



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY – JUPITER¹

15814 Corporate Circle

Jupiter, FL 33478

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MECHANICAL

Valid To: February 28, 2021

Certificate Number: 1720.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, as well as the two satellite laboratory locations listed below, to perform the following tests on the following types of products and materials: Aerospace components, Military equipment, Nuclear equipment, Commercial and Automotive components.

For the following types of industries: Aerospace, Defense, Nuclear, Telecommunications, Electrical, Electronics, Automotive, Information Processing and Scientific Instruments.

Test Description:

Test Method(s):

LOCA

ASTM D3911

Leakage (Immersion)

MIL-STD-810C/D/E/F/G, Method 512

Explosive Atmosphere

MIL-STD-810cC/D/E/F/G, Method 511;
RTCA/DO-160, Section 9

Fire Resistance/Fire Proofness

SAE AS 4273;
ISO 2685;
SAE AS 1055;
SAE AIR 1377A;
DOT/FAA AC 20-135;
RTCA/DO-160, Section 26;
Rolls-Royce Spec. MTR00072;
Rolls-Royce Spec. FVR08366;
Rolls-Royce Spec. JES 314-1

Continuous Flow/Endurance/Performance²

Liquid: (1 to 20,000) GPM,

(1 to 12,000) psi, 200 °F

Triumph Thermal Systems ETS 2507;
Honeywell 41-22911,
Honeywell 12-77690;

Test Description:

Hydrostatic Pressure/Burst/Pressure²
(70,000 psi max)

Test Method(s):

Breeze Eastern ECO 28183;
Amerex DTP ES-2010-1052;
MIL-DTL-7905H;
Goodrich ED/3424/55QS;
Goodrich ED/3564/09QS;
Honeywell SOW_WPI_PCE

Test Description:

Pneumatic Static Pressure/Burst/Pressure/ Pressure
Decay²
(30,000 psi max)

Test Method(s):

Hamilton Sundstrand HSER 30110;
UTAS ED/3578/07/DF;
UTAS ED/3579/07/DP;
Honeywell 08-75701;
Honeywell 12-77690

Fuel Icing

SAE ARP 1401

Impulse

SAE ARP 603;
SAE ARP 1383

¹ This accreditation covers testing performed at the main laboratory listed above, and the following satellite laboratories listed below:

ELEMENT MATERIALS TECHNOLOGY – JUPITER
7780 Technology Drive
Melbourne, FL 32904

Test Description:

Salt Spray

Test Method(s):

ASTM B117, ASTM D1735, ASTM D2247;
DIN50021-SS; IEC 60945 Section 8.12;
MIL-STD-202, Method 101;
MIL-STD-810C/D/E/F/G, Method 509;
RTCA/DO-160, Section 14

Sand & Dust

IEC 60529, Section 13;
MIL-STD-810C/D/E/F/G, Method 510;
MIL-STD-202 Method 110A;
RTCA/DO-160, Section 12

Test Description:

Test Method(s):

Humidity (Temp/Humidity)

Bellcore GR-63 (5.1.1.3);
MIL-STD-202 A-G Methods 103, 105.1, and 106;
MIL-STD-810C/D/E/F/G, Method 507;
RTCA/DO-160, Section 6;
DIN 50017; IEC 60945, Section 8.3

Moisture Resistance

MIL-STD-202, Method 106

High/Low Temperature

MIL-STD-810C/D/E/F/G, 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

RTCA/DO160, Section 6;
IEC 60945, Section 8.5;
MIL-STD-202 Method 107G;
MIL-STD-810C/D/E/F/G, Method 503

Altitude

Up to 70,000 ft

MIL-STD-810C/D/E/F/G, Method 500;
RTCA/DO160 Sections 4.6.1, 4.6.3

Leakage (Immersion)

MIL-STD-810C/D/E/F/G, Method 512;
IEC 60945, Section 8.9

Fluid Susceptibility

MIL-STD-810C/D/E/F/G, Method 504
RTCA/DO-160, Section 11

HALT/HASS²

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

MIL-STD-810C/D/E/F/G, Method 500;
RTCA/DO160

Over Pressure

RTCA/DO160

Rain

MIL-STD-810 C/D/E/F/G Method 506 Proc III;
IEC 60945, Section 8.8

Solar Radiation

MIL-STD-810 C/D/E/F/G, Method 505

Impact

UL 746C, Section 57

Test Description:

Test Method(s):

Icing/Freezing Rain

MIL-STD-810 C/D/E/F/G, Method 521;
RTCA/DO160, Section 24

Pressure²
Up to 3,000 psi

Pall Aeropower, AEC 346168QTP, (Customer
Supplied)

Water

IEC 60529, Section 14

Waterproofness

RTCA/DO160, Section 10.3.1, 10.3.3 & 10.3.4

Freeze/Thaw

MIL-STD-810 C/D/E/F/G, Method 524

Water Jet Cleaning²
50 psi

DRS 9608-96800-0001, Customer Supplied (PSI
50)

Steam Jet²
105 psi

DRS 9608-96800-0001, Customer Supplied (105
PSI)

Corrosion

ASTM G85-S, Annex IV

Flammability

RTCA/DO160, Section 26, CAT C; FAR 25-853

Drop Test

IEC 60945/Ed4, Section 8.6.1

Blowing Rain

MIL-STD-810 C/D/E/F/G, Method 506, Procedure I

² Using customer-specified test methods utilizing any combinations of test equipment parameters listed above.





Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY - JUPITER

Jupiter, 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 25th day of February 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1720.02
Valid to February 28, 2021

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