

# Accreditation



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

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

meets the requirements of DIN EN ISO/IEC 17025:2018 for the conformity assessment activities specified in the following partial accreditation certificates. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided that these are explicitly confirmed in the annexes to the partial accreditation certificates listed below.

**D-PL-12001-04-01**

**D-PL-12001-04-02**

**D-PL-12001-04-03**

**D-PL-12001-04-04**

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with 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 consists of this cover sheet, the reverse side of the cover sheet and the following annex. It only applies in connection with the partial accreditation certificates listed above and the notices referred to there.

Registration number of the certificate: **D-PL-12001-04-00**

Berlin, 23.08.2023

Dipl.-Ing. Gabriel Zrenner  
Head of Department

Translation issued:  
09.11.2023

*by proxy Tim Hain*  
Dipl.-Ing. Gabriel Zrenner  
Head of Department

*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](http://www.dakks.de)).*

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

See notes overleaf

# 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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

## Deutsche Akkreditierungsstelle

### Annex to the Accreditation Certificate D-PL-12001-04-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 23.08.2023

**Date of issue:** 23.08.2023

Holder of accreditation certificate:

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

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 in the annexes to the partial accreditation certificates listed below.

**D-PL-12001-04-01**

**D-PL-12001-04-02**

**D-PL-12001-04-03**

**D-PL-12001-04-04**

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally 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>.*

# Accreditation



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

## **Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung Burghof 1, 33165 Lichtenau, Germany**

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 confirm generally with 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 partial accreditation certificate only applies in connection with the notice of 23.08.2023 with accreditation number D-PL-12001-04.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 2 pages.

Registration number of the partial accreditation certificate: **D-PL-12001-04-01**

It is a part of the accreditation certificate: D-PL-12001-04-00.

Berlin, 23.08.2023

Dipl.-Ing. Gabriel Zrenner  
Head of Department

Translation issued:  
09.11.2023

*by proxy Tim B...*  
Dipl.-Ing. Gabriel Zrenner  
Head of Department

*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](http://www.dakks.de)).*

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

See notes overleaf

# 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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

# Accreditation



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

## **Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung Burghof 1, 33165 Lichtenau, Germany**

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 confirm generally with 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 partial accreditation certificate only applies in connection with the notice of 23.08.2023 with accreditation number D-PL-12004-04.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the partial accreditation certificate: **D-PL-12001-04-02**

It is a part of the accreditation certificate: D-PL-12004-04-00.

Berlin, 23.08.2023

Dipl.-Ing. Gabriel Zrenner  
Head of Department

Translation issued:  
09.11.2023

*by proxy Tim ACS*

Dipl.-Ing. Gabriel Zrenner  
Head of Department

*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](http://www.dakks.de)).*

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

See notes overleaf

# 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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

# Accreditation



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

## **Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung Burghof 1, 33165 Lichtenau**

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 confirm generally with 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 partial accreditation certificate only applies in connection with the notice of 23.08.2023 with accreditation number D-PL-12001-04.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the partial accreditation certificate: **D-PL-12001-04-03**

It is a part of the accreditation certificate: D-PL-12001-04-00.

Berlin, 23.08.2023

Dipl.-Ing. Gabriel Zrenner  
Head of Department

Translation issued:  
09.11.2023

  
Dipl.-Ing. Gabriel Zrenner  
Head of Department

*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](http://www.dakks.de)).*

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

See notes overleaf



# 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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

# Accreditation



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

## **Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung Burghof 1, 33165 Lichtenau**

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 confirm generally with 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 partial accreditation certificate only applies in connection with the notice of 23.08.2023 with accreditation number D-PL-12001-04.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the partial accreditation certificate: **D-PL-12001-04-04**

It is a part of the accreditation certificate: D-PL-12001-04-00.

Berlin, 23.08.2023

Dipl.-Ing. Gabriel Zrenner  
Head of Department

Translation issued:  
09.11.2023

*by proxy*   
Dipl.-Ing. Gabriel Zrenner  
Head of Department

*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](http://www.dakks.de)).*

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

See notes overleaf

# 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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

# Deutsche Akkreditierungsstelle

## Annex to the Partial Accreditation Certificate D-PL-12001-04-01 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 23.08.2023

**Date of issue:** 23.08.2023

This annex is a part of the accreditation certificate D-PL-12001-04-00.

Holder of partial accreditation certificate:

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

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 confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

### **Gas cylinders**

**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.**

*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

**Page 1 of 2**

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

**Annex to the Partial Accreditation Certificate D-PL-12001-04-01**

Testing field	Standard / In-House Procedure / Version	Title of Standard or In-House Procedure	Test Range / Restrictions
Gas cylinders	DIN EN 12245: 2012-03	Transportable gas cylinders - Fully wrapped composite cylinders	Only: section 5.2.3, 5.2.4, 5.2.5 and 5.2.12
Gas cylinders	DIN EN 17339: 2020-09	Transportable gas cylinders - Fully wrapped carbon composite cylinders and tubes for hydrogen	Only: section 6.2.3, 6.2.4, 6.2.5 and 6.2.11

**Abbreviations used:**

DIN	Deutsches Institut für Normung e.V. – German institute for standardization
EN	Europäische Norm – European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation

Valid from: 23.08.2023

Date of issue: 23.08.2023

# Deutsche Akkreditierungsstelle

## Annex to the Partial Accreditation Certificate D-PL-12001-04-02 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 23.08.2023

**Date of issue:** 23.08.2023

This annex is a part of the accreditation certificate D-PL-12004-04-00.

Holder of partial accreditation certificate:

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

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 confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

**Electrical engineering – batteries**

**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.**

*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

**Page 1 of 3**

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

**Annex to the Partial Accreditation Certificate D-PL-12001-04-02**

Testing field	Standard / In-House Procedure / Version	Title of Standard or In-House Procedure	Test Range / Restrictions
Electrical engineering	DIN EN 62133-2; VDE 0510-82 2017-11	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems (IEC 62133-2:2017); German version EN 62133-2:2017	
	DIN EN IEC 62619; VDE 051 0-39 2020-05	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications (IEC 21A/687/CD:2018); Text in German and English	
	ECE-R 100 Rev. 2 1995-10	Un regulation No. 100, Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train	Only Annex 8D „Mechanical integrity” and Annex 8E “Fire resistance
	ECE-R 100 Rev. 2, Amendment 4 2019-05	Un regulation No. 100, Revision 2 - Amendment 4, Supplement 4 to the 02 series of amendments - Date of entry into force: 28 May 2019, Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train	
	ECE-R 100 Rev. 2, Amendment 5 2021-07	Un regulation No. 100, Revision 2 - Amendment 5, 03 series of amendments - Date of entry into force: 9 June 2021, Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train with regard to specific requirements for the electric power train	
	ECE-R 134 2015-06	Un regulation No. 134, Uniform provisions concerning the approval of motor vehicles and their components with regard to the safety-related performance of hydrogen-fuelled vehicles (HFCV)	Only Annex 3, section 5.1 „Fire test“ and 5.2 „Engulfing fire test

Valid from: 23.08.2023

Date of issue: 23.08.2023

**Annex to the Partial Accreditation Certificate D-PL-12001-04-02**

Testing field	Standard / In-House Procedure / Version	Title of Standard or In-House Procedure	Test Range / Restrictions
	GB/T 31467.3-2015 2015-05	Lithium-ion traction battery pack and system for electric vehicles - Part 3: Safety requirements and test methods	Only section 7.3 „Drop“, 7.6 „Crush“ and 7.10 „External bonfire
	KMVSS No. 515 2021-08	Regulations for Motor Vehicle Safety Standards – Traction Battery	Only section 48.6.1 „Drop test“
	SAE J2464:2009-112009 2009	Electric and Hybrid Electric Vehicle Rechargeable Energy Storage System (RESS) Safety and Abuse Testing	Only section 4.3.2 „Drop“, 4.3.3 “Penetration Test (Cell Level or Above)” and 4.3.6 „Crush (Cell Level or Above)”

**Abbreviations used:**

DIN	Deutsches Institut für Normung e.V. – German institute for standardization
ECE	Economic Commission for Europe
GB/T	Guobiao tuījiàn (chinese national standard)
KMVSS	Korea Motor Vehicle Safety Standards
SAE	Society of Automotive Engineers
UIC	Union internationale de chemins de fer (International Union of Railways)

Valid from: 23.08.2023

Date of issue: 23.08.2023

**Page 3 of 3**

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



## Deutsche Akkreditierungsstelle

### Annex to the Partial Accreditation Certificate D-PL-12001-04-03 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 23.08.2023

**Date of issue:** 23.08.2023

This annex is a part of the accreditation certificate D-PL-12001-04-00.

Holder of partial accreditation certificate:

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

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 confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

**Dynamic testing of the strength properties of systems, components and materials for the rail and aerospace sectors**

**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.**

*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

**Page 1 of 3**

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

**Annex to the Partial Accreditation Certificate D-PL-12001-04-03**

DIN EN 15152 2019-10	Railway applications - front windscreens for train cabs (here: only sections 6.2.6 and 6.2.7)
ASTM F 320 2021	Standard Test Method for Hail Impact Resistance of Aerospace Transparent Enclosures
ASTM F330 2021	Standard Test Method for Bird Impact Testing of Aerospace Transparent Enclosures
FRA CFR 49, Part 223 2011-10	Federal Railroad Administration, Part 223 Certification/testing of glazing materials - windows (here: only appendix A)
GM/RT 2100 Appendix B 2012-06	Requirements for rail vehicle structures Body side windows - small missile - test procedure
GM/RT 2456 2002-04	Structural requirements for windscreens and windows on railway vehicles
MIL-W-81752 1987-02	Windshield systems, fixed wing aircraft - General specification (here: only section 3.7.2. „bird impact“)
NF F 15-818 1996-12	Railway Rolling Stock - Frontal Windscreens Windscreens (here: only sections 18.5.2.4.1, 18.5.2.4.2, 18.5.2.4.3, 18.5.3)
NF F01-281 2014-04	Railway vehicles - parts from fibre reinforced composite materials with duroplastic matrix - specifications, test methods, qualification and conformity assessment
UIC 651 2002-07	Layout of driver's cabs in locomotives, railcars, multiple unit trains and driving trailers Laminate, compartment walls, windows (here: only section 2.7.4 and annex C)

Valid from: 23.08.2023

Date of issue: 23.08.2023

Page 2 of 3

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

**Abbreviations used:**

ASTM	American Standard of Testing Materials
DIN	Deutsches Institut für Normung e.V. – German institute for standardization
FRA	Federal Railroad Association
GM/RT	Railway Group Safety - Railway Safety
MIL-W	MILITARY SPECIFICATION
NF	Norme française
UIC	International union of railways

# Deutsche Akkreditierungsstelle

## Annex to the Partial Accreditation Certificate D-PL-12001-04-04 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 23.08.2023

**Date of issue:** 23.08.2023

This annex is a part of the accreditation certificate D-PL-12001-04-00.

Holder of partial accreditation certificate:

**Industrieanlagen- Betriebsgesellschaft mit beschränkter Haftung  
Burghof 1, 33165 Lichtenau**

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 confirm generally with the principles of DIN EN ISO 9001.

Testing within the field of:

**Dynamic tests of systems and components as well as materials for attack resistant effects against ballistics and explosives**

**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.**

*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

**Page 1 of 3**

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

**Annex to the Partial Accreditation Certificate D-PL-12001-04-04**

**1 Effects against ballistics**

BRV 1999 1999-07	Directive for testing and certification of bullet proof vehicles for private and other types of vehicles (only testing)
STANAG 2280 2007-06	Design threat levels and handover procedures for temporary protective structures
STANAG 2920 2003-07	Ballistic test method for personal armour materials and combat clothing
STANAG 4569 - NATO AEP-55, Vol. 1 2014-05	Procedures for evaluating the protection level of armoured vehicles - Kinetic Energy and Artillery Threats
VPAM APR 2006 2014-11	General basis for ballistic material, construction and product testing - requirements, test levels and test methods
VPAM BRV 2021-03	General basis for specially protected vehicles - requirements, classifications and test methods
VPAM PM 2007 2008-05	General basis for bullet resistant plate materials -requirements, classification and test methods

**2 Effects against explosives**

Dstl/WP53308 1.0, 1 2014-09	UK Ministry of Defence Technical Authority Instructions for Testing the Protection Level of Vehicles Against Buried Blast Mines
STANAG 2280 2007-06	Design threat levels and handover procedures for temporary protective structures
STANAG 4569 - NATO AEP-55, Vol. 2 2014-05	Procedures for evaluating the protection level of armoured vehicles - Mine Threat
STANAG 4569 - NATO AEP-55, Vol. 3 2014-05	Procedures for evaluating the protection level of armoured vehicles - IED Threat
VPAM ERV 2010 2011-05	General basis for specially protected vehicles - resistance against explosive effects

Valid from: 23.08.2023

Date of issue: 23.08.2023

**Annex to the Partial Accreditation Certificate D-PL-12001-04-04**

**Abbreviations used:**

AEP	Allied Engineering Publication
BRV	Bullet Resistant Vehicles
DIN	Deutsches Institut für Normung e.V. – German institute for standardization
Dstl/ WP	Work procedure of Defence Science and Technology Laboratory, Ministry of Defence, UK
EN	Europäische Norm – European Standard
IEC	International Electrotechnical Commission
IED	improvised explosive device
ISO	International Organization for Standardization
NATO	North Atlantic Treaty Organisation
NATO STANAG	NATO Standardisation Agreement
VPAM	Test directives of the association of testing institutes for attack proof materials and constructions

Valid from: 23.08.2023

Date of issue: 23.08.2023

**Page 3 of 3**

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