SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY – MELBOURNE
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MECHANICAL

Valid To: February 28, 2027 Certificate Number: 7039.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for the following tests on the following types of products: Aircraft components, automotive components, gaskets, seals and packings, packaging and containers, pipes, hoses, valves and fittings, rubber and rubber products, tools, windows & doors, wiring harnesses, subassemblies.

For the following types of industries: Aircraft, Aerospace, Automotive, Medical, Defense and Electronics industries.

Test Description:	**Tests Method(s) [1]:**
Vibration[2,3] Up to 9,000 lbf (3 to 4000) Hz Acceleration: Up to 100 g Displacement: Up to 4 in	RTCA/DO-160, Section 8; MIL-STD-202 Method 106; MIL-STD-810, Methods 514, 516, Procedures IV, VI, and 519; MIL-STD-167; IEC 60945, Section 8.7
Shock[2,3] Up to 210 g; 1/2 Sine (< 1 to 35) ms at Terminal Peak	RTCA/DO-160 Section 7; MIL-STD-202 Methods 202, 205, and 213 (higher levels need drop tower); MIL-STD-810, Methods 514, 516, Procedures I, II, III, and V; IEC 68-2-27; MIL-S-901D
SRS[2,3] Up to 250 g (5 to 2500) Hz	MIL-STD-810, Method 516
Loose Cargo[2,3] Circular Synchronous Bed 300 RPM, 1 inch Orbital Path at 5 Hz	MIL-STD-810, Method 514

Test Description:	**Tests Method(s) [1]:**
Acceleration[2,3]	MIL-STD-202, Method 212 (*Test Conditions A and C only*); MIL-STD-810, Method 513; MIL-E-5272, Rev. C, 22 Jan 71, Para 4.16
Salt Spray[2,3]	ASTM B117; ASTM D1735; ASTM D2247; DIN50021-SS; IEC 60945 Section 8.12; MIL-STD-202, Method 101; MIL-STD-810, Method 509; RTCA/DO-160, Section 14
Sand[2,3]	MIL-STD-810, Method 510; MIL-STD-202 Method 110A; RTCA/DO-160, Section 12
Dust[2,3]	IEC 60529, Section 13; MIL-STD-810, Method 510; MIL-STD-202 Method 110A; RTCA/DO-160, Section 12
Settling Dust[2]	IEC 60529, Section 13
Humidity (Temp/Humidity)[2,3]	Bellcore GR-63 (5.1.1.3); MIL-STD-202 Methods 103, 105.1, and 106; MIL-STD-810, Method 507; RTCA/DO-160, Section 6; DIN 50017; IEC 60945, Section 8.3
Moisture Resistance[2]	MIL-STD-202, Method 106
High/Low Temperature[2,3]	MIL-STD-810, Methods 501, 502, 520; MIL-STD-202, Method 108A; IEC 60945, Sections 8.2, 8.4; RTCA/DO160, Sections 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.55, 5, 24 (Category A & C)
Thermal Shock[2,3]	RTCA/DO160, Section 6; IEC 60945, Section 8.5; MIL-STD-202 Method 107G; MIL-STD-810, Method 503
Altitude[2,3] *Up to 70,000 ft*	MIL-STD-810, Method 500; RTCA/DO160 Sections 4.6.1, 4.6.3
Leakage (Immersion)[2,3]	MIL-STD-810, Method 512; IEC 60945, Section 8.9

Test Description:	**Tests Method(s) [1]:**
Fluid Susceptibility[2,3]	MIL-STD-810, Method 504; RTCA/DO-160, Section 11
HALT/HASS[2] *Random Vibration (5 to 5000) Hz* *Level (0 to 85) g(pk)* *Temperature: (-100 to 200) °C*	Halt Standard; General Halt Requirements, Customer Supplied
Rapid Decompression[2,3]	MIL-STD-810, Method 500; RTCA/DO160
Over Pressure[2,3]	RTCA/DO160
Rain[2,3]	MIL-STD-810 Method 506 Proc III; IEC 60945, Section 8.8
Solar Radiation[2,3]	MIL-STD-810, Method 505
Impact[2]	UL 746C, Section 57
Icing/Freezing Rain[2,3]	MIL-STD-810, Method 521; RTCA/DO160, Section 24
Pressure[2] *Up to 3,000 psi*	Valve Research QTP50007-1
Water[2]	IEC 60529, Section 14
Waterproofness[2,3]	RTCA/DO160, Section 10.3.1, 10.3.3 & 10.3.4
Freeze/Thaw[2,3]	MIL-STD-810, Method 524
Water Jet Cleaning[2] *50 psi*	DRS 9608-96800-0001, Customer Supplied (PSI 50)
Steam Jet[2] *105 psi*	DRS 9608-96800-0001, Customer Supplied (105 PSI)
Flammability[2,3]	RTCA/DO160, Section 26, CAT C; FAR 25-853
Drop Test[2]	IEC 60945/Ed4, Section 8.6.1
Blowing Rain[2,3]	MIL-STD-810, Method 506, Procedure I

[1] 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 *R101 - General Requirements: Accreditation of Conformity Assessment Bodies.*

[2] Including customer-supplied specifications directly related to the test technologies and parameters listed above.

[3] Note: This lab is capable of performing current and older versions of MIL-STD-810 (versions B through H) and RTCA/DO-160 (versions B through G) for the methods listed above. The methods listed above on this scope are accredited.

Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY - MELBOURNE

Melbourne, FL

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 11th day of February 2025.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7039.02
Valid to February 28, 2027

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