

Enabling the Future of Defence

High-Performance Carbon Fibre and Composite Materials for Mission-Critical Platforms

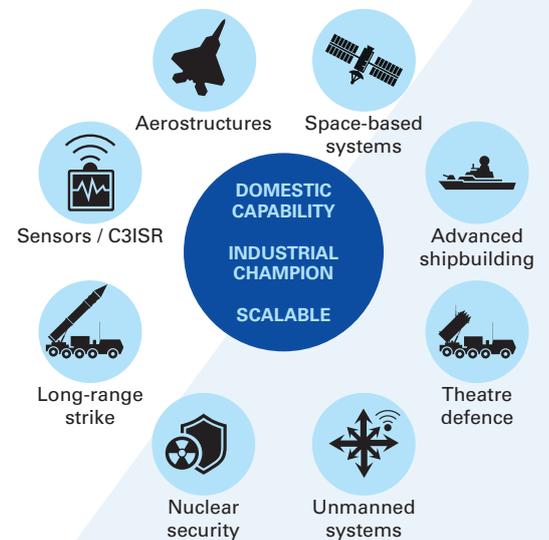


Toray is a trusted leader in advanced carbon fibre and lightweight composite material solutions. With over 40 years of proven aerospace heritage, our high-performance composite materials are integral to critical defence and missile systems across land, sea, air, and space. Our European-based, vertically integrated operations ensure security of supply, strengthen industrial sovereignty, and enable agile, scalable production to meet evolving market demands.

Advanced Material Solutions

- ▶ **Developer and manufacturer of TORAYCA™ carbon fibres**
 - Standard | Intermediate | High modulus
 - Broadest portfolio and largest capacity of carbon fibres manufactured in Europe
 - Not subject to U.S. defence-related export controls for carbon fibre manufactured in France and Japan
- ▶ **Advanced composite materials**
 - Thermoset and thermoplastic composite prepregs, uni-directional tapes, advanced towpreg, woven fabric, and laminates
 - Solutions for high-temperature | Structural | Low-dielectric | Flame Smoke Toxicity
 - Suitable for rapid processing including snap cure, out of autoclave, AFP/ATL, press moulding, CCM, and filament winding
 - Design allowables database
 - Composite tooling prepregs
 - Ancillary products
 - Film adhesives | Surfacing films | Syntactics | Lightning Strike Solutions
 - Pultruded carbon fibre rods and laminates

Technology Application Spectrum



TORAY

Innovation by Chemistry

Why Toray?

Secure, Compliant Operations

Toray ensures readiness for defence programmes and reduced programme risk with European manufactured materials not subject to U.S. defence-related export controls for carbon fibre manufactured in France and Japan. Our sites have robust IT and cyber security systems able to meet defence contracting requirements.

Unmatched Capacity and Supply Assurance

Toray operates the largest global carbon fibre and advanced composite production network, with built-in redundancy and scalability to meet surge requirements. Vertically integrated, from fibre to composite parts, we exhibit the largest capacity for carbon fibre manufactured in Europe.

Broad and Comprehensive Technology Portfolio

Our technology portfolio is broad, diverse, and grounded in deep technical expertise. Our TORAYCA™ carbon fibres represent the widest range of strength and stiffness on the market. Vertically integrated as a prepreg manufacturer, our intermediary products feature ultra-high-temperature composites and radar-absorbing materials to low-dielectric prepregs and advanced thermoplastics.

Proven technology

Our technology has been deployed across aerospace, defence, and space applications for over 40 years. Trusted for reliability and performance, when failure is not an option.

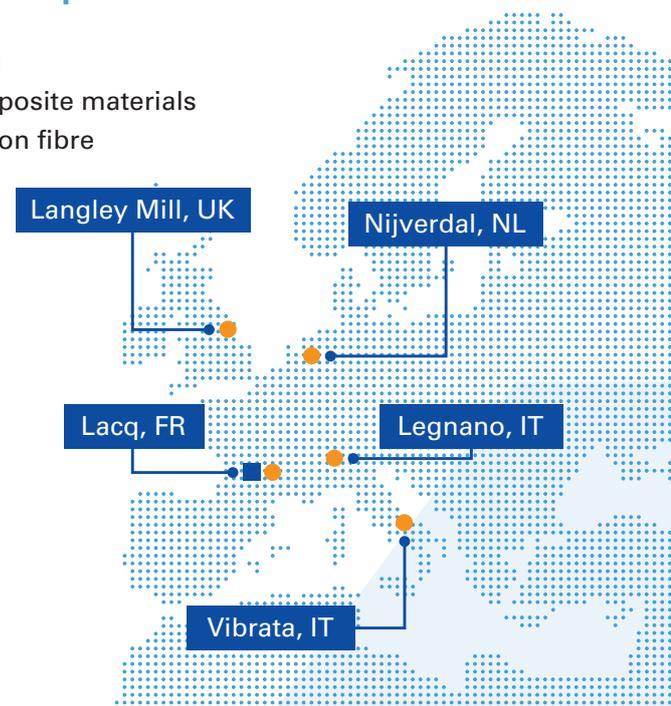
Certificates:

- ▶ **Nadcap AC7122** (non-metallic materials testing)
- ▶ **Nadcap AC7124** (non-metallic materials manufacturing)
- ▶ **AS /EN/ JISQ 9100D**
- ▶ **Cyber Essentials**
- ▶ **ISO 14001:2015**
- ▶ **ISO 45001: 2018**
- ▶ **ISO 50001: 2018**
- ▶ **ISO 9001:2015**

European production sites

Legend

- Composite materials
- Carbon fibre



Other production sites

- ▶ **Japan**
- ▶ **Republic of Korea**
- ▶ **United States**



Access detailed product information or request expert guidance

Composite materials: www.toraytac.com | explore@toraytac-europe.com

Carbon fibre and towpreg: www.toray-cfe.com | sales.cfe.mb@mail.toray

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