION

Valid To: May 31, 2026

Certificate Number: 1123.07

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:

#### On the following products or types of products:

Automotive, Aerospace, Military and Electrical/Electronic/Mechanical components and assemblies.

Test TypeTest ParametersTest M	Iethod/Standard
Random Vibration1Displacement: up to 2.5 in pk- to-pkTL-61 TL-65 Ford C ASTM FCA C Ford CSingle Axis Vibration Testing. Electro-dynamic vibration tables. Controllers using client methods within the following parameters:Frequency: 5 Hz to 2,500 HzHyund GMW GMWTubles. Controllers using client methods within the following parameters:Frequency: 100 °C. Ramp rate 20 °C/minute max.Hyund 100 °C. State 20 °C/minute max.Humidity: 30% to 95% RH201, 2 S14; MIL-S S14; MIL-S SAE J TSC 7 USCA USCASAE J SAE J	72; 50; ETP:00.00-E-412; 1 D4728; S.00056; EPT:00:00-E-412; 3172 <sup>2;</sup> 3191; lai/KIA ES95400-10; 0068-2-27; 0068-2-64; 5750-3; 3.3; 1601; TD-202 (G, H) methods 14; TD-81 0(G, H) method 28401NDS01; 1455; 0000G; R-2; R-21

(A2LA Cert. No. 1123.07) 07/23/2024

Test Type	Test Parameters	Test Method/Standard
		TL-6172; TL-6550:
		Ford CETP:00 00-E-412:
	Displacement: up to 2.5 in pk-	ASTM D4728:
	to-pk	FCA CS.00056:
		Ford CEPT:00:00-E-412;
	Force: Up to 15,000 lbf	GMW 3172 <sup>2;</sup>
	<b>F</b>	GMW 3191;
Sine Vibration <sup>1</sup>	5 Hz to 2 500 Hz	Hyundai/KIA ES95400-10;
	5 112 10 2,500 112	IEC 60068-2-27;
Single Axis Vibration Testing.	Temperature:	IEC 60068-2-64;
Electro-dynamic vibration	(-50  to  +150) °C. Ramp rate	ISO 16750-3;
tables. Controllers using client	20 °C/minute max.	JDQ 53.3;
methods within the following		JIS D 1601; MIL STD 202 (C. II) methods
parameters:	Humidity:	MIL-STD-202 (G, H) methods
	30% to 95% RH	MII -STD-810 (G H) method
		514·
	Velocity Continuous:	Nissan 28401NDS01:
	71 inches/second	SAE J 1455;
		TSC 7000G;
		USCAR-2;
		USCAR-21
	Displacement: Up to 2.5 in pk-	Ford CETP:00.00-E-412;
	to-pk	ASTM D4728;
		FCA CS.00056;
	Force: Up to 40,000 lbf (half-	Ford CEP1:00:00-E-412; CMW 2172 <sup>2</sup> :
	sine)	GMW 3191
	Acceleration: Up to $1500  g$	Hyundai/KIA FS95400-10
	(depending on product and	IEC 60068-2-27:
<b>Mechanical Shock</b> <sup>1</sup>	fixture design, mass, and pulse	IEC 60068-2-64;
	duration)	ISO 16750-3;
Electro-dynamic vibration tables		JDQ 53.3;
with mechanical shock	Temperature:	JIS D 1601;
controller using client methods	(-50  to  +150) °C Ramp rate	MIL-STD-202 (G, H) methods
within the following parameters:	20 °C/minute max.	203, 213;
Wayoforma, half size saw	Humidity	$\frac{1}{514}$ MIL-51D-810 (G, H) method
tooth and transzoidal	$\frac{1}{20\%} t_0 95\% \text{ BH}$	514; Nissan 28401NDS01.
	2070 10 9370 KH	SAF I 1455.
	Up to 100 g (electrodynamic)	TSC 7000G:
	(depending on product and	USCAR-2;
	fixture design, mass, and pulse	USCAR-21
	duration)	
	Up to 1500 g (shock amplifier-	
	pneumatic) (depending on	
	product and fixture design,	
	mass, and pulse duration)	

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Test Type	Test Parameters	Test Method/Standard
Vibration Test Fixture <sup>1</sup>		
Transmissibility	Frequency: 5 Hz to 2,500 Hz	GMW 3172

<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).

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(A2LA Cert. No. 1123.07) 07/23/2024





# **Accredited Laboratory**

A2LA has accredited

## **ELEMENT MATERIALS TECHNOLOGY KOKOMO**

Kokomo, IN

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 23<sup>rd</sup> day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 1123.07 Valid to July 31, 2026

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