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Revolutionizing wind turbine data driven rotor monitoring and alarm systems with new Ventus TripleCMAS.

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A game-changer for optimizing operation and maintenance of all existing and future wind turbines worldwide, Ventus Group has launched TripleCMAS - a revolutionary product that converts the rotor and swept area into a condition monitoring and alarm system.

Launched on a global scale simultaneously at Wind Energy Hamburg in Europe and at the Renewable Energy India Expo 2022, TripleCMAS offers a new way of improving asset health and performance management thanks to patented innovative technology.

This next-generation data-driven rotor monitoring system is based on data collected wirelessly from the rotor, whereafter algorithms using Machine Learning and Artificial Intelligence analyse the data. The independent and flexible system converts the rotor and the entire swept area into a measuring instrument for wind turbines, complete with live dashboard and alarm systems that alert operators when specified thresholds per algorithm are exceeded.

The multi-modular solution includes easy-to-install sensor nodes that, when used in conjunction with Ventus Group's future LEDSTM product, also becomes a monitoring and alarm system on the efficiency of the Lighting and Electrostatic Discharge System from each individual wind turbine blade. Weighing less than 200 grams, the sensor nodes can be retrofitted to the turbine tower and inside of blades for wireless, remote sensing. Located in the nacelle, the data collection and data processing box is designed specifically for wind turbines, with the Ventus Data Processing Unit securely transferring analytics and alarms to the operator's dashboard and Ventus Central Server.

The TripleCMAS provides alarms and a real-time dashboard, enabling operators to perform trend- and across fleet analysis to detect failures at an early stage. This reduces risks and ultimately extends the lifetime of the turbine using a host of algorithms monitoring wind speed and direction, turbulence intensity, relative blade pitch angles, punctual shocks in the blade structure, movements in the foundation, to mention a few.

Commenting on the global product launch, Ventus Group CTO Poul-Anker Lübker, said: "TripleCMAS is the perfect system for wind farm operation, management and revenue optimization. This revolutionary patented rotor monitoring technology helps operators make significant maintenance savings, while increasing the efficiency and return-on-investment of the asset. TripleCMAS signals the future of wind turbine data management and is now available on a global scale with Ventus."

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About Ventus Group

Headquartered in Austria, Ventus Group also has offices in Denmark, UK, Poland, Canada and India. The company offers end-to-end wind turbine optimization solutions within the type approval design envelope for wind turbine performance, deploying a multitude of patented innovative technologies. Its primary focus is wind turbine rotor efficiency, delivering aerodynamic, efficient and balanced rotors, the lack of which are the common cause for damaging increased loads and underperforming turbines. Using its extensive industry experience, products and services of the Ventus Group capture measurements, analyses data and compiles comprehensive reports.

Learn more at www.ventus.group

