

Get training from the experts,  
so you can become one yourself!

Space is limited. To ensure your spot, visit  
[www.gearboxexpress.com/registration](http://www.gearboxexpress.com/registration)



**Gearbox Certification**

Course presented by Gearbox Express and Romax  
Gearbox Express • Mukwonago, Wisconsin



## It's not a blackbox, it's a gearbox.

We at Gearbox Express and Romax are gearbox guys that have grown up in the industry. All we have learned about gearboxes we did so by getting our hands dirty. Our training and certification program is simple: our smart people will train you how to do your job better.

**REGISTER TODAY!**  
*This opportunity is limited, sign up online to ensure your spot.*

**TUITION**  
**\$2,500**

**SPACE IS LIMITED  
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### The course will cover in detail:

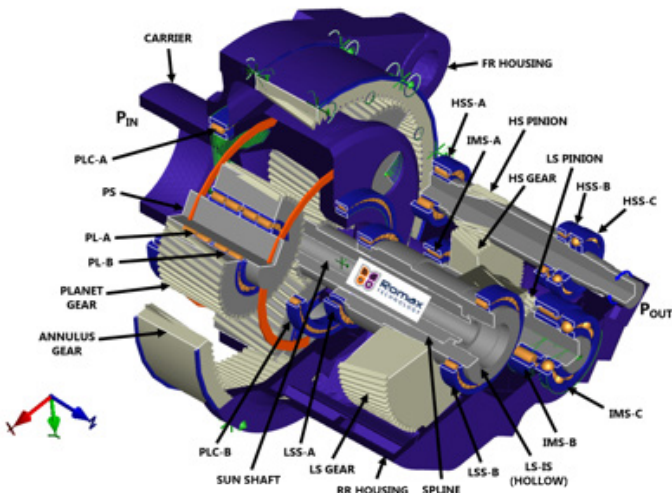
- Gearbox components and terminology
- Gear and bearing manufacturing
- Gearbox assembly best practices
- Gear and bearing failure modes
- Borescope and photography best practices
- Inspection hands-on work
- Lubrication systems
- Condition-monitoring systems
- Failure root cause analysis techniques – main bearing failure case study
- High-speed shaft replacement on the shop floor
- What can you do to extend the life of your gearbox?

# Increase Your Gearbox Knowledge

This practical training will greatly increase your knowledge of wind turbine drivetrains. You'll learn from some of the industry's top repairers, gearbox designers and consulting engineers.

The course format is blend of classroom and shop-floor training. You'll work individually and on small teams. And the two-day course culminates with a high-speed shaft replacement demonstration.

You'll walk away from this dynamic two-day course with a much greater understanding of how Wind Turbine Gearboxes are designed and operate.



**Mike Hornemann**  
Reliability Engineer



**Jesse Graeter, P.E.**  
Lead Mechanical Engineer

Mike completed his Mechanical Engineering degree in 2000 and has worked in the wind industry ever since. Prior to joining Romax InSight in 2012, Mike's wind experience comprised of: 6 years with General Electric as a field engineer commissioning 1.5 MW wind turbines, 18 months of project installation and commissioning support at Clipper and 3 years at EDPR as the manager of the Turbine

Performance Engineering group. At InSight, Mike works directly with wind turbine owners to improve the reliability of operating wind assets. Recent projects have included drivetrain failure root cause analysis, main component due diligence assessment for wind farm sales, CMS system installation, borescope inspection and development of up tower drivetrain repair tooling and procedures.

Jesse holds a bachelor's degree in Mechanical Engineering and is licensed as a professional engineer. He joined Romax InSight in 2013 having previously worked at General Electric. At GE Wind he was a design engineer on the wind turbine drivetrain team with a focus on the 1.5MW gearbox. His consultancy work at Romax InSight involves instrumentation design and installation, including up tower loads

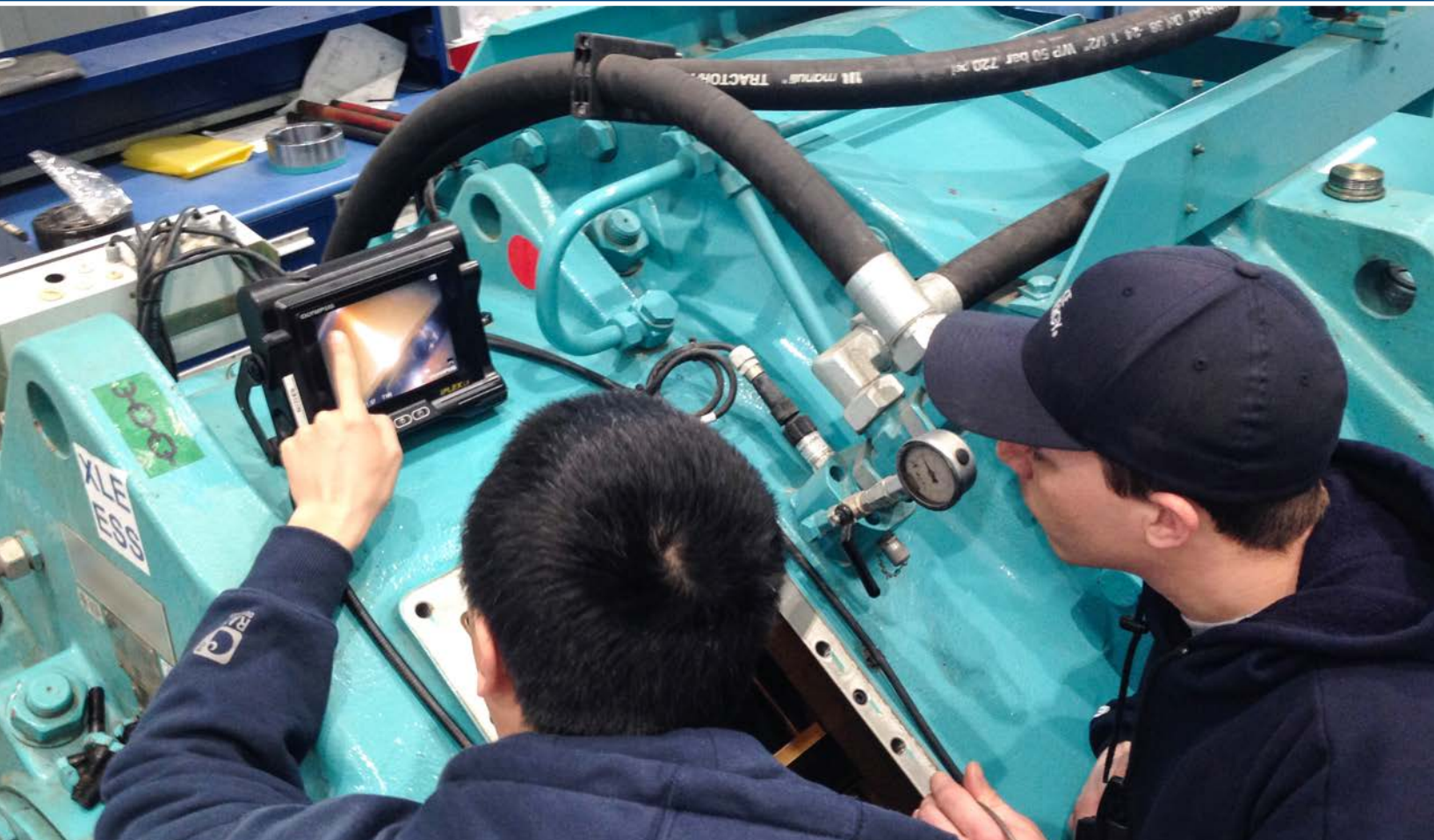
measurements and gearbox validation on test stands. He oversees the manufacturing and assembly of prototype gearbox designs. As an RCA chief investigator, he works on gearbox component failures as well as operational assessments of the entire turbine. To support wind turbine owners, Jesse specializes in onsite borescope inspections, vibration monitoring, and the design & prototyping of field solutions.



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Upon paid registration, you will receive a detailed syllabus, directions and accommodation instructions.



**Gearbox Express** is the only company in North America that is focused on providing independent, down-tower, wind gearbox remanufacturing services.

**LEADING THE CHARGE**



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EXPRESS**  
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