



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HUMANETICS
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MECHANICAL

Valid To: September 30, 2024

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"> • E (H3-50) • N (H3-6YO) • O (H3-5) • P (H3-3) • R (Crabi-12) • T (H3-10) • U (ESID2-RE) • V (SID2s) ECE 94: Regulation 95 (ESID2) SAE J2860 (H3-95) ISO 15830-2 (WorldSID 50 th) |
| 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"> • E (H3-50) • M (SID H3) • N (H3-6YO) • O (H3-5) • P (H3-3) • R (Crabi-12) • T (H3-10) • U (ESID2-RE) • V (SID2s) ECE 94: Regulation 95 (ESID2) SAE J2860 (H3-95) ISO 15830-2 (WorldSID 50 th) |

| Test Type | Parameter(s) | Range | Test Method(s) |
|---------------|--|--|---|
| Thorax Impact | Velocity Displacement Hysteresis Acceleration Force Rotation Moment 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 (-21 to 29) deg (-23.5 to 17.8) Nm; (20 to 83) m/s (18 to 26) °C (10 to 70) % RH | 49 CFR, Part 572 Subpart: <ul style="list-style-type: none"> • E (H3-50) • M (SID H3) • N (H3-6YO) • O (H3-5) • P (H3-3) • R (Crabi-12) • T (H3-10) • U (ESID2-RE) • V (SID2s) SAE J2779 (H3-50 L\S) SAE J2860 (H3-95) SAE J2878 (H3-5 L\S) ISO 15830-2 (WorldSID 50 th) ECE 94: Regulation 95 (ESID2) BIORID: ECE/TRANS/WP.29/1101/Amend.3/Addendum 1 |
| 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"> • N (H3-6YO) • O (H3-5) • P (H3-3) • T (H3-10) 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"> • E (H3-50) 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"> • U (ESID2-RE) 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"> • E (H3-50) • N (H3-6YO) • O (H3-5) • T (H3-10) 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 (H3-50) |



Accredited Laboratory

A2LA has accredited

HUMANETICS

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 16th day of September 2022.

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, 2024

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