

Situation for wind farm operators

- ! HIGH INVESTMENT COST**
Uncertainties around turbine- and site-specific loads hinder the minimization of conservative rotor blade designs.
- ! POOR ENERGY-TO-LOAD RATIO**
Unknown loads during operation prevent the optimization of turbine energy-to-load ratio.
- ! LIFETIME LOADS**
Unknown load histories impede the maximization of turbine lifetime.

Features of Turbine Load Control

With Turbine Load Control, we provide a sensitive detection system for detrimental loads and can calculate a virtual age of the turbine to enable lifetime extension.

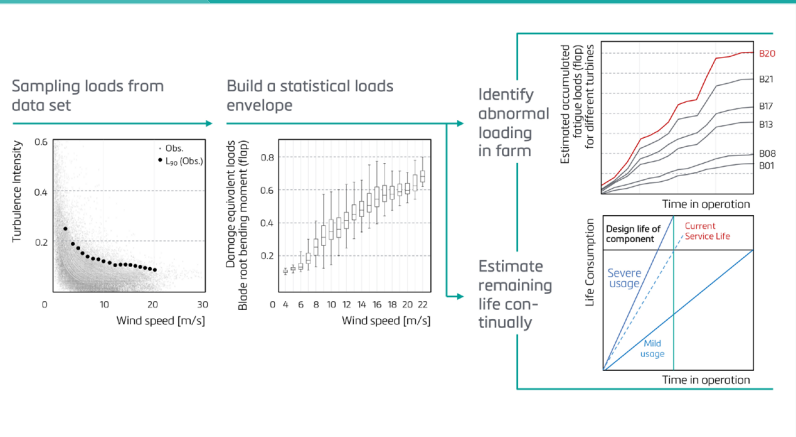
Benefit for wind farm operators

- + KNOWLEDGE OF LOADS**
Actively control the system and achieve an optimum relationship between protection and efficiency.
- + ACTIVE LOAD REDUCTION**
Maintenance and repair work is reduced by active load reduction and avoidance of overloads.
- + LIFETIME EXTENSION**
Knowledge of the cumulative loads can determine the virtual age and form the basis of lifetime extension.

Case Study

Average continued service life	6 years
Potential for prolonged life-time extension assessment	10 %
With a 3MW turbine this results in an additional production of	2.250 MWh
Equals an additional yield	110 kEUR*

* At an assumed exchange price of 5 ct.



Achieved optimizations

- LIFETIME ESTIMATION**
- EXTREME LOADS MONITORING**
- LOAD REDUCTION**

Get in touch >

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