

Rapid prototyping

Calian's composites division

At Calian, we offer rapid prototype manufacturing services for a wide variety of composite materials. Based entirely on customer requirements, we manufacture, test and prototype products using accurate and efficient tools, machines and processes.

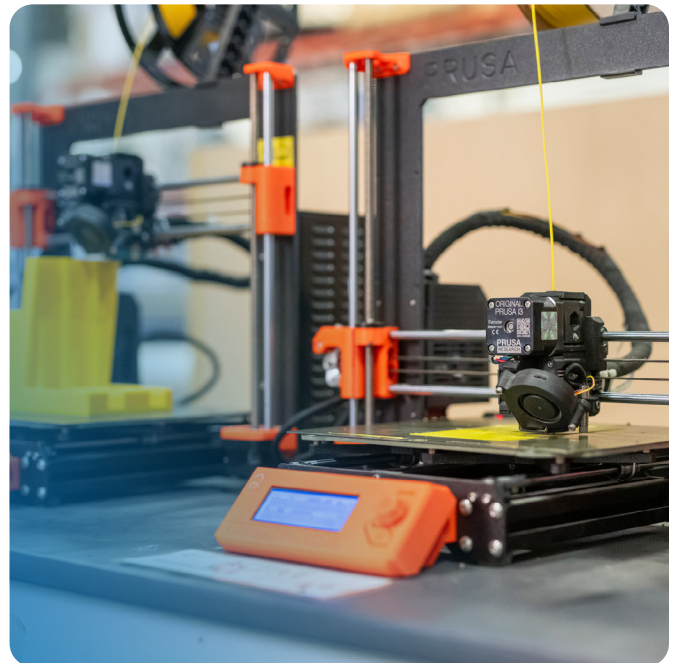
Whether it is small or large projects, Calian has all the necessary resources to meet customer needs quickly.

Benefits of prototyping

- Rapid turnaround times
- Wide range of stocked materials, including carbon fibre, fiberglass, Kevlar and various types of foam core
- Experience in seamless transitions from prototype to production volumes
- High precision and accuracy
- Customizable prototyping solutions
- Advanced 3D printing and fabrication technologies

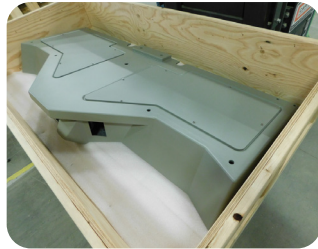
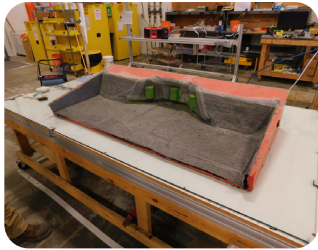
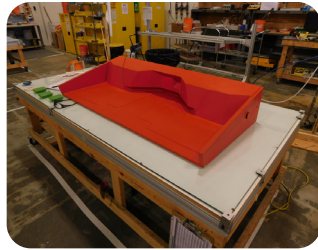
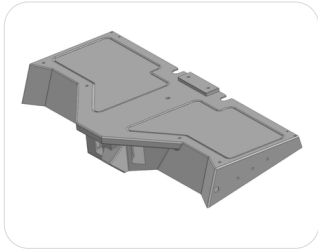
Benefits

- Accelerated product development cycles
- Reduced time-to-market for new products
- Ability to test and refine designs quickly
- Cost-effective prototyping processes
- Tailored solutions to meet specific project needs



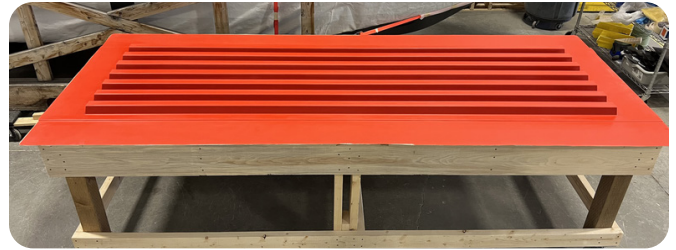
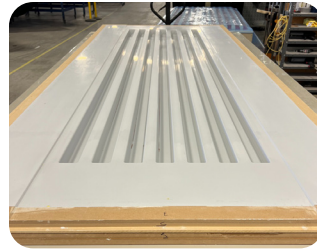
Example project: military component

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.



Example project: staggered core mold

A mold for this component needed to be created quickly and at a low cost to test and validate a concept. The first mold was produced in under two weeks, with usable parts for testing being produced in under three weeks. This mold was minorly adjusted to test variations of the component. Once a final design was determined, a fiberglass mold for production was manufactured using a CNC machined plug.



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.