AXISCADES Wind Assessment and Siting

30+ Years of Engineering Excellence

Wind Energy is one of the leading renewable industry where manufacturers are innovating and pushing their capacities to cater to the increasing demand for more powerful and efficient turbines. With extensive research on siting of turbines in challenging conditions, our domain experts join hands with OEMs to build on ideas and expertise to break the barriers for innovation. We at AXISCADES offer a complete package of domain expertise right from the concept development stage, analysis, testing, manufacturing and validation. A reliable team of highly trained professionals, who work efficiently to ensure your investments return high value at minimal risk, with future proofing, is our indispensable asset.

Wind Resource Assessment is the most important step in planning a community wind project, because it is the basis for determining initial feasibility and cash flow projections, which ultimately is vital for the total success of the project. Accurate wind resource assessments are crucial to the successful development of wind farms. We follow a tailor made approach of Wind Recourse Assessment, customized to support each wind power developer differently, according to their needs in estimating the future energy production of their wind farm.





PRODUCT DESIGN AND DEFINITION

Concept & Detailed Design & Drafting GD&T & Stack up Studies Tolerance Analysis Configuration & Assembly Electrical CAD

ENGINEERING ANALYSIS AND OPTIMIZATION

Structural Analysis - Static, Modal & Thermal Dynamic & Transient Analysis - Acoustics & NVH Fatigue & Damage Tolerance Topology & Topography Optimization Aerodynamics & Aero-elasticity studies

WIND RESOURCE ASSESSMENT AND SITING

Analysis of Quality of Wind Data Turbine Layout Optimization Noise & Shadow Flickering Calculation Preliminary Wind Data Validation Wind Farm Layout Optimization Annual Energy output & Site Analysis

MECHANICAL AND ELECTRICAL SYSTEMS HARNESS & ROUTING

Harness Installation System Integration Mechanical / Electrical Routings Hydraulics

TECHNICAL PUBLICATIONS

Manuals (Maintenance, Service, Operator, Installation & Setup Guides) AMM, IPC, CMM, IPL, etc. Interactive Manuals & Training Material

MANUFACTURING ENGINEERING SERVICES

Virtual / Digital Manufacturing Process Planning & Simulations Tool Design Should Cost Modelling

Our team helps you progress your project through several stages of a customized assessment process that involves:

- Initial Assessment
- Detailed site characterization
- Long-term validation of data

With significant expertise across geographies we provide value addition through the analysis of quality of wind data, turbine layout optimization, annual energy estimation for the designed layout and an overall optimization of the wind farm layout including structural analysis and value engineering.

