Turbine Load Control

The extension of the axial beam to the collector of wind turbines is the main axis for the optimal control of the turbine's load. The system has a self-optimizing Buckingham mechanism for the reduction of high loads.

Insulation and continuity checks are performed automatically, ensuring the safety of the turbine load. The system also offers a wide range of additional functionalities for the control of the turbine's load, such as the monitoring of the turbine's health and the optimization of its performance.

Fiber-Optic Sensing

Fiber optic sensors are often used in turbine load control due to their ability to provide high-precision measurements. These sensors can measure a wide range of physical quantities, such as strain, temperature, and vibration, which are crucial for the efficient operation of the turbine.

The benefits of fiber optic sensors include their high sensitivity, reliability, and immunity to electromagnetic interference. These sensors are also capable of measuring a wide range of physical quantities, making them a versatile tool for turbine load control.

Innovative Fiber Bragg Grating (FBG) measurement technology

FBG sensors are used in wind turbine load control due to their ability to provide high-precision measurements of strain and vibration. These sensors are made by depositing a pattern of interference fringes onto a fiber optic core, which changes its refractive index and creates a Bragg grating.

The Bragg grating can be used to measure strain, vibration, and temperature, making it a versatile tool for turbine load control. FBG sensors are also immune to electromagnetic interference, making them a reliable choice for this application.
We provide sensors and solutions to drive smart wind energy.