European Eyes on India's Windergy 2025 — Where AI Took the Wind by Storm

Assert Al Introduces Orbit: Al-Powered Quality Assurance for Wind Blade Manufacturing



Chennai, Tamil Nadu Nov 6, 2025 (<u>Issuewire.com</u>) - The wind energy sector gathered in full force at Windergy India 2025, South Asia's largest exhibition and conference dedicated to the wind industry. The event, attended by global players such as Suzlon, Siemens Gamesa, Vestas, Inox Wind, LM Wind Power, and GE Vernova, showcased a surge of innovation aimed at making wind manufacturing smarter, cleaner, and more transparent.

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Among the standout participants was Assert AI, a leading Vision AI company transforming industrial automation through computer vision. The company demonstrated Orbit, its proprietary AI-driven monitoring platform, which is currently the only solution that tracks and **validates wind blade quality during manufacturing**, not after production.

Traditional quality checks rely on sensors or manual inspection, detecting deviations only once

production is complete. Orbit changes this by integrating computer vision directly into the manufacturing process. Every ply, resin layer, or core material is identified and verified before it is applied to the blade mould. If any discrepancy is detected, the system automatically halts the process, ensuring that each preceding step is perfect before the next begins.

The result is reduced defects, fewer reworks, and significantly lower rejection rates, directly leading to stronger yield and measurable cost savings for wind blade manufacturers.

Rising Standards in Quality and Compliance

Indian authorities, led by the Ministry of New and Renewable Energy (MNRE), have recently introduced new SOP guidelines for wind turbine models. These guidelines emphasize traceability, process validation, and digital proof of compliance, aligning closely with Europe's own growing emphasis on manufacturing transparency and sustainability.

Orbit is already designed for this level of accountability, offering digital audit trails and automated verification reports that help manufacturers meet these standards with ease.

A Turning Point for Global Wind Manufacturing

As India advances toward its 122 GW wind power target, the combination of AI-enabled process assurance and stricter quality regulations marks a significant step forward. For European OEMs and component suppliers exploring manufacturing partnerships in India, solutions like Orbit offer the confidence that quality and compliance are built into every stage of production.

"Orbit is not designed to catch defects. It is designed to prevent them," said a spokesperson from Assert AI. "By using AI to validate each step in real time, manufacturers can achieve consistency, traceability, and compliance; the cornerstones of a globally trusted supply chain."



Media Contact

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