

Energy Assessment

Prototyping & Testing

Grid Integration & Power Quality

Test Sites

Prototyping & Testing

# LOAD MEASUREMENT



Every hour your wind turbine isn't load certified, installed and generating power is costing you and your customers money. With millions at stake for a new development, delays are costly and time to market is crucial.

*You can cut time and costs significantly while maintaining exceptional quality with windtest grevenbroich.*

We've been assessing loads and stress for the wind energy industry for more than 20 years. New turbine prototypes and their main shafts, blades, rotors, tower sections, foundations... you name it, we can measure it to ensure your prototype simulations align with national and international requirements like IEC, MEASNET, FGW.

Precise and reliable load measurement and evaluation. By any measure, your turbine and its components will pass the test.

## OUR SERVICES

### Site Calibration

Our engineers evaluate the terrain where we will be performing wind tower measurements in accordance with IEC 61400-12-1. We then develop a measurement concept based on the local conditions, erect a wind measurement mast and select, configure and install measurement technologies.

## WHY WINDTEST GREVENBROICH?

### Accredited

We are accredited in accordance with DIN EN ISO/IEC 17025. With windtest grevenbroich, you always get the highest level of quality in your measurement programs.

### Experienced

windtest grevenbroich has completed nearly 1,000 type testing projects worldwide. Since we know exactly what we're doing, there is less potential for delays.

### Flexible & Responsive

Sometimes new situations or requirements arise in the course of a project. Thanks to our specialists' abilities and our advanced technologies and equipment, we can adapt and respond quickly to your needs.

### Engaged

Our specialists are members of several national and international working committees like IEC, MEASNET, FGW, ... so we're always able to apply the latest processes and technology advancements to your project.

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quality by any measure

### Prototype Measurement

We measure mechanical loads based on national and international guidelines such as IEC TS 61400-13, IEC 61400-22 or GL 2010, as well as IEC 61400-2 and AWEA and BWEA for SWT.

### Safety and Function Testing

Our testing and measurement includes thorough evaluation of functional and safety criteria for specified operating states of the turbine.

### Power Performance Measurement

Power performance and load testing can be completed simultaneously.

### Components and Test Beds

We design and optimize component test beds with accredited measurement technology and automated evaluation routines.

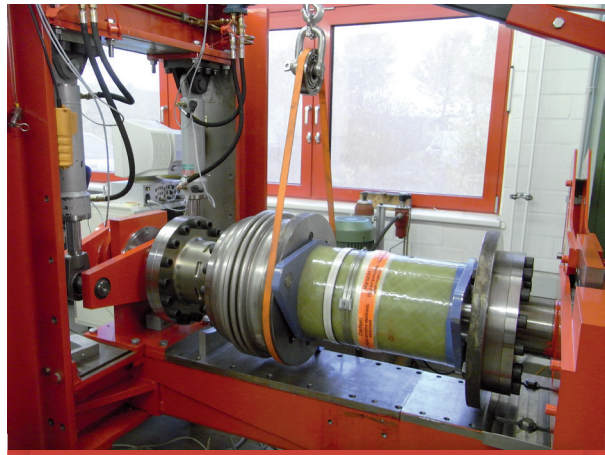
## CUSTOMIZED TESTING

We often develop and implement customized load testing programs beyond IEC requirements.

It might be e. g. turbines or components in the field that are showing damages or testing an existing turbine to ensure it is suitable and safe for operation under more demanding site conditions. Regardless of the situation, windtest grevenbroich can create a test program to get you the data you need.

## PROCESS AND TIMELINE

Depending on suppliers and delivery times, windtest grevenbroich will install measuring equipment within two months of your order. Measurement periods are generally three to six months depending on wind conditions. We will provide monthly interim reports during that time and a final



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## YOUR CONTACT

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