

Optigear Synthetic Oils Deliver Long-Term Success

WIND ENERGY (CANADA)

Wind Turbine Gearboxes

Castrol Optigear® Synthetic X 320

Excellent Long-Term Gear Protection



THE SITUATION

A new wind farm was being commissioned with a total of 51 MW capacity (34 GE 1.5 MW turbines). They were initially charged with Castrol Optigear Synthetic A 320 wind turbine gear oil and ran with no issues or failures.

When the time came to change the oil, the customer sought the best oil and best support.

THE CHALLENGE

- Deliver the latest technology wind turbine gear oil to maximize gearbox and oil life
- Provide support necessary to properly change over to the new oil

THE RESULTS

- Castrol Optigear Synthetic X 320 was chosen as the best technology wind turbine gear oil available
- Castrol provided change-over procedures and on-site support during the change

THE SOLUTION

- Castrol has a strong focus on the Wind energy segment and continues to develop new technology to support long-term reliability.
- Since the commissioning of the facility, Castrol had developed a new synthetic gear oil, Optigear Synthetic X, which provides longer oil life and the best gear protection in the industry.
- Optigear Synthetic X 320 was recommended for this farm when it was time to change the initial oil charge.
- Castrol supported the change-over to ensure a smooth transition.

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RECOMMENDATIONS

Based on our strong experience in the Wind segment, Castrol was able to provide a detailed conversion procedure, which included flushing instructions. We utilized a lower priced flushing fluid called Castrol Magna 320 to minimize the conversion cost for the farm. On-site support was provided to ensure the conversion procedure was properly carried out by the service provider. Oil analysis testing was done to verify that the oil conversion on each turbine was successful.

CONCLUSION

Proper flushing and conversion to the new oil is critical to ensuring long life of the oil and gearbox. Regular oil analysis is conducted by Castrol to ensure the oil is suitable for continued service.

The long-term result at this farm is excellent turbine reliability with no gear failures related to the oil.



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