

## Deutsche Akkreditierungsstelle GmbH

**Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV**

Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

# Accreditation



The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory

**Industrieanlagen- Betriebsgesellschaft mbH  
IABG  
Burghof 1, 33165 Lichtenau**

is competent under the terms of DIN EN ISO/IEC 17025:2005 to carry out tests in the following fields:

**Dynamic tests of systems and components as well as materials for attack resistant effects against ballistics, explosives and impact in the fields of defence and security, aerospace as well as railway applications**

The accreditation certificate shall only apply in connection with the notice of accreditation of 27.09.2018 with the accreditation number D-PL-12001-04. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 4 pages.

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

Berlin,  
27.09.2018

Dr. Heike Manke  
Head of Division

Translation issued:  
27.09.2018

  
Head of Division

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.*

<https://www.dakks.de/en/content/accredited-bodies-dakks>

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 publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.

No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.

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 Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.

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 GmbH

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

**Valid from: 27.09.2018**

Date of issue: 27.09.2018

Holder of certificate:

**Industrieanlagen- Betriebsgesellschaft mbH  
IABG  
Burghof 1, 33165 Lichtenau**

Tests in the fields:

**Dynamic tests of systems and components as well as materials for attack resistant effects against ballistics, explosives and impact in the fields of defence and security, aerospace as well as railway applications**

**The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the free choice of standard or equivalent testing methods. The listed test methods are exemplary. The testing laboratory maintains a current list of all test methods within the flexible scope of accreditation.**

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

Abbreviations used: see last page

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.  
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

**Annex to the accreditation certificate D-PL-12001-04-00**

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 2014-05	Protection level for occupants of armoured vehicles
NATO AEP-55, Vol. 1 2014-04	Procedures for evaluating the protection level of armoured vehicles - Kinetic Energy and Artillery Threats
NATO AEP-55, Vol 2 2014-05	Procedures for evaluating the protection level of armoured vehicles - Mine Threat
NATO AEP-55, Vol 3 2014-05	Procedures for evaluating the protection level of armoured vehicles - IED Threat
VPAM APR 2006 2014-11	General basis for ballistic material, construction and product testing – requirements, test levels and test methods
VPAM PM 2007 2008-05	General basis for bullet resistant plate materials – requirements, classification and test methods
VPAM BRV 2009 2014-01	General basis for specially protected vehicles – requirements, classifications and test methods
VPAM ERV 2010 2011-05	General basis for specially protected vehicles – resistance against explosive effects
BRV 1999 1999-07	Directive for testing and certification of bullet proof vehicles for private and other types of vehicles <i>(withdrawn)</i>
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
DIN EN 15152 2007-11	Railway applications – front windscreens for train cabs 6.2.6, 6.2.7

**-Translation-**

Abbreviations used: see last page

**Valid from: 27.09.2018**

Date of issue: 27.09.2018

**Annex to the accreditation certificate D-PL-12001-04-00**

FRA CFR 49, Part 223 2011-10	Federal Railroad Administration, Part 223 Certification/testing of glazing materials - windows 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
NF F01-281 2014-04	Railway vehicles – parts from fibre reinforced composite materials with duroplastic matrix – specifications, test methods, qualification and conformity assessment
NF F 15-818 1996-12	Railway Rolling Stock - Frontal Windscreens Windscreens, 18.5.2.4.1, 18.5.2.4.2, 18.5.2.4.3, 18.5.3
ASTM F320:2016-00 2016-04	Standard Test Method for Hail Impact Resistance of Aerospace Transparent Enclosures
ASTM F330:2016-00 2016-04	Standard Test Method for Bird Impact Testing of Aerospace Transparent Enclosures
MIL-W-81752 1987-02	Windshield systems, fixed wing aircraft - General specification 3.7.2. bird impact
UIC 651 2002-07	Layout of driver's cabs in locomotives, railcars, multiple unit trains and driving trailers Laminate, compartment walls, windows 2.7.4 and annex C

**-Translation-**

Abbreviations used: see last page

**Valid from: 27.09.2018**  
Date of issue: 27.09.2018

**Abbreviations used:**

AEP	Allied Engineering Publication
ASTM	American Standard of Testing Materials
BRV	Bullet Resistant Vehicles (specially protected vehicles)
DIN	Deutsches Institut für Normung e.V.
Dstl/ WP	Work procedure of Defence Science and Technology Laboratory, Ministry of Defence, UK
FRA	Federal Railroad Association, USA
GM/RT	Railway Group Safety - Railway Safety, UK
MIL	Military standard, USA
NATO	North Atlantic Treaty Organisation
NATO STANAG	NATO Standardisation Agreement
NDS	In house method of the CAB
NF	Norme française – French standard
VPAM	Test directives of the association of testing institutes for attack proof materials and constructions
UIC	Union internationale de chemins de fer (internationale railway association)

**-Translation-**

Abbreviations used: see last page

**Valid from: 27.09.2018**  
Date of issue: 27.09.2018