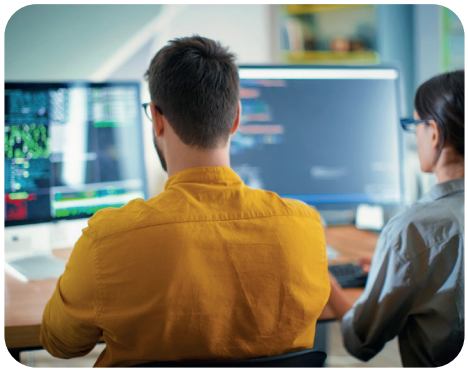
BLADE ENGINEERING & ANALYSIS SERVICES

Technical due diligence

Confidence in procurement
Assurance that blades meet technical expectations and are backed by rigorous testing and certifications.

Thorough insight
Gain a complete understanding of your blade's design and operational practices, uncovering potential areas for improvement as well as limitations in certification and testing methodologies.

Confidence in operation
With a thoroughly assessed blade design and operational strategy, our customers can be more assured in their investment and operational decisions.



We offer a detailed, independent assessment of wind turbine blade designs. Choosing the right blades during procurement is critical. This service focuses on technical rigour, examining full-scale testing methods and certification schemes, and highlighting where these may fall short. While certification is important, it often only meets minimum standards. Established OEMs frequently go beyond this baseline — our analysis identifies these differences, enabling better-informed procurement choices. By combining in-house structural expertise with one of the industry's most extensive global blade damage databases, we help customers identify unseen risks, benchmark designs, and ultimately make strategic decisions with confidence.

What we offer

Structural evaluation
A deep dive into the blade's structural integrity, highlighting risks not visible through certification alone. Our insights are enhanced by comparative analysis with global blade damage data.

Full-scale and sub-component testing evaluation
We assess whether testing programmes truly replicate real-world loading conditions, with recommendations to strengthen test coverage and reliability.

Certification and implications
Review of certifications specifically targeted at structural integrity and testing process (especially full-scale and sub-component testing).

Recommendations and improvements
Suggestions on areas of improvement for testing methodologies. Recommendations for supplemental tests.

Lightning assessment
Understand the effectiveness of the blade's lightning protection system and potential improvements.

Leading edge erosion
Evaluate potential risks and solutions related to leading edge erosion.

Operation & Maintenance review
Assess operational practices and maintenance schedules to ensure they align with best practices.