



ADDING VALUE

Our key values that embody the Solico identity and brand:

- Committed
- Independent
- Fit for purpose

These values give our team a shared purpose that we all work towards and embody.



INTRODUCTION

Founded 35 years ago, Solico Engineering is Benelux's largest composite engineering company, and proudly supports market leading composites manufacturers across a broad spectrum of Maritime, Defence, Civil & Architecture and Industrial markets.

Always independent, and focused on smart, fit for purpose design, we commit to add value to every project we engineer.

WHAT WE DO

Advanced Composite Engineering

Absolute independence allows Solico to consider all material and production process options, quickly shortlisting the most logical possibilities for your project. Our experience in delivering over 4000 engineering projects, and a vast network of multi-disciplinary partners, help us anticipate potential challenges and keep your project moving.

Concept design is the stage in every project where we evaluate design options. We make sure that every design is safe, feasible and future proof, getting to that Go/No-go decision quickly and with the least amount of resources.

Detail verification is the time to define a thousand details: production methods, weight estimates, cost estimates and many more. We leave nothing to chance and, by understanding your industry and application, Solico understands when to optimize for weight, and when to optimize for cost.

Design for production requires an engineering team that knows production. Solico engineers regularly visit manufacturing companies to upgrade their knowledge and experience, ensuring we can help select the perfect partners for production.

Second opinion sometimes it can be useful to look at the problem with a fresh perspective. Whatever the stage of your composite project, Solico is there to support you with a practical and to-the-point view of how to move forwards.

Material Testing

Solico has its own, fully equipped, in-house laboratory dedicated to testing FRP composites. Solico's test facility provides an invaluable resource for customers, supporting production approvals from class societies such as Lloyds register, and also for Solico's own engineers, who use the lab to continuously enhance composite material databases and validate simulations.

Composite samples can be mechanically tested using a wide range of industry standard ISO and ASTM tensile, compressive and shear test methods whilst detailed material compositions can also be determined using an incineration furnace and digital scanning calorimeter (DSC).

Read more in our <u>Material Testing Brochure</u>

On-Site Support

When the project is particularly complex or will run for many months, we have seen that the collaboration between production and design teams becomes more efficient when our engineers are on-site more frequently.

Depending on the specific requirements, our engineers can be present once or even multiple times per week.











Defence

For composite engineering in Defence applications, Solico works in a secure environment with screened employees. With 35 years of experience and a huge multi-disciplinary network enable Solico to support large defence programs and ensure a fast turn-around time for each project.

Solico has worked on interior modules, underbelly blast panels and doors for a wide range of military vehicles. Lightweighting with composites not only increases speed and maneuverability of these land forces vehicles, but also provides design options to increase their personnel, payload, protection or equipment capacity.

At sea, for both surface vessels and submarine craft, Solico engineers lightweight composite structures and components that reduce weight, improve speed and increase stability. Furthermore, Solico has extensive expertise in low signature applications including high speed composite propellers, sonar domes, and radar masts, as well as a deep understanding of military design considerations such as Undex, RCS, ballistics, EMC and blast requirements.







Maritime

Maritime projects are closely interwoven throughout the company history, with Solico having engineered thousands of superyacht, small craft and commercial vessel structures since the company was founded in 1990. Working with leading shipyards, custom yacht builders, series production boat specialists and marine component manufacturers, Solico's expertise covers the entire vessel from stem to stern.

Masts, booms, doors, deck hatches, superstructure components and radar masts are just some of the specialities Solico engineers for large motor and sailing superyachts. Commercial vessels, ferries, small boats and the latest generation of foiling and non-foiling electric boats are also becoming more regular projects for the maritime business unit.

Solico has recently launched a new program to significantly increase efficiency and reduce lay-up time in high-rate marine production by offering 2D kitting files to customers who wish to CNC cut and mark their own dry fabric and core material kits.







"成功"的"政治"的"特别"

Civil & Architecture

Composite materials can be moulded into almost any shape and form, as well as providing architects and civil engineers with a host of additional benefits including reductions in weight and installation time on site, improved corrosion resistance, greater fatigue performance and extended maintenance schedules.

From pedestrian bridges and aquaducts to roofs and complete building facades, Solico has engineered a massive range of composite structures for civil and architectural projects, supporting leading composite manufacturers with detailed engineering analysis, structural verification, production design details and coordination with external consultants & subcontractors.

Solico's expertise with large composite structures for civil and architectural markets is complimented by a deep understanding of the reaction to fire requirements for different structures in this field of application. Whilst completely independent in terms of materials and process, Solico is able to discuss potential solutions for key US, UK and European fire safety standards.







Industrial

Lightweight, strong, stiff and resistant to corrosion, composite materials provide a host of benefits versus more traditional materials for the industrial sector. Solico provides an initial, independent viewpoint when considering the viability of using composites and, if the advantage is clear, offers a full service engineering support to optimize the structure for production.

From massive flue gas duct components where even a tiny reduction in part thickness can realise material savings measured in tonnes, to detailed simulations for a new composite ankle foot prosthesis, Solico has the expertise to deliver the smartest engineering solution.

For manufacturers of composite silos, vertical and horizontal tanks, Solico has developed its bespoke Amphora software to calculate and optimize construction variables according to the EN 13121 standard. Amphora is quick and easy to use – allowing customers to input their own materials database and rapidly create a fully compliant technical report for each tank or silo project.



Working With Solico

At Solico, our team is the foundation of our success. We are often on the lookout for new engineers, with our consistent growth over the years creating a variety of roles for both new graduates and more experienced engineers.

Working at Solico, one thing you can be sure of is that no two days are alike. One day you could be working on the latest in composite medical prosthetics, and the next day your engineering skills could be helping to develop safer military vehicles. Always working towards the smartest engineering solution, you can be sure that the rest of the team are there to back you up.

We believe strongly in building careers in composite engineering, and that in composite engineering, you never stop learning. Solico creates bespoke learning and training programs for every employee through its Solico Academy initiative, providing mentors, time and resources to build an ever stronger team.

Get in touch at careers@solico.nl to know more about our latest vacancies.

References

What makes us successful? Ask our customers! We are proud to have partnered with some of the world's leading composite manufacturers. Here are just a few of our client references:























































































Poly Products
Maatwerk in composieten



















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