Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-21362-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **15.04.2024**

Date of issue: 15.04.2024

Holder of accreditation certificate:

FICHTNER GmbH & Co. KG
Sarweystraße 3, 70191 Stuttgart

with the location

FICHTNER GmbH & Co. KG
Sarweystraße 3, 70191 Stuttgart

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.

Tests in the fields:

Determination of the wind potential and energy yields of on- and offshore wind energy installations including the assessment of wind input data; Determination of the site quality for commissioning; Evaluation and analysis of wind input data (from wind met mast/meteorological met mast, SoDAR, LiDAR) for the determination of the wind potential; Post-construction energy yield assessments for on- and offshore wind energy installations including the analysis and evaluation of historical wind turbine production data; Determination of the reference yield of wind turbine generators

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 methods within the flexible scope of accreditation.

1 Determination of the wind potential and energy yields of on- and offshore wind energy installations including the assessment of wind input data

Document reference	Document title
IEC 61400-1 * Ed. 4.0 2019-02	Wind energy generation systems - Part 1: Design requirements
IEC 61400-12-1 * Ed. 3.0 2022-09	Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines
IEC 61400-12-5 * Ed. 1.0 2022-08	Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain
IEC 61400-50 * Ed. 1.0 2022-08	Wind energy generation systems - Part 50: Wind measurement - Overview
IEC 61400-50-1 * Ed. 1.0 2022-11	Wind energy generation systems - Part 50-1: Wind measurement - Application of meteorological mast, nacelle and spinner mounted instruments
IEC 61400-50-2 * Ed. 1.0 2022-08	Wind energy generation systems - Part 50-2: Wind measurement - Application of ground-mounted remote sensing
FGW TR 6, Rev. 12 * 2023-11	Determination of wind potential and energy yields
MEASNET 2022-09	Evaluation of site-specific wind conditions, version 3

2 Determination of the site quality for commissioning

Document reference	Document title
FGW TR 6, Rev. 12 * 2023-11	Determination of wind potential and energy yields

3 Evaluation and analysis of wind input data (from wind met mast/meteorological met mast, SoDAR, LiDAR) for the determination of the wind potential

Document reference	Document title
IEC 61400-1 * Ed. 4.0 2019-02	Wind energy generation systems - Part 1: Design requirements
IEC 61400-12-1 * Ed. 3.0 2022-09	Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines
IEC 61400-12-5 * Ed. 1.0 2022-08	Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain
IEC 61400-50 * Ed. 1.0 2022-08	Wind energy generation systems - Part 50: Wind measurement - Overview
IEC 61400-50-1 * Ed. 1.0 2022-11	Wind energy generation systems - Part 50-1: Wind measurement - Application of meteorological mast, nacelle and spinner mounted instruments
IEC 61400-50-2 * Ed. 1.0 2022-08	Wind energy generation systems - Part 50-2: Wind measurement - Application of ground-mounted remote sensing
FGW TR 6, Rev. 12 * 2023-11	Determination of wind potential and energy yields
MEASNET 2022-09	Evaluation of site-specific wind conditions, version 3

4 Post-construction energy yield assessments for on- and offshore wind energy installations including the analysis and evaluation of historical wind turbine production data

Document reference	Document title
IEC 61400-26-1 * Ed. 1.0 2019-05	Wind turbines – Part 26-1: Availability of wind energy generation systems
FGW TR 6, Rev. 12 * 2023-11	Determination of wind potential and energy yields

5 Determination of the reference yield of wind turbine generators

Document reference	Document title
FGW TR Teil 5, Rev. 8 * 2020-03	Determination and application of the reference yields

Abbreviations used:

FGW	German Federation of Wind Energy and other Decentralized Energies e.V.
IEC	International Electrotechnical Commission
MEASNET	Measuring Network of Wind Energy Institutes