



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SMITHERS DT LLC
6539 Westland Way
Suites 20 through 25
Lansing, MI 48917
Kelby Thayer Phone: (517) 322- 2400

MECHANICAL

Valid To: February 28, 2022

Certificate Number: 0363.06

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following types of tests on various packages such as cases, crates, unit loads, racks, tray packs, trays and pouches consisting of corrugated, wood, metal, and plastic materials:

PACKAGE SYSTEMS

<u>Test Description/Parameter</u>	<u>Test Method(s)/Standard(s)¹</u>
Environmental Conditioning ² Temperature (-20 to 140) °F Humidity (10 to 90) % RH Vacuum (6 to 28.5) in Hg	ASTM D4169, D6653, F1980; ISTA 2A, 3A, 3B, 3E, 3F, 3H
Compression Testing ² (25 to 45,000) lbs	ASTM D4169; ISTA 2A, 3E, 3F, 3H
Free Fall Drop Testing	ASTM D4169; ISTA 1A, 2A, 3A, 3B, 3F
Horizontal Impact Testing ² (5 to 25) g	ASTM D4169; ISTA 3B, 3E, 3H
Incline Impact Testing ² (2 to 6) ft/s	ASTM D4169; ISTA 3B, 3E
Mechanical Vibration Testing ² (3 to 200) Hz	ASTM D4169; ISTA 1A, 2A, 3A, 3B, 3E, 3F, 3H
Rotational Drop Testing	ASTM D4169; ISTA 3A, 3B, 3E, 3H
Tip-Over Testing	ASTM D4169; ISTA 3B
Bridge Impact Testing	ASTM D4169; ISTA 3A, 3B
Concentrated Impact Testing	ASTM D4169; ISTA 3A, 3B

<u>Test Description/Parameter</u>	<u>Test Method(s)/Standard(s)</u>
Seal Strength Tests of Flexible Barrier Materials	ASTM F88
Seal Integrity (Medical Devices)	ASTM F1886, F1929, F3039
Pack Integrity (Internal Pressure Bubble Emissions)	ASTM F2096

PRODUCTS³

<u>Test Description/Parameter</u>	<u>Range of Capabilities</u>
Pressure Cycling ²	Up to 100 psi
Vacuum ²	0 to -26 in Hg
Vibration ²	Frequency – Up to 2,000 Hz Acceleration – Up to 100 G Displacement – +/- 1 in
Temperature Cycling ²	-70 to 170 °C
Mechanical/Impact Shock ²	Up to 2,000 g

¹When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is required to be using the current version within one year of the date of publication, per part C., Section 1 of A2LA R101 – *General Requirements – Accreditation of ISO/IEC 17025 Laboratories*.

²Also using customer supplied and industry specifications directly related to the test technologies and parameters listed above to perform tests on military, aerospace, automotive, medical, commercial, metals, plastics, rubber, electrical/electronic products and/or assemblies.

³The following test methods utilize the Product Environmental Testing parameters listed above: Ford ESDG93-8260-AA, MIL-STD-883 and SAE J2044





Accredited Laboratory

A2LA has accredited

SMITHERS DT LLC

Lansing, MI

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 2020.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0363.06
Valid to February 28, 2022

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