



OPT FOR CASTROL OPTIGEAR

SYNTHETIC CT

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.

 **OPTIGEAR**

CASTROL OPTIGEAR SYNTHETIC CT

ROBUST GEAR PROTECTION THAT OPTIMISES EFFICIENCY FOR LESS DOWNTIME.

INTRODUCTION

Castrol Optigear Synthetic CT 320 is a premium synthetic oil for wind turbine gears operating in wide temperature ranges and under high loads. It delivers robust surface protection and reduces gear friction.

Suited for high capacity wind turbine gears, Synthetic CT is also used for the lubrication of oil-lubricated rolling element bearings.

TRUSTED TECHNOLOGY, ROBUST GEAR PROTECTION

Castrol Optigear Synthetic CT has advanced 'ashless' technology that is proven to run up to 8°C cooler¹, providing consistent wear protection for up to eight years of oil life². In tests, it is also proven to generate up to 28% less foam³ than competitors, making it an optimum technological combination for gearbox protection.

Castrol Optigear Synthetic CT is the gear oil often chosen by operators with mixed turbine fleets or complex maintenance schedules.

CASTROL OPTIGEAR SYNTHETIC CT

How our robust gear oil lets customers take control of the levelised cost of energy (LCOE).

Almost 40% of unscheduled downtime days are attributed to gearbox failures, costing up to 200,000 USD per event⁴. This can have a huge impact on the cost of generating electricity.

Castrol Optigear Synthetic CT is proven to run cooler and generate less foam than competitors, providing robust gearbox protection³.

Lower foaming decreases gear and bearing wear, reduces cavitation and allows the oil to work optimally. Some customers have even reported oil and gears to be in a 'like-new condition' after eight years of use².

Customers opt for Optigear Synthetic CT because they can operate at maximum efficiency, simplify their maintenance schedules and minimise gearbox failures to take control of their LCOE⁵.

WHY THE WORLD'S MOST EFFICIENT WIND FARMS OPT FOR CASTROL OPTIGEAR SYNTHETIC CT

KEY CLAIMS

Castrol Optigear Synthetic CT is proven to run 8°C cooler than other commercially available wind gear oils; less heat equals less wear.

Tested and proven in both the lab and field by customers and independent experts.

Synthetic CT generates up to 28% less foam than competitors.

Less foam and less heat mean more efficient energy generation.

Almost 40% of unscheduled downtime days are attributed to gearbox failures, costing up to 200,000 USD per event.

Castrol Optigear Synthetic CT delivers less downtime because it provides greater resistance to gearbox breakdown.

Synthetic CT offers simple maintenance and less technical challenges for mixed turbine fleets.

Castrol Optigear Synthetic CT gives wind farm operators control over their levelised cost of energy.

QUESTIONS TO ASK CUSTOMERS WHEN SELECTING THE OPTIMUM GEARBOX OIL FOR THEIR BUSINESS

Does the customer operate a fleet of mixed turbines?	<input type="checkbox"/>
Does the customer operate a fleet made by a single manufacturer?	<input type="checkbox"/>
Are any of their turbines out of warranty or close to end of warranty?	<input type="checkbox"/>

WHAT FACTORS MATTER MOST WHEN SELECTING AN AFTER-MARKET GEARBOX OIL?

Oil life	<input type="checkbox"/>	Simplified technical challenges	<input type="checkbox"/>
Easy changeovers/compatibility	<input type="checkbox"/>	Gear protection	<input type="checkbox"/>
Less downtime	<input type="checkbox"/>	Controlling the levelised cost of energy	<input type="checkbox"/>
Comparison tests – in labs and in the field	<input type="checkbox"/>	Other	<input type="checkbox"/>

If the customer wants ultimate performance and has a skilled team who will manage a thorough changeover process, Castrol Optigear Synthetic X may be more suitable.

OPT FOR CASTROL OPTIGEAR SYNTHETIC CT

If you want to take control of your energy costs,
opt for the oil that minimises complexity and
maximises efficiencies.

Visit castrol.com/windenergy

Sources:

1. Sincro Mecánica Wind Oil Evaluation 2016.
2. 8 year customer field inspection (USA, 2017).
3. 3 year field trial – 2013.
4. The Wind Operations and Maintenance Report,
The Wind Energy Update, 2016.
5. Castrol Laboratory Compatibility since 2013.

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