


# CONVERSATION


## David DiNunzio

Wind Application Engineer  
Castrol

 /Castrol

 @CastrolB2B

 Castrol

 877-641-1600

 [www.castrol.com/windenergy](http://www.castrol.com/windenergy)



### Please give us some background information on Castrol. How did it make a name for itself in the wind-energy industry?

Castrol® has more than 25 years of experience in the wind-energy market. Its lubricants were even used in the world's first wind-energy projects in the early 1980s. The company offers the wind market a dedicated full synthetic gear oil range alongside complementary lubricant products and associated services. These include specialist-testing facilities for screening new technologies and simulating operating conditions, as well as used oil analysis, such as Castrol LabCheck and Castrol Predict, to verify long-term characteristics

and customized lubricants training for wind-farm operators. Castrol's wind-turbine-specific lubricants are chosen as the "first-fill" lubricant for some of the world's major turbine manufacturers and are recommended by many leading bearing and gearbox suppliers globally. Castrol employs over 7,000 people in more than 140 countries who are working at the forefront of advanced lubricant technology.

### What role does lubricant technology play when it comes to maintaining and operating today's wind turbines and maximizing their efficiency?

Lubricant technology can play a big role in the longevity and efficiency of wind-turbine mechanical components. Wind turbines use lower engineering design factors and operate in a wide range of environmental conditions, so we need to maximize the protection that lubricants can provide. As the wind-energy industry continues to expand, it brings with it the challenges of operating on a global scale from Central America, to the Midwest, and well up into the Arctic regions. In other countries, offshore wind turbines have demonstrated their own environmental and maintenance challenges. We continue to push the

limits of lubricant design and capability to enhance the reliability and efficiency of wind turbines everywhere. The evolution of lubricant technology enables us to meet these challenges and ultimately lower the cost of power generation.

### Tell us about the products Castrol offers the wind-energy market.

Castrol has been a leader in the American wind-energy industry dating back to the 1980s and has learned a great deal during this time of market expansion. Using that experience, Castrol has developed lubricant options for the all the turbine applications that can best match each individual customer's situation and conditions. We don't feel that one-size-fits-all is always the best approach. Our philosophy has always been to offer the best protection while maximizing the life of our lubricants. With this in mind, we have developed the unique capability to enhance product performance with uptower chemistry. Combined with our services, we strive to help our customers achieve the lowest total cost of ownership.

### What types of services does Castrol offer the wind-energy industry?

As the industry matures, our ser-

“Castrol’s wind-turbine-specific lubricants are chosen as the “first-fill” lubricant for some of the world’s major turbine manufacturers and are recommended by many leading bearing and gearbox suppliers globally.”

vice offering continues to evolve to meet the needs of our customers. We provide support and oil analysis from installation through the life of the turbine. With intimate knowledge of the formulation and fluid/grease behavior, we can also provide recommendations for means to extend the life of our oils that are guaranteed to succeed. Castrol can provide troubleshooting assistance and inspection services both on the ground and uptower. This includes generating inspection reports with photos and borescope images. We also provide support during oil changes to ensure that the new lubricants are given the best chance to succeed. In addition, we can provide training support to upskill those who seek more knowledge on tribology.

### How can industry members benefit from working with Castrol?

There are several advantages in working with Castrol here in the U.S. and abroad. We have relationships in all facets of the wind-energy industry from the OEMs and equipment suppliers to owners, service providers, and laboratories. We also are able to utilize Castrol’s global network of specialists to provide support for businesses that go beyond these U.S. borders. We have exciting projects taking place in many countries that can share best practices for the benefit of all.

### Does Castrol offer any types of training for wind-energy professionals?

Castrol has a long history of providing training to their customers in every industry, and wind is no different. I highly encourage anyone who is interested to inquire about the training that we can supply related to the fundamentals of lubrication, wind turbine applications, and oil analysis, among others. We can then take a deeper dive into bearings, gears, and hydraulics for more advanced learning. Castrol has sponsored training classes at local community colleges, our locations across the country, and on many customer sites. These classes can provide a better understanding of the surface interaction and how lubricants can help drive the reliability needed for this industry. It also shows how storage and handling can impact lubricant longevity and the routine testing that takes place. We would be glad to customize the materials to fit the scope and size of what you might be seeking.

### What can the industry expect from Castrol in the future and going forward?

The industry is growing and evolving rapidly, and we want to continue developing technology to help further the wind-energy industry. We are working on the next generation of oils and greases that address specific issues in wind. So far, we are encouraged about what we have seen

in research and development. Look for some new products to come out soon. From the services side, we have added additional resources to the field. We’re excited to get more involved with our customers, especially from an oil analysis and recommendation perspective. Please don’t hesitate to reach out to your Castrol representative should you have any questions. ↵

Stahlwille Tools is the ONLY tool company with dimensionally accurate hand tools!

**STAHLOWILLE**

**TORQUE WRENCHES**

- Super accurate scale designed for industrial applications
- Can be used as a breaker bar with no damage
- Designed to ISO 12 month calibration cycle
- Does not need to be "zero'd" after use
- Interchangeable insert heads

**MOBILE TORQUE TESTERS**

STAHLOWILLE TOOLS NA, SARASOTA FL, 800-695-2714  
WWW.STAHLOWILLETOOLS.COM

Dealer Inquiries Invited

**STAHLOWILLE**

Professional Tools made in Germany  
800-695-2714