

9-10th July

Broomfield, CO



Wind Academy 2025

Major Component Short Course



Turbine Technology Workshop

ONYX Insight have amassed extensive blade and drivetrain experience while providing engineering services to wind farm operators worldwide. We've condensed this knowledge into a 2-day Wind Turbine Technology Short Course for operations professionals, performance and reliability engineers, and portfolio managers.

ONYX Wind Academy is a must for those who want to develop a deeper understanding of their wind turbine assets, recognize the behaviour of their major components, and increase the longevity of such hardware.

Approach

The aim of this training course is to arm you with the knowledge and tools to identify and understand the failure modes experienced by the major components of your wind turbines.

The first day will focus on understanding the drivetrain, bearings, lubricants and tower & foundations. The second day covers blades and hands-on demos.

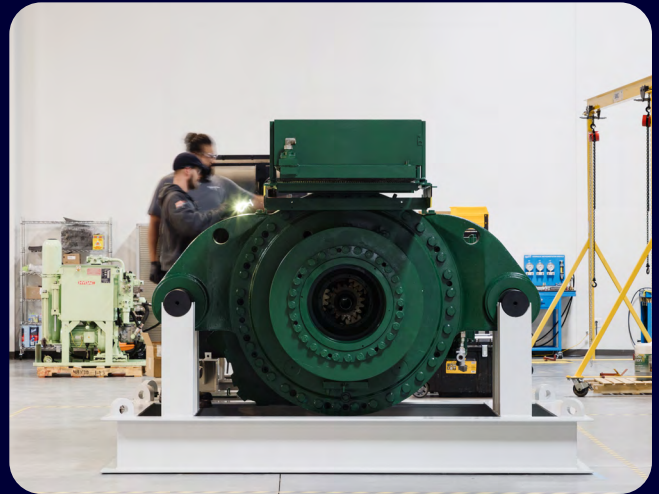
Key Details

Price: \$2,800

Date: 9-10th July

Location: The training course will be held over two days in person at Takkion's Denver Training Facility in Broomfield, Colorado.

The Takkion facility spans over **55,000sqft** and includes a multi-use working at heights training tower, plus a cutting edge blade repair lab. The perfect setting to assist in your learning.



Training Agenda

Day 1

Time	Session
8:00am	Safety, introductions and coffee
8:30am	Wind turbine drivetrain components, operating principals, managing lubricants for optimal rotating equipment
9:45am	Break
10:00am	Gear failure modes & bearing failure modes
11:00am	Monitoring overview - CMS, vibration, SCADA, lubrication (demo)
12:00pm	Lunch
1:00pm	Towers and foundations - structural health monitoring (demo)
2:00pm	Pitch systems
3:00pm	Generators
4:00pm	Repairs: Managing the cost and quality of uptower repair and factory refurbishment
5:00pm	End of day 1
5:30pm	Happy hour & networking

Day 2

Time	Session
8:00am	Coffee & networking
8:15am	Introduction: Blades overview, aerodynamics
8:45am	Blades structural design
9:45am	Break
10:00am	Blades manufacturing
10:30am	Blades damage & repairs
12:00pm	Lunch
12:30pm	Blade root failures in focus
1:00pm	Composite repair demo: best practices for grinding, scarf joints, and layup (hands-on demo)
2:30pm	Break
3:00pm	Composite layup, best repair practices, and scarfing & grinding (hands-on demo)

Please Note

Attendees: The course will be limited to 15 participants. If the course is full, registrants will be added to a waitlist for the next available course date.

Your trainers



Mike Hornemann, Principal Engineer

As Principal Engineer for ONYX Insight in the USA, Mike has performed many failure root cause analysis investigations for the major gearboxes, developed tooling for main bearing life extension, all while ensuring the engineering team maintains a high level of quality of analysis and reporting for all engineering consulting.



Alberto Vera Garcia, Senior Consulting Engineer

Alberto has over 16 years of experience in the wind energy sector, including 11 years working directly or indirectly with Siemens Gamesa. His expertise spans blade structure, certification, design, stress analysis, and validation, with a strong focus on WTG certification strategy aligned with international standards (OD-501 & IEC-61400) and blade structural integrity across design, testing, and fleet support.



Forrest French, Senior Project Engineer

Forrest leads the deployment and development of our blade root monitoring systems. He brings a strong background in mechanical engineering and system optimisation, having spent four years at ExxonMobil as an optimisation and field engineer. Forrest holds a degree in Mechanical Engineering from Oklahoma State University.



Marc Buonanni, Senior Consulting Engineer

Marc has over 12 years of experience in the wind industry, spanning mechanical engineering, reliability, and technical consulting. His expertise includes drivetrain components, condition monitoring, and field operations, with a focus on improving turbine performance through data-driven maintenance strategies and cross functional project delivery across North America.

Sign-up today

Speak with your account
manager for you or your team
to join us in July

