Digital Twins for future smart wind turbines

DTU Wind Energy

DTU

ReliaBlade – Improving Blade Reliability through Application of Digital Twins over Entire Life Cycle ReliaBlade

• Digital twins make it possible to improve the design, optimizing manufacturing and move the operation from fixed scheduled intervals with reactive maintenance to predictive maintenance.





ACTUAL

COMMUNICAITON AND INTERACTION

DIGITAL





Testing the blade under operational conditions in the lab

DTU



Session

Digital Twins for future smart wind turbines

- Welcome and "ReliaBlade project and vision for use of digital twin technology" Kim Branner, DTU Wind Energy
- "The Digital Twin: concept, value creation and recent work in the ReliaBlade project" Bart Peeters, Product Line Manager Structures and Environmental Testing, Siemens Digital Industries Software
- "Monitoring and digitalization of wind turbine blades using optical MEMS sensors" Kasper Reck-Nielsen, CEO, CEKO Sensors ApS
- "The future of digitalization and how it helps to handle fluctuating power generation" Trygve Skjøtskift, Associate Partner - Energy, Environment & Utilities, IBM Denmark
- Discussion How can digitalization and digital twin technology change the wind energy industry?