

Marine and defence

Calian's composites division

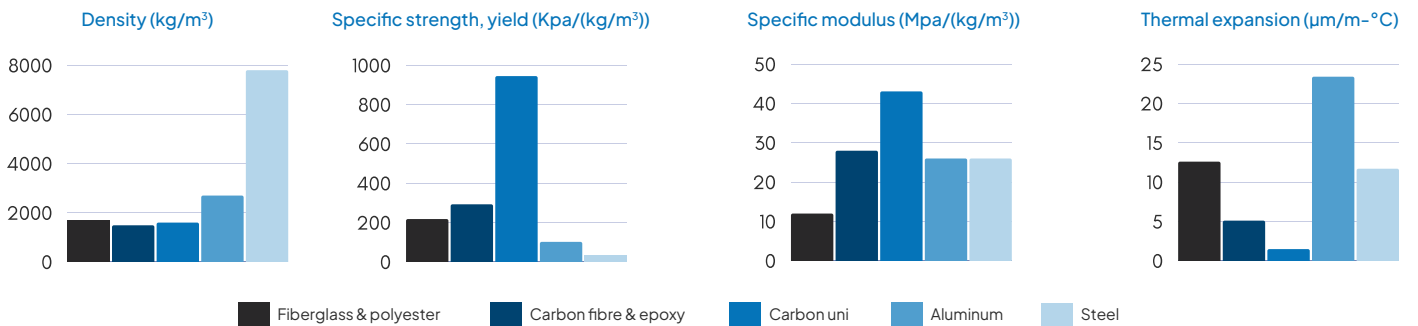
Fibre-reinforced composites using carbon fibre and fibreglass present innovative opportunities for designers. Each year composites continue to replace traditional materials, such as steel and aluminum, across many industries.

Calian has experience in the design and manufacturing of components that achieve the following benefits:

- Extended lifespan of marine and defence components
- Lighter structures to improve fuel efficiency and increase payload capacity
- Reduced emissions based on updated requirements from government offices or regulatory bodies
- Lower maintenance and repair costs
- Tailored solutions for various applications
- Ability to manufacture complex and aerodynamic shapes



Composites vs. metal



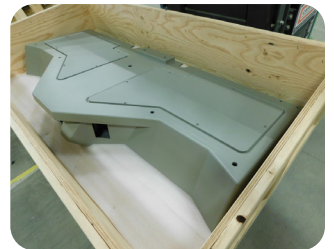
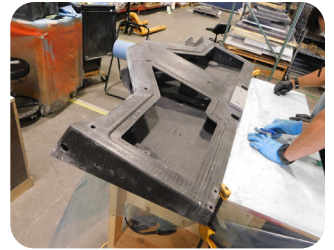
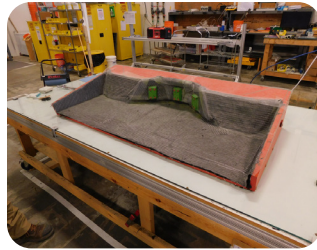
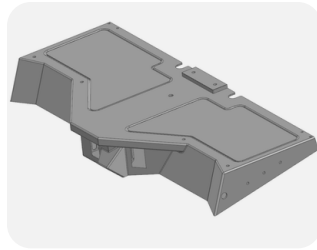
Example project: Hammerhead

The Hammerhead is a high-performance unmanned marine surface vehicle used by various navies as part of threat response training and targeting system testing. Calian manufactures the hull, deck, hatches and other internal components in order to produce a strong, lightweight vehicle for our customer. Manufacturing consistency and laminate quality are crucial to these vessels, as the components will experience exceptional G-force during deployment in the open water.



Example project: military component

This rapidly produced component below was created as a lightweight demonstration piece included on a prototype military vehicle. The entire process, starting from initial CAD design, through tooling and final manufacturing, took only six weeks. The resulting part weighed 48kg less than a comparable stainless steel component, and allowed for a successful demonstration by the customer.



Connect with us to learn about Calian.

Email us at composites@calian.com or visit calian.com/composites.



For over 40 years, Calian has delivered mission-critical solutions when failure is not an option. Trusted worldwide, we empower organizations in critical industries to overcome obstacles, manage risks and drive progress. By combining the expertise of our people, proven industry insight, cutting-edge technology, bold innovation and global reach, we deliver tailored solutions that solve complex challenges. Headquartered in Ottawa, Canada, with over 6,000 people around the world, Calian's solutions protect lives, strengthen security, foster global connectivity and drive economic progress, making a lasting impact where and when it matters most.