quietrevolution
The answer is blowing in the wind

Ultra-advanced product lifecycle management software is allowing wind energy companies to reap the harvest of an industry set for global expansion. UK-based quietrevolution deploys CATIA to lead the way towards sustainable wind energy turbine manufacture.

The Wind Energy Industry brings together skills, technologies and science that have not been previously combined on a single system. Dassault Systèmes PLM technology that is used by thousands of enterprises throughout the world to develop and bring leading products to market has proven an ideal match for the needs of this emerging industry. For example, light weight, very robust, able to deal with severe climate, intricate mechanisms and advanced power handling are common requirements to both the aerospace and wind energy industry allowing an ideal technology and knowledge transfer to the wind energy sector.

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quietrevolution Design Manager Richard Kingsley said, “Product development is at the heart of our work. In the short time that we have been using CATIA virtual design solution, it has significantly improved our ability to efficiently complete the design-to-manufacture processes of advanced structures.” Mr. Kingsley, who has experienced PLM at Lotus Cars, Proton, Ascari and Aston Martin, added: “Dassault Systèmes PLM solution allows us to digitally design, sign off, investigate tooling feasibility, build products, and communicate 3D designs. CATIA is the industry standard among our supply chain and it allows us to exchange native files with partner companies leading to more efficient production processes.”

The advantage of the quietrevolution design is that the 120 degree-blade twist means that the rotor is always working; this makes the design especially suitable for populated areas where wind direction is often variable. Using CATIA allows the company to not only develop a more efficient and very elegant design, but also to communicate through internal and external supply chains using native CATIA files or data formats that suit the needs of suppliers and sub-contractors. Richard Kingsley added: “Working efficiently with suppliers is crucial. The Dassault Systèmes data environment ensures that this level of communication is smooth and error free with absolute control over versions and release procedures.”

CYCLE TIME
Mike Crow, Director, Dassault Systèmes said: “We are glad that quietrevolution is utilizing CATIA leading-edge virtual design solutions to be at the forefront of the wind energy industry. Using best practices developed in conjunction with leading manufacturers from other industries for design and production, wind turbine manufacturers can avoid costly trial and error in the real world and significantly reduce development cycle time while manufacturing stronger products with higher energy outputs by integrating design, testing, and manufacturability analysis in a single environment.”

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