

# LOAD MEASUREMENT

## **Energy Assessment**

## **Type Testing & Technical Expertise**

## **Test Site Operation**

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 north-america.**

We've been assessing loads and stress for the wind energy industry for more than 25 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 and MEASNET.

**Precise and reliable load measurement and evaluation.**

**By any measure, your turbine and its components will pass the test.**



## **WHY WINDTEST NORTH-AMERICA?**

### **Accredited Expertise**

We offer accredited services in accordance with ISO/IEC 17025. With windtest north-america, you always get the highest level of quality in your measurement programs.

### **Experienced**

windtest has completed more than 1,500 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 and MEASNET, so we're always able to apply the latest processes and technology advancements to your project.



## 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.

### 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 guidelines 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.

### 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 that are beyond IEC requirements. It might be testing turbines and components in the field that are showing damage to find out what's causing it, or testing an existing turbine type to ensure it is suitable and safe for operation under more demanding site conditions. Regardless of the situation, windtest north-america can create a testing protocol to get you the data you need.

## Process and Timeline

Depending on suppliers and delivery times, windtest will install measuring equipment within two months of your order. Measurement periods are generally three to six months. We'll provide monthly interim reports during that time and a final report for you to present to the certifying body.



### See How We Measure Up

Sandy Shonkwiler, Office Manager  
+1 712-362-6803 | [sandy.shonkwiler@windtest-na.com](mailto:sandy.shonkwiler@windtest-na.com)  
[windtest-na.com](http://windtest-na.com)

windtest north-america  
2421 7th Avenue South  
Estherville, IA 51334