Inspection training pays off

The expectations of continued wind industry growth bring sustained challenges at many levels. One of these is finding the best way of expanding the workforce while maintaining safety and training standards, something that can be achieved with the correct training and support.

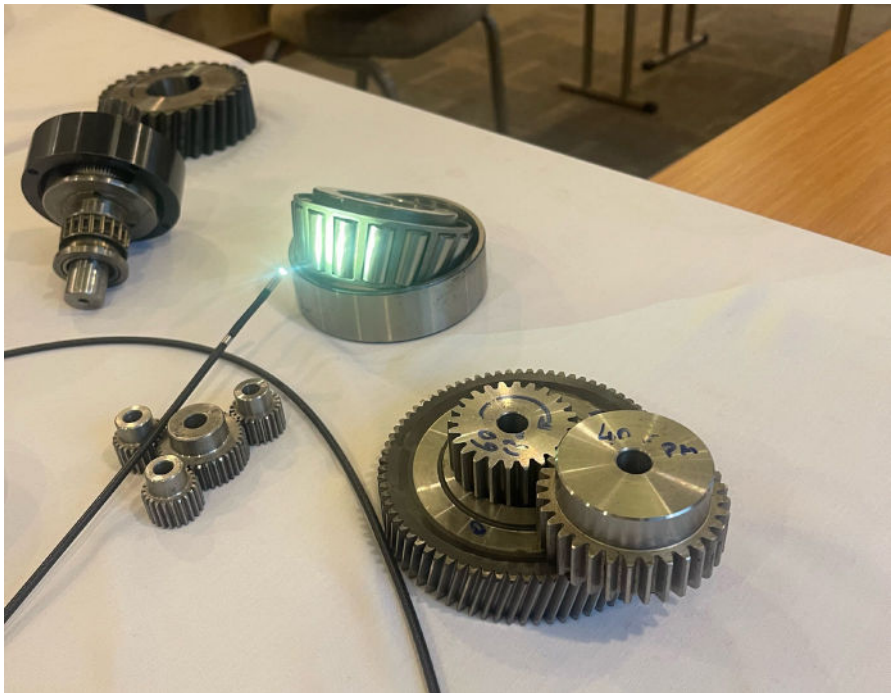
Demand for wind turbine technicians is predicted to grow over the next five years, due to the very rapid growth in onshore and offshore wind farms, as well as the need for older wind farms to be replaced or refurbished, as they come to the end of their working lives. However, for this growth to be successful, the workforce needs to expand too and the skills gap needs to be bridged.

According to the Global Wind Organisation (GWO), global onshore and offshore wind capacity is set to grow by 67% from 837GW in 2021 to 1,394GW in 2026, and a skilled workforce is needed to install and maintain this fleet safely and efficiently.

The GWO / GWEC report also indicates that more than 500,000 wind technicians will be needed by 2026 to meet the demands of the construction and maintenance of wind farms, if the world is to deliver the wind energy capacity required to meet net zero goals. This represents a 33% rise in recruitment and thus training needs for wind turbine technicians.

As a new and evolving industry, offshore wind is at risk of a 'knowledge gap' that needs to be filled. Finding and undertaking the relevant training to upskill staff quickly and effectively will make the industry more operationally efficient, help answer technical challenges, make maintenance simpler and prevent mistakes. Training is an undeniably important piece of the puzzle, particularly when it comes to eliminating the hazards of working at heights on the installation and maintenance of turbines, both on and offshore.

Wind-ON is helping to tackle the challenge of closing the skills gap in the wind sector with



comprehensive training programmes covering some of the most important aspects of turbine installation and operational maintenance inspections. The service and installation company, based in Turkey, has recently expanded its services to include on site and classroom based training modules covering Borescope Inspections and Rigging and Lifting Operations.

Owner and instructor Nihat Tonguc has been working in major operations and borescope inspections since 2010, with companies including Vestas and General Electric. Since becoming the first inspector in Turkey, he is now keen to share his experience and give others the opportunity to benefit from his training.

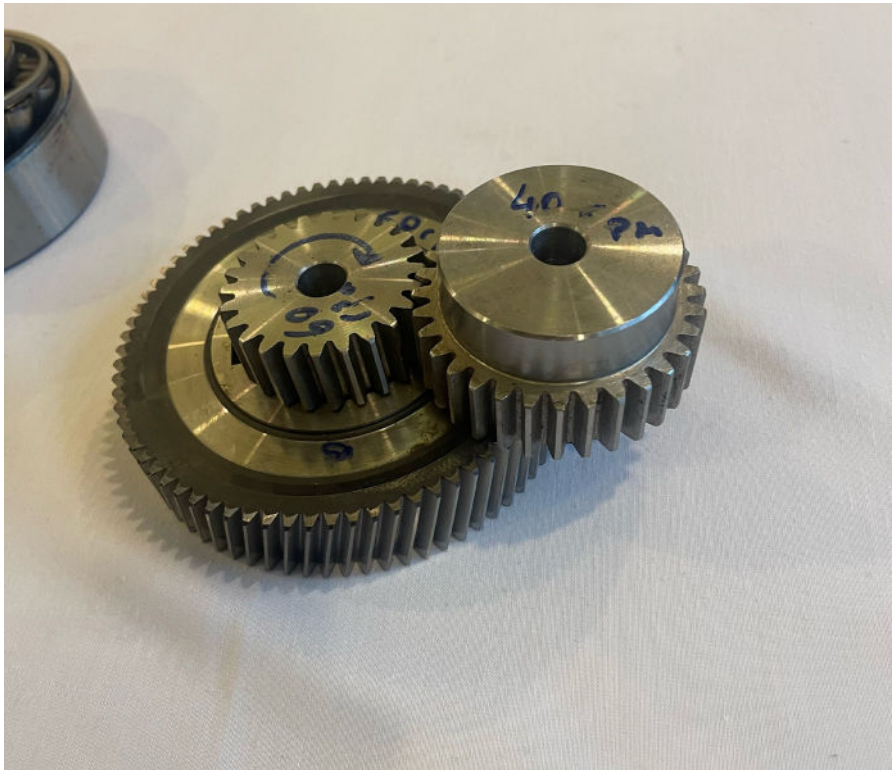
'Our expert training modules, with real demonstrations in a classroom environment, enable participants to get hands-on experience in a unique way. All our training is TÜV SÜD certified and provides in-demand skills,' comments Tonguc.

'Enabling companies to add new scope to their offering through Borescope İnspection for Wind Turbine Gearboxes, others already offering such a service can also benefit from the training, with employees being brought up to speed faster thanks to the rich content and practical exercises that give them invaluable hands-on experience in a safe, controlled environment.

'Overall, such training enables wind energy partners to strengthen the skills of their team and add value to their scopes at a very busy and exciting time of growth for the sector.'

Wind-ON recently delivered its Borescope inspection module training to a client in Poland, Wind Audit, who sent their entire site team to the Academy. From arranging the hotel accommodation and transfers from the airport, the team took part in seven days hands-on training in Turkey, performing a full inspection of two-stage two stage planetary gearboxes, including reports.

'We'd recommend the Borescope Inspection training to anyone seeking to enhance their skills in this field,' comments Wind Audit CEO Daniel Perkowski. 'We were extremely impressed with both the quality of instruction and the knowledge the Wind-ON team provided.



‘Training will be a true enabler in the scaling up of the offshore wind sector, with businesses already beginning to focus on upskilling existing talent and creating career progression pathways for employees to develop within the industry.’

‘Mr Tonguc is an expert in his field and his practical training with the device and a real gearbox was especially helpful in understanding how to properly inspect a wind turbine gearbox using a borescope. He taught our employees the fundamentals of Borescope Inspection, from reading the drawings to understanding how the gearbox works and how to get with the probe to the various inspection points.

‘Furthermore, our staff benefited from a walk-through of all the necessary steps to make an accurate inspection report. This was instrumental in helping our colleagues apply the knowledge gained from the course for our own business.

‘Our employees now have a better understanding of wind turbine gearbox inspections and are confident that they can use his knowledge in their work.’

Returning to their business in Poland, it wasn’t long before the newly-trained team shortly received enquiries for inspection batches, which they are able to provide thanks to their trained staff and ongoing support from the Wind-ON team via video calls to provide correct drawing and statement methods.

‘We are very happy to see our clients bringing a new scope to their business, and their feedback has been positive and well received by our training team,’ comments Tonguc.

Carried out at the company’s headquarters in Balıkesir, Turkey, or on site throughout the Middle East, Africa and the EU, is suitable for those new to the industry as well as for companies looking to expand their operation to cover gearbox inspections. It can also benefit wind turbine operators who need to understand gearbox reports from their technical departments and O&M technicians performing Boroscope inspections. Candidates undertaking the basic level

training don’t require any previous experience and once complete they are able to move on to the advanced level training to enhance their skills.

Simulating real-life operations in the classroom environment with 1:50 scale construction areas, complete with a scaled crane and turbine, enabling candidates to get hands-on experience to aid their learning and understanding of the systems.

Borescope training is offered at basic and advanced level, enabling candidates to take a big step in becoming an inspector in just two weeks. The training gives candidates the knowledge and skills required to perform routine and non-routine borescope inspections.

‘Training will be a true enabler in the scaling up of the offshore wind sector, with businesses already beginning to focus on upskilling existing talent and creating career progression pathways for employees to develop within the industry,’ Tonguc concludes. ‘By drawing on our own expertise in providing innovative technologies to help drive the transition to more sustainable, reliable & affordable energy systems, our training helps bridge the skills gap.’

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