

Press release

Twaron Next® helps power Brunel Solar Team 2025 Bridgestone World Solar Challenge win

Arnhem (NL), August 28, 2025 - The Brunel Solar Team has won the 2025 Bridgestone World Solar Challenge, reaching Adelaide first after a 3,000-kilometer journey from Darwin. The team, made up of 18 students from Delft University of Technology, secured its eighth victory in the event. The car ran on Bridgestone solar car tires with its ENLITEN™ technology, which included belt reinforcement made with Twaron Next® supplied by Teijin Aramid. This result highlights the strength of Dutch engineering and the role of advanced materials in enabling next-generation mobility.



© Brunel Solar Team - Hans-Peter van Velthoven

“Our role is to provide materials that enable ideas to come to life, even in demanding conditions. This challenge shows what can happen when we back the next generation of engineers with sustainable, high-performance solutions.” – Hendrik de Zeeuw, Chief Commercial Officer, Teijin Aramid

Designed to deliver under pressure

The team's winning vehicle, Nuna 13, was built with one purpose: efficiency. It weighs just 160 kilograms and runs on a custom-designed, ironless in-wheel motor that achieves 98 percent operational efficiency. Its asymmetric catamaran shape, developed through six months of aerodynamic modelling, was validated through full-scale wind tunnel testing.

“You don’t get a second chance out there. The car has to behave exactly as expected, and that only works if the systems are built to work together from the start.” – Thijmen God, Technical Manager, Brunel Solar Team

The design features two vertical fins that help convert side winds into forward motion, improving both speed and stability. The Bridgestone solar car tires with its ENLITEN™ technology were reinforced with Teijin Aramid's product, Twaron Next®. This version of Twaron® contains circular content and has contributed to enhancing the tire's performance and environmental profile.

“It’s a strange mix of relief and disbelief. You start with a concept, build it from scratch, and then trust every decision to hold up under pressure. The fact that it did is an incredible feeling.” – Daan van den Dries, Chief Engineer, Brunel Solar Team

Supporting the next generation of engineers

Teijin Aramid supported the team with high-performance materials tailored to the application. Twaron® was used in the vehicle's protective driver shield. Twaron Next®, a new, more sustainable fiber made with circular content, was also used in Bridgestone solar car tires with its ENLITEN™ technology. This marks the first industrial-scale use of Twaron Next® in a real-world application.

Teijin Aramid's support of the Brunel Solar Team is part of its broader brand platform, *Materializing ambitions*, which highlights real-world stories of engineering transformation across industries and geographies. As part of this initiative, Teijin Aramid has released a three-part documentary series, *Building Nuna*, capturing the Brunel team's journey from classroom theory to high-performance competition. The full series is available here:

<https://www.teijinaramid.com/en/buildingnuna#series>

About Teijin Aramid

Teijin Aramid is a subsidiary of the Teijin Group and a world leader in aramid production. The company's products, Twaron®, Teijinconex® and Technora®, are renowned for their excellent strength-to-weight ratio, heat resistance and wide application. Aramids are used in a variety of markets, including automotive, industry, safety and life protection, and aerospace. These high-performance and recyclable materials are produced in the Netherlands, Thailand and Japan. For more information: www.teijinaramid.com

About Teijin Group

Teijin (TSE: 3401) is a technology-driven global group with two core businesses: high-performance materials and healthcare solutions. Established in 1918 as Japan's first rayon manufacturer, Teijin today comprises some 150 companies employing 20,000 people. Teijin is committed to its Purpose, “Pioneering solutions together for a healthy planet.” Teijin works together with employees and external partners to achieve its Long-Term Vision, “To be a company that supports the society of the future.” Teijin posted consolidated revenue of JPY 1,005.5 billion and total assets of JPY 1,061.3 billion in the fiscal year ending March 31, 2025. Visit www.teijin.com

To follow the Brunel Solar Team's race journey, visit www.brunelsolarteam.com

About ENLITEN™

ENLITEN™ is Bridgestone's unique technology that evolves environmental performance, expands basic performance, and elevates all conventional performances in tires. It also pursues 'ultimate customization' to sharpen the edge in tire performance, which not only meets the apparent needs

and potential wants of the markets and customers, but also further inspires markets and customers by creating new value that they may not have imagined, according to the characteristics of diverse vehicles and usage conditions.

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End of publication and not for publication

Media inquiries/interviews

Interviews are available with both Teijin Aramid engineers and members of the Brunel Solar Team

Assets available in [media kit](https://www.teijinaramid.com/en/buildingnuna#mediakit) (<https://www.teijinaramid.com/en/buildingnuna#mediakit>)

- high-resolution photography
- car specifications
- student bios
- race footage

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