



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HUMANETICS INNOVATIVE SOLUTIONS, INC.

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MECHANICAL

Valid To: September 30, 2022

Certificate Number: 2421.02

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:

Test Type	Parameter(s)	Range	Test Method(s)
Head Drop	Resultant Acceleration Lateral Acceleration Unimodal Oscillation Temperature Humidity	300 g ± 15 g (0 to 17) % (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• E (H3-50)</li> <li>• N (H3-6YO)</li> <li>• O (H3-5)</li> <li>• P (H3-3)</li> <li>• R (Crabi-12)</li> <li>• T (H3-10)</li> <li>• U (ESID2-RE)</li> <li>• V (SID2s)</li> </ul> ECE 94: Regulation 95 (ESID2) SAE J2860 (H3-95) ISO 15830-2 (WorldSID 50 <sup>th</sup> )
Neck Pendulum	Velocity Acceleration Rotation Moment Displacement Temperature Humidity	(2.40 to 7.77) m/s (0 to 30) g (45 to 114) deg (12.0 to 130) Nm (-20 to 168) mm (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• E (H3-50)</li> <li>• M (SID H3)</li> <li>• N (H3-6YO)</li> <li>• O (H3-5)</li> <li>• P (H3-3)</li> <li>• R (Crabi-12)</li> <li>• T (H3-10)</li> <li>• U (ESID2-RE)</li> <li>• V (SID2s)</li> </ul> ECE 94: Regulation 95 (ESID2) SAE J2860 (H3-95) ISO 15830-2 (WorldSID 50 <sup>th</sup> )

Test Type	Parameter(s)	Range	Test Method(s)
Thorax Impact	Velocity Displacement Hysteresis Acceleration Force Temperature Humidity	(2.94 to 6.83) m/s (0 to 76.0) mm (50 to 85) % (14 to 70) g (1 to 11.1) kN (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• E (H3-50)</li> <li>• M (SID H3)</li> <li>• N (H3-6YO)</li> <li>• O (H3-5)</li> <li>• P (H3-3)</li> <li>• R (Crabi-12)</li> <li>• T (H3-10)</li> <li>• U (ESID2-RE)</li> <li>• V (SID2s)</li> </ul> SAE J2779 (H3-50 L\S) SAE J2860 (H3-95) SAE J2878 (H3-5 L\S) ISO 15830-2 (WorldSID 50 <sup>th</sup> ) ECE 94: Regulation 95 (ESID2)
Torso Flexion	Velocity Force Angle Temperature Humidity	(0.5 to 1.5) °/s (130 to 550) N (0 to 50) ° (18.9 to 25.6) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• N (H3-6YO)</li> <li>• O (H3-5)</li> <li>• P (H3-3)</li> <li>• T (H3-10)</li> </ul> SAE J2860 (H3-95)
Hip Flexion	Velocity Angle Torque Temperature Humidity	(5 to 10) °/s (0 to 50) ° (0 to 203) Nm (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• E (H3-50)</li> </ul> SAE J2862 (H3-5)

Test Type	Parameter(s)	Range	Test Method(s)
Rib Module	Velocity Displacement Temperature Humidity	(1 to 10) m/s (10 to 51.0) mm (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• U (ESID2-RE)</li> </ul> ECE 94: Regulation 95 (ESID2)
Knee Impact	Velocity Force Temperature Humidity	(2 to 3) m/s (2.0 to 7.3) kN (18 to 26) °C (10 to 70) % RH	49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> <li>• E (H3-50)</li> <li>• N (H3-6YO)</li> <li>• O (H3-5)</li> <li>• T (H3-10)</li> </ul> SAE J2862 (H3-5) SAE J2860 (H3-95)
Knee Slider Impact	Velocity Displacement Force Temperature Humidity	(1.5 to 3) m/s (9.3 to 18.3) mm (1.26 to 3.10) kN (18 to 26) °C (10 to 70) % RH	SAE J2856 (H3-50) SAE J2860 (H3-95) SAE J2862 (H3-5) SAE J2876 (H3-50 Low Speed)
Foot Impact	Velocity Force Moment Acceleration Temperature Humidity	(4.3 to 6.8) m/s (2.8 to 3.8) kN (95 to 145) Nm (245 to 345) g (19 to 25) °C (10 to 70) % RH	ECE Regulation 94: Addendum 93: Annex 10 (ESID2)



## Accredited Laboratory

A2LA has accredited

# HUMANETICS INNOVATIVE SOLUTIONS, INC.

*Farmington Hills, 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 1<sup>st</sup> day of February 2021.

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

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2421.02  
Valid to September 30, 2022

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