

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-22496-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 09.01.2024

Date of issue: 09.01.2024

Holder of accreditation certificate:

ATD-LabTech GmbH
Dieselstraße 1, 63843 Nierdernberg

with the location

ATD-LabTech GmbH
Dieselstraße 1, 63843 Niedernberg

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and they conform to the general with the principles of DIN EN ISO 9001.

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.

Abbreviations used: see last page

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Tests in the field

Testing of Crash Test Dummies (ATD), used for passive vehicle safety dynamic testing

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods listed here with different issue dates.

The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

Frontal Impact Dummies

Hybrid III 5th Percentile Female

49 CFR Part 572 Subpart O 2002-09	Hybrid III 5 th Percentile Female Test Dummy, Alpha Version 572.132 - Head drop 572.133 - Neck pendulum flexion and extension 572.134 - Thorax impact 572.135 - Torso flexion 572.136 - Knee impact left and right
SAE Engineering AID 25 1999-07	User's Manual for the Small Adult Female Hybrid III Test Dummy - Knee Slider Test (left and right) - Hip range of motion (left and right)
SAE J2878 2016-06	Low Speed Thorax Impact Test Procedure for the HIII 5F Dummy - 3 m/s Thorax impact

Hybrid II 50th Percentile Male

49 CFR Part 572 Subpart B 1985-06	50 th Percentile Male 572.6 - Head drop 572.7 - Neck pendulum 572.8 - Thorax impact 572.8 - Thorax impact (slow) 572.9 - Torso flexion test 572.9 - Abdomen compression 572.10 - Knee impact (left and right)
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Hybrid III 50th Percentile Male

49 CFR Part 572 Subpart E 2011-11	HIII 50 th Male Dummy 572.32 - Head drop 572.33 - Neck pendulum flexion and extension 572.34 - Thorax impact 572.35 - Knee impact (left and right) 572.35 - Hip range of motion (left and right)
78051-9904 User Manual HIII- 50 th FAA Male Rev. B 2011-06	Hybrid III 50 th Male FAA Dummy 78051-218X-FAA User Manual 3.3 - Head drop 3.4 - Neck pendulum (flexion and extension) 3.5 - Thorax impact 3.6 - Knee impact (left and right) 3.7 - Sliding-Knee Test (left and right) 3.8 - Hip range of motion (left and right) 3.9 - Torso flexion test 3.9 - Abdomen compression
UN-R 94, Annex 10 SA 02 2013-07	UN Regulation No 94 - Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a frontal collision Annex 10 Certification procedure for the dummy lower leg and foot - Foot impact (left and right)
SAE Engineering AID 23 2000-01	User's Manual for the 50 th percentile Male Hybrid III Dummy - Sliding-Knee Test (left and right)
SAE J2856 2009-09	Low Speed Knee Slider Test Procedure for the Hybrid III 50 th Male Dummy - Sliding-Knee Test (left and right)
SAE J2779 2015-07	Low Speed Thorax Impact Test Procedure for the HIII 50 th Male Dummy - 3 m/s Thorax impact
SAE J2876 2015-05	Low Speed Knee Slider Test Procedure for the Hybrid III 50 th Male Dummy - Sliding-Knee Test low speed (left and right)
SAE J3074 2017-02	Lumbar Flexion Test Procedure for the Hybrid III 50 th Male Dummy - Lumbar flexion test

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Hybrid III 95th Percentile Male

SAE J2860 2012-09	User's Manual for the Hybrid III Large Male Test Dummy 4.1 - Head drop 4.2 - Neck pendulum (flexion and extension) 4.3 - Thorax impact 4.4 - Knee impact (left and right) 4.5 - Sliding-Knee Test (left and right) 5.5 - Torso flexion test
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THOR 50th Percentile Male

THOR Qualification Procedures Manual (NHTSA) 2018-09	THOR 50 th Percentile Male Qualification Procedures Manual in conjunction with ISO/TS 21002:2021 4 - Head impact 5 - Face impact 6.7 - Neck torsion 6.8 - Neck pendulum flexion 6.9 - Neck pendulum extension 6.10 - Neck pendulum lateral (left and right) 7 - Upper thorax impact 8 - Lower thorax impact (left and right) 9 - Abdomen impact 10 - Knee impact (left and right) 11 - Knee slider impact (left and right) 12 - Ankle eversion and inversion (left and right) 13 - Ball of foot impact (left and right) 14 - Heel impact (left and right)
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THOR-50M EuroNCAP SBL-A Update 2017-01	THOR-50M EuroNCAP SBL-A Update in conjunction with ISO/TS 21002:2021 - Head impact - Face impact - Neck torsion - Neck pendulum flexion - Neck pendulum extension - Neck pendulum lateral (left and right) - Upper thorax impact - Lower thorax impact (left and right) - Abdomen impact - Knee impact (left and right) - Knee slider impact (left and right) - Ankle eversion and inversion (left and right) - Ball of foot impact (left and right) - Heel impact (left and right)
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THOR-50M Standard SBL-B
Update (Humanetics)
2018-01

THOR-50M EuroNCAP SBL-A Update
in conjunction with ISO/TS 21002:2021

- Head impact
- Face impact
- Neck torsion
- Neck pendulum flexion
- Neck pendulum extension
- Neck pendulum lateral (left and right)
- Upper thorax impact
- Lower thorax impact (left and right)
- Abdomen impact
- Knee impact (left and right)
- Knee slider impact (left and right)
- Ankle eversion and inversion (left and right)
- Ball of foot impact (left and right)
- Heel impact (left and right)

THOR-50M EuroNCAP
Specification and Certification
Technical Bulletin 026
Version 1.1
2020-08

THOR-50M EuroNCAP Specification and Certification Version 1.1
TB026
in conjunction with ISO/TS 21002:2021

2. THOR Certification

- Head impact
- Neck torsion (left and right)
- Neck pendulum flexion
- Neck pendulum extension
- Neck pendulum lateral (left and right)
- Upper thorax impact (4,3 m/s)
- Upper thorax impact (2,5 m/s)
- Lower thorax impact (left and right)
- Abdomen impact
- Knee impact (left and right)

Side Impact Dummies

SID-IIs

49 CFR Part 572 Subpart V
2009-08

SID-IIsD Side Impact Crash Test Dummy, Small Adult Female

- 572.192 - Head drop
- 572.193 - Neck pendulum
- 572.194 - Shoulder impact (on certification bench)
- 572.195 - Thorax impact with arm (on certification bench)
- 572.196 - Thorax impact without arm (on certification bench)
- 572.197 - Abdomen impact (on certification bench)
- 572.198 - Pelvis impact (on certification bench)
- 572.199 - Iliac impact (on certification bench)

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EuroSID-2

49 CFR Part 572 Subpart U 2011-11	ES-2re Side Impact Crash Test Dummy, 50 th Percentile Adult Male 572.182 - Head drop test 572.183 - Neck pendulum test 572.184 - Shoulder impact test 572.185 - Rib drop test (2 tests) 572.185 - Thorax without arm impact test 572.186 - Abdomen impact test 572.187 - Lumbar flexion test 572.188 - Pelvis impact test
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UN-R 95, Annex 6 SA 03 2014-02	UN Regulation No 95 - Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a lateral collision Annex 6, Section 5 Certification of the dummy 5.5 - Head drop test 5.6 - Neck pendulum test 5.7 - Shoulder impact test 5.9 - Rip drop test (3 tests) 5.10 - Lumbar flexion test 5.11 - Abdomen impact test 5.12 - Pelvis impact test
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WorldSID 5th Percentile Female

W5-9900 User Manual Rev E 2015-08	User's Manual for the WorldSID 5 th Small Adult Female Side Impact Dummy in conjunction with ISO/TS 21002:2021 9.1 - Head drop test (front and lateral) 9.2 - Neck pendulum test 9.3 - Shoulder impact test 9.4 - Thorax with arm 9.5 - Thorax without arm 9.6 - Abdomen impact test 9.7 - Pelvis impact test
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WorldSID 50th Percentile Male

<p>W50-9900 User Manual Rev. H 2016-01</p>	<p>User's Manual for the WorldSID 50th percentile Male Side Impact Dummy in conjunction with ISO/TS 21002:2021 8.4 - Head drop test (front and lateral) 8.5 - Neck pendulum test 8.7 - Shoulder impact test 8.8 - Thorax without arm 8.9 - Abdomen impact test 8.10 - Pelvis impact test</p>
<p>ISO/WD 15830-2 2013-05</p>	<p>Design and performance specifications for the WorldSID 50th Percentile Male Side Impact Dummy Section 5 in conjunction with ISO/TS 21002:2021 5.1 - Head drop test (front and lateral) 5.2 - Neck pendulum test 5.3.2 - Shoulder impact test 5.3.3 - Thorax with arm 5.3.4 - Thorax without arm 5.3.5 - Abdomen impact test 5.3.6 - Pelvis impact test</p>
<p>WorldSID-50M Qualification Procedure (NHTSA) 2019-10</p>	<p>WorldSID-50M Qualification Procedures (NHTSA) - Neck torsion (left and right)</p>

Rear Impact Dummy

BioRID II

<p>ARA-9901 BioRID II Dummy Certification Manual Rev. E 2019-12</p>	<p>BioRID II Dummy Certification Manual - BioRID sled - Jacket - Pelvis - Dummy</p>
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Child Dummies

Hybrid III Children

<p>49 CFR Part 572 Subpart R 2001-10</p>	<p>CRABI 12-Month-Old Infant, Alpha Version 572.152 - Head drop front 572.152 - Head drop rear 572.153 - Neck pendulum (flexion and extension) 572.154 - Thorax impact</p>
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49 CFR Part 572 Subpart P
2002-01

3-Year-old Child Crash Test Dummy, Alpha Version
572.142 - Head test
572.143 - Neck pendulum (flexion and extension)
572.144 - Thorax impact
572.145 - Torso flexion

49 CFR Part 572 Subpart N
2011-06

Six-Year-old Child Test Dummy, Beta Version
572.122 - Head drop
572.123 - Neck pendulum (flexion and extension)
572.124 - Thorax impact
572.125 - Torso flexion
572.126 - Knee impact (left and right)

49 CFR Part 572 Subpart S
2010-12

Six-Year-old Weighted Child Test Dummy
572.162 - Head drop
572.163 - Neck pendulum (flexion and extension)
572.164 - Thorax impact
572.165 - Torso flexion
572.166 - Knee impact (left and right)

49 CFR Part 572 Subpart T
2012-02

10-Year-old Weighted Child Test Dummy, HIII-10C
572.172 - Head drop
572.173 - Neck pendulum (flexion and extension)
572.174 - Thorax impact
572.175 - Torso flexion
572.176 - Knee impact (left and right)

P-Dummies

UN-R 44 Annex 8
2010-11

UN Regulation No 44 – Uniform provisions concerning the approval of restraining devices for child occupants of power-driven vehicles ('Child Restraint Systems')
Annex 8 Description of manikins
Appendix 1 Description of the 9 months and 3, 6 and 10-year manikins

Q-Dummies

047-9900 User Manual Q0
Rev. F
2017-07

6week old, Newborn User Manual
5.3 - Head drop (front and lateral)
5.4 - Neck pendulum (flexion, extension, lateral)
5.5 - Lumbar test (flexion, extension, lateral)

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<p>036-9900 User Manual Q1 Rev. H 2016-08</p>	<p>Advanced 1 year old child User Manual 8.1 - Head drop (front and lateral) 8.2 - Neck pendulum (flexion and lateral) 8.3 - Lumbar test (flexion and lateral) 8.4 - Abdomen test 8.5 - Thorax impact (front and lateral)</p>
<p>048-9900 User Manual Q1.5 Rev. G 2015-07</p>	<p>Advanced 1.5 year old child User Manual 8.1 - Head drop (front and lateral) 8.2 - Neck flexion (front and lateral) 8.3 - Lumbar test (front and lateral) 8.4 - Abdomen test 8.5 - Thorax impact (front and lateral)</p>
<p>020-9905 User Manual Q3 Rev. G 2016-10</p>	<p>Advanced 3 year old child User Manual 8.1 - Head drop (front and lateral) 8.2 - Neck flexion (front and lateral) 8.3 - Lumbar test (front and lateral) 8.4 - Abdomen test 8.5 - Thorax impact (front and lateral)</p>
<p>020-9900 User Manual Q3s Rev. J 2018-02</p>	<p>Q3s User Manual 7.1 - Head drop (front and lateral) 7.2 - Neck flexion (front, lateral and torsion) 7.3 - Lumbar test (front and lateral) 7.4 - Shoulder test 7.5 - Thorax impact (with/without arm) 7.6 - Abdomen test 7.7 - Pelvis impact</p>
<p>033-9900 User Manual Q6 Rev. M 2016-11</p>	<p>Advanced 6 year old child User Manual 8.1 - Head drop (front and lateral) 8.2 - Neck flexion (front and lateral) 8.3 - Lumbar flexion (front and lateral) 8.4 - Abdomen test 8.5 - Thorax impact (front and lateral)</p>
<p>010-9900 User Manual Q 10 Rev. G 2016-02</p>	<p>10.5 year old child User Manual in conjunction with ISO/TS 21002:2021 14.1 - 14.3 - Head drop (front and lateral) 14.4 - 14.7 - Neck flexion (flexion, extension and lateral) 14.8 - 14.10 - Lumbar flexion (front and lateral) 14.11 - 14.13 - Thorax impact (front and lateral) 14.14 - Shoulder impact (full arms for frontal dummy) 14.15 - Pelvis impact 14.16 - Abdomen impact 14.17 - Shoulder impact (half arms for lateral dummy)</p>

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Impactors

Headform

49 CFR Part 572 Subpart L 1995-08	FMH (Free Motion Headform) 572.102 - Drop test
631/2009/EC Appendix I 2011-09	Commission Regulation (EC) No 631/2009 of 22 July 2009 laying down detailed rules for the implementation of Annex I to Regulation (EC) No 78/2009 of the European Parliament and of the Council on the type-approval of motor vehicles with regard to the protection of pedestrians and other vulnerable road users, amending Directive 2007/46/EC and repealing Directives 2003/102/EC and 2005/66/EC PART V: TEST IMPACTORS, Appendix I: Certification of impactors, Section 4: Headform impactors
GTR9 2011-02	Global Technical Regulation No. 9 "PEDESTRIAN SAFETY" 8.3. - Child and adult headform impactors certification
UN-R 127, Annex 6 SA 01 2015-02	Uniform provisions concerning the approval of motor vehicles with regard to their pedestrian safety performance - Head drop test

Leg Impactors

133-9900 User Manual FLEX PLI GTR Rev. K 2018-07	Flex PLI GTR User Manual 7.2 - Femur and Tibia Bone Assembly Certification 7.3 - Knee Certification 8. - Pendulum Dynamic Certification 9. - Dynamic Inverse Certification Test
ISO/NP TS 20458 2019-11	Road vehicles Design and performance specifications for advanced Pedestrian Legform Impactor (aPLI)

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Abbreviations used:

ATD	Anthropomorphic Test Devices
BioRID	Biofidelic Rear Impact Dummy
CFR	Code of Federal Regulations (Office of the Federal Register, U.S. Government)
EC	European Parliament and of the Council
EuroNCAP	European New Car Assessment Programme
GTR	Global Technical Regulation (Arbeitsgruppe, die ISO zuarbeitet)
ISO	International Organization for Standardisation
NHTSA	National Highway Traffic Safety Administration
SAE	Society of Automotive Engineers
SID	Side Impact Dummy
UN-R	Regulation of the Economic Commission for Europe (ECE)
User Manual	Product documentation from ATD manufacturers (manufacturer specifications)

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