

# Accreditation



The Deutsche Akkreditierungsstelle attests with this **Accreditation Certificate** that the testing laboratory

#### IFF Engineering & Consulting GmbH Anton-Zickmantel-Straße 50, 04249 Leipzig

meets the requirements according to DIN EN ISO/IEC 17025:2018 for the conformity assessment activities listed in the annex to this certificate. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided they are explicitly confirmed in the annex to this certificate.

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 principles of DIN EN ISO 9001.

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This accreditation certificate only applies in connection with the notices of 15.03.2024 with accreditation number D-PL-11332-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 4 pages.

Registration number of the accreditation certificate: D-PL-11332-01-00

Berlin, 15.03.2024

Dr.-Ing. Ernst Ulrich Head of Technical Unit

Translation issued: 11.04.2024

Dr.-Ing. Ernst Ulrich Head of Technical Unit

The certificate together with the annex 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 (www.dakks.de).

## Deutsche Akkreditierungsstelle GmbH

Office Berlin Spittelmarkt 10 10117 Berlin Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main Office Braunschweig Bundesallee 100 38116 Braunschweig

The Deutsche Akkreditierungsstelle GmbH (DAkkS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkkS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

DAkkS is a signatory to the multilateral agreements for mutual recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Co-operation (ILAC).

The up-to-date state of membership can be retrieved from the following websites:

EA: www.european-accreditation.org

ILAC: www.ilac.org IAF: www.iaf.nu

This accreditation certificate is the property of the German Accreditation Body.



### Deutsche Akkreditierungsstelle

# Annex to the Accreditation Certificate D-PL-11332-01-00 according to DIN EN ISO/IEC 17025:2018

 Valid from:
 15.03.2024

 Date of issue:
 15.03.2024

Holder of accreditation certificate:

IFF Engineering & Consulting GmbH Anton-Zickmantel-Straße 50, 04249 Leipzig

with the location

#### IFF Engineering & Consulting GmbH Anton-Zickmantel-Straße 50, 04249 Leipzig

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 principles of DIN EN ISO 9001.

Static and dynamic strength tests on railway-specific components; impact tests on passenger and freight wagons; bogie frame tests; testing of buffers and draw gear and their components; analyis of the running behaviour of railway vehicles; acoustic measurements on and in railbound vehicles.

Within the given test fields the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following: usage of different versions of standard test methods granted here.

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

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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This document is a translation. The definitive version is the original German annex to the accreditation certificate.



Annex to the Accreditation Certificate D-PL-11332-01-00

#### **1** Structural strength tests on rail vehicles

DIN EN 12663-1 2015-03	Structural requirements for railway vehicle bodies - Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons) (Chapter 8)
DIN EN 12663-2 2010-07	Structural requirements for railway vehicle bodies - Part 2: Freight wagons <i>(Chapters 5 to 9)</i>
UIC-Kodex 566 1990-01	Loadings of passenger coach bodies and their components
UIC-Kodex 577 2012-01	Freight wagons - stresses
2 Bogie frame tests	
2 Bogie frame tests DIN EN 13749 2021-05	Railway applications - Wheelsets and bogies – Method of specifying the structural requirements of bogie frames (Sections 6.2.3 and 6.2.4 and Annexes C, F, G)
DIN EN 13749	the structural requirements of bogie frames
DIN EN 13749 2021-05 UIC-Kodex 510-3	the structural requirements of bogie frames (Sections 6.2.3 and 6.2.4 and Annexes C, F, G)



#### Annex to the Accreditation Certificate D-PL-11332-01-00

#### 3 Testing of buffers and draw gear and their components

DIN EN 15551 2022-01	Railway applications - Rail rolling stock - Buffers (Appendix B, C, D, E, F, G, I)
DIN EN 15566 2022-01	Railway applications - Railway rolling stock - Draw gear and screw coupling (Annex A1, A2.1-A2.4, E 3.4, E 6.2, E 6.3, F 4.4, F 8.5, G 1.4, G 1.5, G 2.2, G 2.3 (only static and dynamic tensile and compression tests))
DIN EN 16019 2014-06	Railway applications - Automatic coupler - Performance requirements, specific interface geometry and test method (Section 5.1.2)
ERRI B 51/RP 27 1995-07	Buffers and draw gear - Design and testing of new draw gear for freight wagons
ERRI B 51/RP 28 1995-09	Buffers and draw gear - Passenger coaches - Service life testing of hydrodynamic and hydrostatic coach buffers
UIC-Kodex 526-1 2008-07	Freight wagons - Buffer with a stroke of 105 mm
4 Analyis of the running b	pehaviour of railway vehicles

DIN EN 14363Railway applications - Testing and Simulation for the acceptance of<br/>running characteristics of railway vehicles - Running Behaviour and<br/>stationary tests<br/>(Section 6.3 Determining the torsion coefficient of a vehicle body)



Annex to the Accreditation Certificate D-PL-11332-01-00

#### 5 Acoustic measurements on and in railbound vehicles

DIN EN ISO 3095 2014-07	Acoustics - Railway applications - Measurement of noise emitted by railbound vehicles
DIN EN ISO 3381 2022-09	Railway applications - Acoustics - Noise measurement inside railbound vehicles

#### Abbreviations used:

DIN Deutsches Institut für Normung e.V. – German institute for standardization

- EN European Standard
- ERRI European Railway Research Institute
- ISO International Organization for Standardisation
- UIC International Union of Railways



#### 1. Structural strength tests on rail vehicles

DIN EN 12663-1:2010-07	Railway applications - Structural requirements of railway vehicle bodies – Part 1: Locomotives and passenger rolling stock (und alternative method for freight wagons) (Section 8)
DIN EN 12663-1:2015-03	Railway applications - Structural requirements of railway vehicle bodies – Part 1: Locomotives and passenger rolling stock (und alternative method for freight wagons) (Section 8)
DIN EN 12663-1:2024-02	Railway applications - Structural requirements of railway vehicle bodies – Part 1: Locomotives and passenger rolling stock (und alternative method for freight wagons) (Section 8)
DIN EN 12663-2:2010-07	Railway applications – Structural requirements of railway vehicle bodies – Part 2: Freight wagons (section 5-9)
DIN EN 12663-2:2024-01	Railway applications – Structural requirements of railway vehicle bodies – Part 2: Freight wagons (section 5-9)
UIC 566 VE 1990-01	Loadings of coach bodies and their components
UIC 577 2004-05	Freight wagons - Stresses
UIC 577 2012-01	Freight wagons - Stresses

#### 2. Bogie frame tests

DIN EN 13749:2011-06	Railway applications – Wheelsets and bogies – Method of specifying the structural requirements of bogie frames (Section 6.2.3 and 6.2.4 and Annexes C, F, G)
DIN EN 13749:2021-05	Railway applications – Wheelsets and bogies – Method of specifying the structural requirements of bogie frames (Section 6.2.3 and 6.2.4 and Annexes C, F, G)
DIN EN 13749:2024-02	Railway applications – Wheelsets and bogies – Method of specifying the structural requirements of bogie frames (Section 6.2.3 and 6.2.4 and Annexes C, F, G)
UIC-Kodex 510-3:1994-07	Freight wagons – Strength testing of 2 and 3-axle bogies on test rig
UIC-Kodex 515-4:1993-01	Passenger rolling stock – Trailer Bogies – Running gear – Bogie frame structure strength tests
UIC-Kodex 615-4:2003-02	Motive power units – Bogies and running gear – Bogie frame structure strength tests

#### 3. Testing of buffers and draw gears and their components

DIN EN 15551:2011-01	Railway applications – Railway rolling stock - Buffers (section 5.4 and 5.5 as well as Annex B, C, D, E, F, L)
DIN EN 15551:2017-05	Railway applications - Railway rolling stock - Buffers (Section B, C, D, E, F, G, J)
DIN EN 15551:2022-10	Railway applications - Railway rolling stock - Buffers (Section B, C, D, E, F, G, J)
DIN EN 15566:2011-02	Railway applications - Railway rolling stock – Draw gear and screw coupling (Annex D.3.4, D.6.3.6.3, D6.4.4, E4.3, E4.5, E.8.7.2.8, E8.7.3, F.1.4, F.1.5, F.2.2 und F.2.3)
DIN EN 15566:2016-12	Railway applications - Railway rolling stock – Draw gear and screw coupling (Annex A1, A2.1-A2.4, E3.4, E6.2, E6.3, F4.5, F8.6, G1.4, G1.5, G2.2, G2.3 (only static and dynamic tensile and compression tests))
DIN EN 15566:2022-10	Railway applications - Railway rolling stock – Draw gear and screw coupling (Annex A1, A2.1-A2.4, E3.4, E6.2, E6.3, F4.4, F8.5, G1.4, G1.5, G2.2, G2.3 (only static and dynamic tensile and compression tests))

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#### 3. Testing of buffers and draw gears and their components

DIN EN 16019:2014-06	Railway applications – Automatic coupler – Performance requirements, specific interface geometry and test method (Section 5.1.2)
ERRI B51/RP27:1995-07	Buffers and draw gear – Design and testing of new draw gear for freight wagons
ERRI B51/RP28:1995-09	Buffers and draw gear – Passenger coaches – Service life testing of hydrodynamic and hydrostatic coach buffers
UIC 526-1:2008-07	Freight wagons – Buffers with a stroke of 105 mm

#### 4. Testing the running characteristics of railway vehicles

DIN EN 14363:2022-10	Railway applications – Testing and Simulation for acceptance of running
	characteristics of railway vehicles – Running Behavior and stationary tests
	(Section 6.3 Determining the torsion coefficient of a vehicle body)

#### 5. Acoustic measurement inside and outside of railbound vehicles

DIN EN ISO 3095:2014-07	Acoustics – Railway applications – Measurement of noise emitted by railbound vehihles
DIN EN ISO 3381:2022-09	Railway applications – Acoustics – Noise measurement inside railbound vehicles

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