



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

HUMANETICS INNOVATIVE SOLUTIONS, INC.
23300 Haggerty Road
Farmington Hills, Michigan 48335
Joshua Yingling Phone: 248 778 3153

MECHANICAL

Valid To: September 30, 2020

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:

<u>Test Type</u>	<u>Parameter</u>	<u>Range</u>	<u>Test Method</u>
Head Drop	Resultant Acceleration	(0 to 300) g	CFR 49, Part 572: Subpart C, E, I, N, O, P, R, U, V
	Lateral Acceleration	± 15 g	SAE User's Manual(s): H3-95 th %, CRABI-18MO
	Unimodal Oscillation	(0 to 17) %	ISO 15830-2, WorldSID
	Temperature	(18 to 26) °C	ECE Regulation 95
	Humidity	(10 to 70) %RH	ECE Directive 96/27/EC
Neck Pendulum	Velocity	(1.20 to 7.13) m/s	CFR 49, Part 572: Subpart C, E, I, N, O, P, R, U, V, T
	Acceleration	(0.0 to 29.0) g	SAE EA 26, 34: H3- 95 th %
	Moment	(0 to 130) Nm	ISO 15830-2, WorldSID
	Force	(4.70 to 5.20) kN	ECE Regulation 95
	Displacement	(0.0 to 168.0) mm	ECE Directive 96/27/EC
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	

<u>Test Type</u>	<u>Parameter</u>	<u>Range</u>	<u>Test Method</u>
Torso Impact	Velocity	(1.0 to 10.0) m/s	ECE Regulation 95
	Displacement	(10.0 to 76.0) mm	CFR 49, Part 572: C, E, F, I, M, N, O, P, R, U, V, T
	Acceleration	(5.0 to 212.0) g	SAE EA, 26, 34: BioSID, H3-95 th %
	Force	(1.0 to 11.1) kN	ISO 15830-2 WorldSID
	Temperature	(18 to 26) °C	ECE Directive 96/27/EC, ARA-9901 BIORID User Manual (Humanetics)
	Humidity	(10 to 70) %RH	
Torso Flexion	Velocity	(0.5 to 1.5) deg/s	CFR 49, Part 572: Subpart C, E, I, N, O, P, T
	Force	(130 to 550) N	SAE EA-26, 34: H3-95 th %
	Angle	(0.0 to 45.5) deg	
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	
Hip Flexion	Velocity	(5 to 10) deg/s	CFR 49, Part 572: Subpart E
	Angle	(0 to 50) deg	SAE EA-25, H3-95 th %
	Torque	(0 to 203) Nm	
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	
Rib Module	Velocity	(1.0 to 10.0) m/s	CFR 49, Part 572: Subpart U
	Displacement	(10 to 51) mm	ECE Directive 96/27/EC
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	

<u>Test Type</u>	<u>Parameter</u>	<u>Range</u>	<u>Test Method</u>
Knee Impact	Velocity	(2.0 to 3.0) m/s	CFR 49, Part 572: Subpart E, N, O, T
	Force	(2 to 6) kN	SAE EA-26, 34: H3-95 th %,
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	
Knee Slider Impact	Velocity	(2.0 to 3.0) m/s	CFR 49, Part 572: Subpart E, O
	Displacement	(10 to 18.3) mm	SAE EA-26, H3-95 th %
	Temperature	(18 to 26) °C	
	Humidity	(10 to 70) %RH	
Foot Impact	Velocity	(4.3 to 7.0) m/s	ECE Addendum 93; Regulation 94
	Force	(2800 to 3800) N	
	Moment	(95 to 145) Nm	
	Acceleration	(245 to 345) g	
	Temperature	(19 to 25) °C	
	Humidity	(10 to 70) %RH	





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 17025:2005 *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 April 2017).



Presented this 24th day of December 2018.

A blue ink signature of the Senior Director of Accreditation Services.

Senior Director, Accreditation Services
For the Accreditation Council
Certificate Number 2421.02
Valid to September 30, 2020

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