

Professional wind tunnel measurements

Calibration, Service and Wind Sensors



DEUTSCHE
WINDGUARD

PROFIT FROM OUR EXPERTISE AND EXPERIENCE

Deutsche WindGuard's Wind Tunnel Services division offers you latest technology wind sensors, their calibration and classification as well as a variety of high-precision measurements. One of our calibration wind tunnels even serves the German national metrology institute (PTB) as a reference wind tunnel for its own calibration of flow sensors.

WIND SENSOR CALIBRATION AND CLASSIFICATION SERVICES

Deutsche WindGuard's five calibration wind tunnels are among the world's most accurate. These Göttingen-type wind tunnels are specifically designed for the measurement of wind sensors. Certificates are valid and accepted worldwide.



FEATURES AND BENEFITS:

Five Calibration Wind Tunnels:

- Air velocity, wind direction and tilt response measurements
- Air velocity range: 0.5 m/s ... 38 m/s
- Test section size: $\geq 1 \text{ m} \times 1 \text{ m} \times 1.8 \text{ m}$
- Turbulence intensity: $< 0.2 \%$
- Contraction ratio: $\geq 4:1$
- Calibrations in accordance with IEC 61400-50-1:2022, IEC 61400-12-1:2017 and other international standards
- DAkkS-/ILAC MRA accredited

AT YOUR SERVICE:

- Deutsche WindGuard's wind tunnel centre with 8 wind tunnels
- DAkkS accredited calibration laboratory according to DIN EN ISO/IEC 17025, MEASNET associated member, IECRE approved and ISO 45001 certified
- Aeroacoustic measurements up to 100 m/s
- Traceability of all measured quantities to national standards
- Redundant measurement systems for increased reliability
- Over 30 years of combined expertise in commercial wind tunnel tests and experience of 20,000 accredited sensor calibrations per year

MEASUREMENTS IN EXTREME ENVIRONMENTAL CONDITIONS

Find out whether your wind sensor is suitable for challenging environmental conditions. Deutsche WindGuard's icing and climatic wind tunnels help evaluate performance at extreme temperatures, pressures and densities.



FEATURES AND BENEFITS:

Icing Wind Tunnel:

- Maximum air velocity: 20 m/s
- Contraction ratio: 3:1
- Temperature: down to $-20 \text{ }^\circ\text{C}$
- Liquid water content: up to 2.4 g/m^3

Climatic Wind Tunnel:

- Maximum air velocity: 15 m/s
- Contraction ratio: 3:1
- Temperature: $-20 \text{ }^\circ\text{C}$... $40 \text{ }^\circ\text{C}$
- Air pressure: 0.7 bar ... 1.1 bar

COMPREHENSIVE INSPECTION AND MAINTENANCE SERVICES

Deutsche WindGuard's specially qualified workshop staff has extensive experience in the inspection and maintenance of wind sensors. Maintenance and repairs are performed in compliance with the manufacturers' specifications.



FEATURES AND BENEFITS:

- Visual inspection, signal, operation and other tests as required
- Maintenance including spare part replacement as stipulated by manufacturer specification
- Detailed report and individual offer, should repair work be necessary
- Final calibration to ensure measurement accuracy for further operation

DEUTSCHE
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