

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-20848-01-00 according to DIN EN ISO/IEC 17025:2005

Period of validity: 19.01.2018 to 18.01.2023

Date of issue: 06.02.2018

Holder of certificate:

**ATD-Service Gerhard Pfeifer
Dieselstraße 1, 63843 Niedernberg**

Tests in the fields:

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

Abbreviations used: see last page

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.

49 CFR Part 572 Subpart R 2001-10	CRABI 12 Month (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
49 CFR Part 572 Subpart P 2002-01	HIII 3 Year Dummy (3-Year-old Child Crash Test Dummy, Alpha Version) 572.142 - Head drop 572.143 - Neck pendulum flexion and extension 572.144 - Thorax impact 572.145 - Torso flexion

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49 CFR Part 572 Subpart N 2011-06	<p>HIII 6 Year Dummy (Six-Year-old Child Test Dummy, Beta Version)</p> <p>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</p>
49 CFR Part 572 Subpart O 2002-09	<p>HIII 5th (Hybrid III 5th Percentile Female Test Dummy, Alpha Version)</p> <p>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</p>
SAE Engineering AID 25 1999-07	<p>User's Manual for the Small Adult Female Hybrid III Test Dummy (Knee Slider Test)</p>
SAE J 2856 2009-09	<p>Low Speed Knee Slider Test Procedure for the Hybrid III 50th Male Dummy (Sliding-Knee Test, left and right)</p>
SAE J2878 2010-01	<p>Low Speed Thorax Impact Test Procedure for the HIII 5F Dummy (3 m/s Thorax impact)</p>
49 CFR Part 572 Subpart E 2011-11	<p>HIII 50th Male Dummy</p> <p>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</p>
ECE-R 94 Anhang 10 ÄS 02 2013-07	<p>Certification procedure for the dummy lower leg and foot (Foot impact)</p>
SAE J2779 2015-07	<p>Low Speed Thorax Impact Test Procedure for the HIII 50th Male Dummy (3 m/s Thorax impact)</p>

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SAE Engineering AID 23 1998-06	User's Manual for the 50th percentile male hybrid III test dummy Section II – Knee Slider Test
SAE J2860 2012-09	User's Manual for the Hybrid III Large Male Test Dummy” Section 4.5 - Knee Slider Test
SAE Engineering AID 26 2012-09	HIII 95th 4.1 - Head drop 4.2 - Neck pendulum flexion and extension 4.3 - Thorax impact 4.4 - Knee impact left and right 4.5 - Knee impact left and right
THOR Qualification Procedures 2016-08	THOR-M-50th (THOR 50th Percentile Male Qualification Procedures Manual) 4 - Head impact 5 - Face impact 6.6 - Neck pendulum (torsion) 6.7 - Neck pendulum flexion 6.8 - Neck pendulum extension 6.9 - Neck pendulum (torsion left + right) 7 - Upper thorax impact 8 - Lower thorax impact 9 - Abdomen impact 10 - Knee impact (left + right) 11 - Knee slider impact (left+ right) 12 - Ankle eversion 13 - Ball of foot impact 14 - Heel impact
ECE-R 95 Anhang 6 ÄS 03 2014-02	ES-2 50th Male Side Impact 5.5 - Face impact 5.6 - Neck pendulum 5.7 - Shoulder impact 5.9 - Rip drop (3tests) 5.10 - Lumbar flexion 5.11 - Abdomen impact 5.12 - Pelvis impact

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49 CFR Part 572 Subpart U 2011-11	ES-2re Side Impact Crash Test Dummy, 50th Percentile Adult Male 572.182 - Head drop 572.183 - Neck pendulum 572.184 - Shoulder impact 572.185 - Rib drop (3 tests) 572.185 - Thorax without arm impact 572.186 - Abdomen impact 572.187 - Lumbar flexion 572.188 - Pelvis impact
W50-9900 User Manual Rev. H 2016	WorldSID 50th (User's Manual for the WorldSID 50th percentile Male Side Impact Dummy) 8.4 - Head drop 8.5 - Neck pendulum 8.7 - Shoulder impact 8.8 - Thorax without arm impact 8.9 - Abdomen impact 8.10 - Pelvis impact
49 CFR Part 572 Subpart V 2009-08	SID IIs (SID-IIs Side Impact Crash Test Dummy, Small Adult Female) 572.192 - Head drop 572.193 - Neck pendulum flexion and extension 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)
048-9900 User Manual Q1.5 Rev. G 2015	Q 1.5 Years (Advanced 1.5 year old child User Manual) 8.1 - Head drop 8.2 - Neck flexion 8.3 - Lumbar flexion 8.4 - Abdomen impact 8.5 - Thorax impact frontal and lateral
020-9905 User Manual Q3 Rev. G 2016	Q 3 Years (Advanced 3 year old child User Manual) 8.1 - Head drop 8.2 - Neck flexion 8.3 - Lumbar flexion 8.4 - Abdomen impact 8.5 - Thorax impact

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033-9900 User Manual Q6 Rev. M 2016	Q 6 Years (Advanced 6 year old child User Manual) 8.1 - Head drop 8.2 - Neck flexion 8.3 - Lumbar flexion 8.4 - Abdomen impact 8.5 - Thorax impact
010-9900 User Manual Q 10 Rev. G 2016	Q 10 Years (10.5 year old child User Manual) 14.1 - 14.3 - Head drop 14.4 - 14.7 - Neck flexion 14.8 - 14.10 - Lumbar flexion 14.11 - 14.13 - Thorax impact 14.14 - Shoulder impact frontal 14.15 - Pelvis impact 14.16 - Abdomen impact 14.17 - Shoulder impact lateral
49 CFR Part 572 Subpart L 1995-08	FMH (Free Motion Headform) 572.102 - Head drop
631/2009/EC Annex I 09- 2011	Type-approval of motor vehicles with regard to the protection of pedestrians and other unprotected road users PART V: TEST SPECIMENS, Annex I: Certification of test specimens, Chapter 4
GTR9 2011-02	Global Technical Regulation No. 9 "PEDESTRIAN SAFETY" 8.3. - Child and adult head form impactors certification

Abbreviations used:

ATD	Anthropomorphic Test Devices
CFR	Code of Federal Regulations (Office of the Federal Register, U.S. Government)
UN-R	Regulation of the Economic Commission for Europe
EG	European Community
GTR	Global Technical Regulation (Working group, works for the ISO)
User Manual	Product documentation of ATD manufacturers (manufacturer specifications)
SAE	Society of Automotive Engineers