



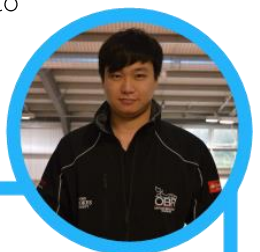
For over five years, Carter Manufacturing Ltd has been a proud supporter of Oxford Brookes Racing (OBR) Formula Student team. OBR and Carter are excited to be continuing their multiyear partnership into 2020, as OBR, the UK's top Formula Student team, transition to an electric competitor. Based in the heart of the Motorsport Valley, both sides are looking forward to another year of working alongside each other to help Oxford Brookes build a multiyear legacy as a competitive, high quality team, while working as a technology demonstrator for Carter's industry-leading bearing innovation.



Carter visiting the team in early 2020 to discuss progress and deliver the S61818 thin-section bearings for the team's all-new electric challenger.

The bearings supplied by Carter are vital in supporting key elements throughout the car, one of these elements being the all-new planetary gearbox designed in-house by the team at OBR. Sitting within a state-of-the-art Electron Beam Melted (3D printed) titanium upright, the Carter **S61818** thin-section bearings are chosen to cope with high static and dynamic loads submitted on the high-performance racecar. Each bearing must do this while being extremely lightweight and durable in this highly integrated system.

The continued support of Carter has extended beyond the bearings, with their technical support always on hand for the new generation of engineers entering into Formula Student. This includes visiting the team to highlight areas of best practise in bearing selection and installation.

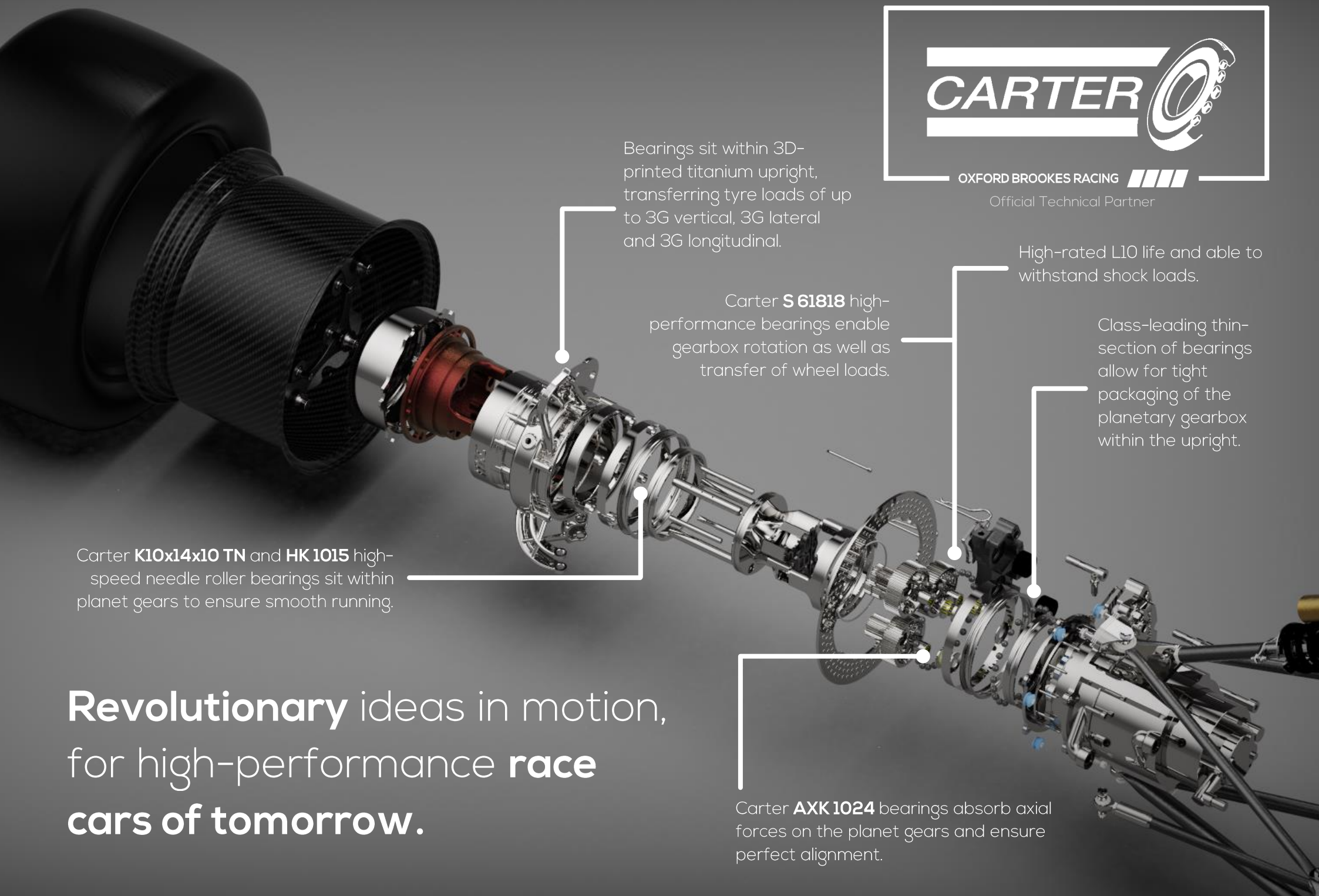


Homan Ho,  
**Powertrain Lead**

*"Carter have a reputation as a trusted supplier and a dedicated technical partner. As we make our transition to electric, we require high performance bearings that will help us in securing our competition goals and success. Thanks to Carter for their continued support, we are one step closer to achieving this success when our car is able to hit the track."*

Carter's products are used across OBR's forthcoming high-performance electric challenger, including compact **K10x14x10 TN** and **HK 1015** bearings within the planet gears themselves, as well across the car's lightweight suspension system and driver environment.

Oxford Brookes Racing and Carter are excited to continue their joint innovation and collaboration on the track at Formula Student UK 2021.



**CARTER**



OXFORD BROOKES RACING

Official Technical Partner

Bearings sit within 3D-printed titanium upright, transferring tyre loads of up to 3G vertical, 3G lateral and 3G longitudinal.

High-rated L10 life and able to withstand shock loads.

Carter **S 61818** high-performance bearings enable gearbox rotation as well as transfer of wheel loads.

Class-leading thin-section of bearings allow for tight packaging of the planetary gearbox within the upright.

Carter **K10x14x10 TN** and **HK 1015** high-speed needle roller bearings sit within planet gears to ensure smooth running.

**Revolutionary** ideas in motion,  
for high-performance **race**  
**cars of tomorrow.**

Carter **AXK 1024** bearings absorb axial forces on the planet gears and ensure perfect alignment.