



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY HUNTSVILLE

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ACOUSTICS & VIBRATION

Valid To: December 31, 2027

Certificate Number: 0214.41

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following Acoustics and Vibration tests:

<b>Tests</b>	<b>Test Method(s) <sup>2</sup>:</b>
<b>Explosive Atmosphere</b> <sup>1</sup> (Site to 50,000 ft simulation)	MIL-STD-202, 109; MIL-STD-810, 511 Procedures I and II; RTCA/DO-160, Section 9
<b>Sand and Dust</b> <sup>1</sup> Site Ambient to 160°F Air Velocity to 40 MPH	MIL-STD-202, 110; MIL-STD-810, 510; RTCA/DO-160, Section 12; IEC 60529 IP5X, IP6X
<b>Temperature/Altitude</b> <sup>1</sup> (-65 to 160) °F 80,000 ft	MIL-STD-202, 105; MIL-STD-810, 500; RTCA/DO-160, Section 4
<b>High Temperature</b> <sup>1</sup> Up to 600 °F	MIL-STD-202, 108; MIL-STD-810, 501; RTCA/DO-160, Sections 4 and 5
<b>Low Temperature</b> <sup>1</sup> Down to -100 °F	MIL-STD-810, 502; RTCA/DO-160, Sections 4 and 5
<b>Temperature Shock</b> <sup>1</sup> (-100 to +300) °F	MIL-STD-202, 107; MIL-STD-810, 503
<b>Temperature/Humidity</b> (-100 to +300) °F (20 to 95) % Humidity	MIL-STD-202, 103 and 106; MIL-STD-810, 507 (excluding vibration); RTCA/DO-160, Section 6

<b>Tests</b>	<b>Test Method(s) <sup>2</sup>:</b>
<b>Explosive Decompression</b> 100,000 ft ≤ 100msec	MIL-STD-810, 500 Procedure IV
<b>Rain/Wind</b>	MIL-STD-810, 506
<b>Icing/Freezing Rain</b>	MIL-STD-810, 521
<b>Immersion</b>	MIL-STD-202, 104; MIL-STD-810, 512; IEC 60529 IPX7, IPX8
<b>Freeze/Thaw</b>	MIL-STD-810, 521
<b>Waterproofness</b>	RTCA/DO-160, Section 10; IEC 60529 IPX1, IPX2, IPX3, IPX4, IPX5, IPX6
<b>Salt Fog</b>	ASTM B117; MIL-STD-202, 101; MIL-STD-810, 509; RTCA/DO-160, Section 14
<b>Salt Fog and SO2</b>	MIL-STD-810, 518
<b>Solar Radiation</b> (Heat Effects only)	MIL-STD-810, 505, Procedure I
<b>Fluid Susceptibility/Exposure to Fluids</b> (Fluid Compatibility and Resistance to Fluids)	MIL-STD-202, 215; MIL-STD-810, 504; RTCA/DO-160, Section 11
<b>Acoustics Reverberation</b> Up to 160 dB Overall (10 to 20,000) Hz	MIL-STD-810, 515
<b>Acoustics Progressive Wave Tube</b> Up to 160 dB Overall (10 to 20,000) Hz	MIL-STD-810, 515
<b>Thermal Acoustic</b> Up to 160 dB Overall (10 to 20,000) Hz (-65 to 200) °F	MIL-STD-810, 515 with Temperature
<b>Acoustic Emissions</b> 23dBA Noise Floor (23 to 175) dBA (10 to 20,000) Hz	MIL-STD-740-1

<b>Tests</b>	<b>Test Method(s) <sup>2</sup>:</b>
<b>Vibration Electro Dynamic Shaker</b> Sine, Random, and Combined 30,000 Pounds Force (5 to 2,000) Hz 1.0” Double Amplitude Combined Environment of (-65 to 300) °F	MIL-STD-167-1 5.1, 5.2, 5.3; MIL-STD-202, 201, 204, and 214; MIL-STD-810, 514, and 528; RTCA/DO-160, Section 8
<b>Vibration Servo Hydraulic Shaker</b> Sine, Random, and Combined 30,000 Pounds Force (2 to 200) Hz 4.0” Double Amplitude Combined Environment of (-65 to 300) °F	MIL-STD-810, 514, and 516; RTCA/DO-160, Section 8
<b>Shock Electro Dynamic Shaker</b> 30,000 Pounds Force 1.0” Double Amplitude 1,200 SRS G	MIL-STD-202, 207, and 213; MIL-STD-810, 516, and 519; RTCA/DO-160, Section 7
<b>Acceleration</b> 22ft Radius Centrifuge / 25G’s 3 Foot Radius Centrifuge / 200 G’s	MIL-STD-202, 212; MIL-STD-810, 513; RTCA/DO-160, Section 7
<b>Drop Impact</b>	MIL-STD-202, 203; MIL-STD-810, 516
<b>Earthquake</b> Resistance (Seismic) Vibration Characteristics of Materials Acceptance Criteria for Seismic Qualification by Shake Table Testing of Nonstructural Components and Systems	IEEE-344; Telcordia GR-63 (5.4.1); ICC-ES AC156

<sup>1</sup> This laboratory also uses customer supplied specifications and/or methods directly related to the testing technologies and parameters listed above.

<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 test method, per Annex A, Part C of A2LA’s *R101 - General Requirements: Accreditation of Conformity Assessment Bodies*.



## Accredited Laboratory

A2LA has accredited

### ELEMENT MATERIALS TECHNOLOGY HUNTSVILLE

Huntsville, AL

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 25<sup>th</sup> day of March 2026.

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 214.41  
Valid to December 31, 2027

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