

Accredited Laboratory

A2LA has accredited

HUMANETICS INNOVATIVE SOLUTIONS, INC.

Raymond, OH

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 8 January 2009).

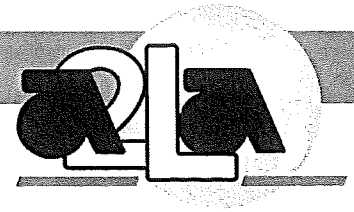


Presented this 2nd day of January 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 1850.03
Valid to July 31, 2019

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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

HUMANETICS INNOVATIVE SOLUTIONS, INC.

ATD Certification Lab

21001 State Route 739

Raymond, OH 43076

Joshua Yingling Phone: 734 446 3153

MECHANICAL

Valid To: July 31, 2019

Certificate Number: 1850.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following Crash Test Dummy tests:

Parameter/Equipment	Range	Comments
Head Drop Test – Resultant Acceleration Lateral Acceleration Unimodal Oscillation Temperature Humidity	(0 to 300) g ± 15 g (0 to 17) % (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart E, N, O, P, R, U, V, M SAE User’s Manual(s): H3-95 th % ECE Regulation 95 ECE Directive 96/27/EC
Hip Flexion – Velocity Angle Torque Temperature Humidity	(5.0 to 10) deg/s (0 to 50) deg (0 to 203) Nm (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart E SAE EA-25, H3-5 th %

Parameter/Equipment	Range	Comments
Knee Impact Test – Velocity Force Temperature Humidity	(2.0 to 3.0) m/s (2.0 to 6.0) kN (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart E, N, O SAE EA-26, 34: H3-95 th %
Knee Slider Test – Velocity Force Displacement Temperature Humidity	(2.0 to 3.0) m/s (1.26 to 3.1) kN (10 to 18.3) mm (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart E, O SAE EA-26, H3-95 th %
Neck Pendulum – Velocity Acceleration Rotation Moment Force Temperature Humidity	(1.2 to 7.13) m/s (0 to 37.0) g (27 to 114) deg (0 to 120) Nm (4.7 to 5.2) kN (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart E, N, O, P, R, U, V, M SAE EA-26, 34: H3-95 th %, BioSID ECE Regulation 95 ECE Directive 96/27/EC
Torso Impact – Velocity Displacement Acceleration Force Temperature Humidity	(1.0 to 10) m/s (10 to 76) mm (5.0 to 212) g (1.0 to 11.1) kN (18 to 26) °C (10 to 70) % RH	ECE Regulation 95 CFR 49, Part 572: E, F, M, N O, P, R, U, V SAE EA-26, 34: BioSID, H3-95 th % ECE Directive 96/27/EC
Torso Flexion – Velocity Force Angle Temperature Humidity	(0.5 to 1.5) deg/s (130 to 550) N (0 to 45.5) deg (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart N, O, P SAE EA-26, 34: H3-95 th %

Parameter/Equipment	Range	Comments
Rib Module – Velocity Displacement Temperature Humidity	(1.0 to 10) m/s (10 to 51) mm (18 to 26) °C (10 to 70) % RH	CFR 49, Part 572: Subpart U ECE Directive 96/27/EC