

## 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

**Pavana GmbH**  
**Otto-Hahn-Straße 12-16, 25813 Husum**

with its locations

**Otto-Hahn-Straße 12-16, 25813 Husum**  
**Peter-Henlein-Straße 2-4, 27472 Cuxhaven**

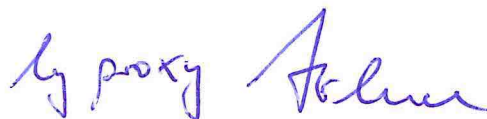
is competent under the terms of DIN EN ISO/IEC 17025:2018 to carry out tests in the following fields:

**Determination of wind potential and energy yields of wind turbines; determination of the site quality; execution and evaluation of wind measurements by anemometer and LiDAR, including LiDAR verification and RSD plausibility testing; accomplishment of shadow flicker calculations of wind turbines; accomplishment of noise immission calculations of wind turbines; accomplishment of extreme wind speed estimations; determination of site quality following commissioning**

The accreditation certificate shall only apply in connection with the notice of accreditation of 18.07.2022 with the accreditation number D-PL-20910-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 3 pages.

Registration number of the certificate: **D-PL-20910-01-00**

Berlin, 18.07.2022



B. Sc. Maik Kadraba  
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 at <https://www.dakks.de/en/accredited-bodies-search.html>.*

# Deutsche Akkreditierungsstelle GmbH

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10117 Berlin

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60327 Frankfurt am Main

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Bundesallee 100  
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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.

The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2625) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). 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-20910-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 18.07.2022

Date of issue: 18.07.2022

Holder of certificate:

**Pavana GmbH**  
**Otto-Hahn-Straße 12-16, 25813 Husum**

With its locations:

**Otto-Hahn-Straße 12-16, 25813 Husum**  
**Peter-Henlein-Straße 2-4, 27472 Cuxhaven**

Tests in the fields:

**Determination of wind potential and energy yields of wind turbines; determination of the site quality; execution and evaluation of wind measurements by anemometer and LiDAR, including LiDAR verification and RSD plausibility testing; accomplishment of shadow flicker calculations of wind turbines; accomplishment of noise immission calculations of wind turbines; accomplishment of extreme wind speed estimations; determination of site quality following commissioning**

**Within the scope of accreditation marked with \*, 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 procedures within the flexible scope of accreditation.**

*The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.*

*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 may be found respectively in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH <https://www.dakks.de/en/content/accredited-bodies-dakks>.*

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-20910-01-00**

**1 Determination of wind potential and energy yields of wind turbines including testing of wind climatological input data; determination of the site quality**

IEC 61400-12-1 Ed. 2.0 * 2017	Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines (here: only Annex G, L)
FGW TG 6, Rev. 11 * 2020-09	Determination of wind potential and energy yields
VA7.2-2 2019-04	Accomplishing an energy yield assessment

**2 Accomplishment and evaluation of wind measurements by anemometer and LiDAR, including LiDAR verification and RSD plausibility checks \***

IEC 61400-12-1 Ed. 2.0 2017	Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines (here only Annex G, L)
FGW TG 6 Rev. 11 2020-09	Determination of wind potential and energy yields

**3 Accomplishment of shadow flicker calculations of wind turbines**

VA7.2-4 2019-04	Accomplishing a shadow flicker calculation
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**4 Accomplishment of noise immission calculations of wind turbines**

DIN ISO 9613-2* 1999-10	Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation
TA Lärm 1998	German Technical Guideline for Noise Reduction ( <i>Technische Anleitung zum Schutz gegen Lärm</i> ) 6th General Administrative Regulation on the Federal Immission Control Act ( <i>Bundesimmissionsschutzgesetz</i> )
VA7.2-3 2021-01	Accomplishing a noise immission calculation

Valid from: 18.07.2022  
Date of issue: 18.07.2022

**Annex to the accreditation certificate D-PL-20910-01-00**

**5 Accomplishment of extreme wind speed estimations**

VA7.2-6 Accomplishing an extreme wind speed estimation  
2020-10

**6 Determination of site quality following commissioning**

FGW TG 10, Rev. 2\* Determination of site quality following commissioning  
2021-03

VA7.2-8 Determination of site quality following commissioning  
2022-04

**Abbreviations used**

FGW Federation of Wind and other Decentralised Energies  
LiDAR Light detection and ranging  
RSD Remote sensing device  
TG Technical guideline  
VA Procedural instruction of Pavana GmbH