

Redefining composite reliability with Ayos Composites

A partnership built on precision,
innovation, and global performance



Challenge

From aerospace to marine to high-spec automotive applications, in industries where performance can't be compromised, composite tooling demands absolute consistency and quality. Manufacturers face constant pressure to reduce risk, maintain tolerances, and deliver superior components at scale. Yet, in emerging global production environments, this is easier said than done.

For Ayos Composites, a fast-growing, dynamic, New Zealand-based manufacturer, the challenge was clear. How to ensure every composite mould meets the highest standards while scaling production internationally. With a focus on epoxy tooling to innovate complex, high-performance, carbon fibre solutions that push boundaries, and a product range extending from hydrofoils to police-grade camera gimbals and advanced aerospace projects, failure wasn't an option.

Reliability, repeatability, and technical support were critical, and previous suppliers hadn't delivered. Variability in board quality, issues with sealing, and long lead times had introduced unnecessary risk and inefficiency. Ayos Composites needed a materials partner that shared their values for engineering excellence and long-term performance.





Solution

To strengthen its position as a leader in high-performance composite manufacturing, Ayos Composites partnered with Base Materials, a long-standing, globally trusted name in advanced tooling solutions.

At the core of the collaboration was a shared ethos: to reduce manufacturing risk while pushing the boundaries of material performance. Ayos Composites began incorporating Base Materials' epoxy tooling boards into their workflows. The switch was more than a product upgrade; it was a strategic decision to de-risk their entire moulding process, reduce wastage, and improve turnaround times across both prototyping, pre-production and small production runs at their head-office in New Zealand and large-scale production projects at their manufacturing facility in the Philippines.

Thanks to the consistency and machinability of Base Material's epoxy tooling boards, Ayos Composites could deliver tighter tolerances for complex multiple part assemblies and maintain structural integrity for aerospace applications. With local on-the-ground support provided through Base Materials' distribution partner, Innovate Composites, based in Auckland, New Zealand, supported by Base Materials technical team, Ayos Composites could focus on engineering and execution rather than troubleshooting material issues.

Looking ahead, the partnership is helping Ayos Composites explore new frontiers, with materials being used in space prototyping projects, further reinforcing their reputation for working at the cutting edge of innovation.

Base Materials' partnership with Ayos Composites showcases how combining deep industry experience with trusted, high-performance materials can unlock innovation on a global scale.

“Working with Base Materials gives us peace of mind. Their tooling boards are consistent and reliable, and their support removes so much of the guesswork from our process. It’s a partnership built on trust, and it lets us deliver world-class composite parts without compromise.”

ANDY ELLIOTT

Managing Director, Ayos Composites