CASTRO
COMPOSITES

TRAINING COURSE

ON CARBON FIBRE COMPOSITES

100% PRACTICAL INTENSIVE PROGRAMME

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What is a composite?

A composite is a material composed of a matrix (resin) and a reinforcement fibre (glass, carbon, aramid, etc.), which combined acquire high mechanical, chemical and aesthetic properties.

These are very strong and lightweight materials that are extremely useful for manufacturing a multitude of parts in many industrial sectors.



In which sectors are carbon composites present?



Composites are present in many of the objects that surround us and very significantly in the industry at almost all levels. It is difficult to find any sector in which composites are not involved in some way or another.

Below are the main sectors where we find the Composites:

- **Marine**: manufacturing of all kinds of high-end recreational boats, competition and military.
- **Aeronautics/Aerospace:** manufacturing of numerous parts for commercial and military aircraft, UAVs, and USVs (wings, flaps, fuselages, cabins, interiors, etc.).
- **Renewable energies**: manufacturing of blades, spars, etc. for wind or underwater turbines.
- **Automotive:** manufacturing of bodies and chassis, interiors, roofs, doors, etc. in competition and military vehicles (cars, off-road vehicles, motorcycles, etc.).
- **Construction**: manufacturing of pipes, beams, roofing elements, bridges, etc.
- **Sports**: manufacturing of canoes or kayaks, skateboards and skis, etc.
- **Urban and domestic furniture.**
- **Others**

Who is our course aimed at?

- **Employees of any company related to Composites**. The courses are designed to be taken by personnel with low technical qualifications up to even production or technical area managers who want to reinforce or expand their practical knowledge.
- **Individuals or independent professionals with a desire to start a new business or career who want to access this sector with an in-depth knowledge of the materials and the processes related to Composites.**
- **Technicians from research and R&D centres**, who wish to train in the production techniques used in Composites, as well as study the properties of new materials and manufacturing processes.
- **University and vocational training students** to whom a future-oriented education is to be provided.
- **Postgraduate students**: architects, technical architects, industrial engineers, aeronautical engineers, naval engineers, chemists, etc.
- **Unemployed individuals from sectors involved in Composites**,- or from other sectors–who wish to gain a professional qualification oriented towards new technologies.



More than 1,200 trainees from over 45 countries endorse us!

Practical Content

In this fully practical course, trainees will learn about the manufacturing processes used to produce carbon fibre parts and moulds for high-performance applications (aeronautics, automotive, marine, wind energy, etc.). The characteristics and main properties of these materials and their manufacturing processes are studied.

To provide an overview of these applications, we will also make a small part (the blade of an underwater generator) by hand lay-up, as well as the front nose of a sports car, manufactured by vacuum infusion with carbon fibres in a sandwich structure.

Trainees will learn to manufacture cosmetic carbon parts using prepregs and infusion, a carbon-epoxy composite mould by vacuum-consolidated hand lay-up, and a hollow tubular car spoiler using structural carbon prepregs from SHD Composites.

Different monolithic and sandwich test laminates will also be manufactured to analyse the importance of reinforcement orientation and core selection in improving resistance to bending, torsion and shear.

We will study structural methacrylate adhesives for carbon-carbon, carbon-metal, carbon-plastic and carbon-to-other-composite joints.







Tuesday

Practical Content

- Chemtrend semi-permanent release agents.

- Manufacture of the two shells of a small underwater generator blade using Resoltech 1070/1077 transparent epoxy resin with a UV filter. Twill and biaxial carbon fabrics are used.



- Manufacture of a rear boot spoiler in a sandwich structure with 2 mm Millifoam foam, using structural prepregs.





Wednesday

Practical Content

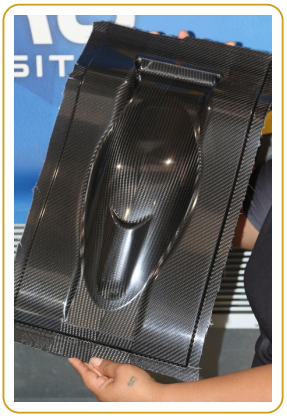
- Manufacture of the nose of a Le Mans-style sports car using carbon fibres and different cores to build a sandwich structure with Crestapol 1260 urethane-acrylate resin. The vacuum infusion technique will be used.



- Manufacture of cosmetic exposed-carbon parts using SHD prepregs. We will make small aircraft, car bodies and face masks.







- Bonding the two carbon underwater generator blade shells using Crestabond M1-20 methacrylate adhesive.

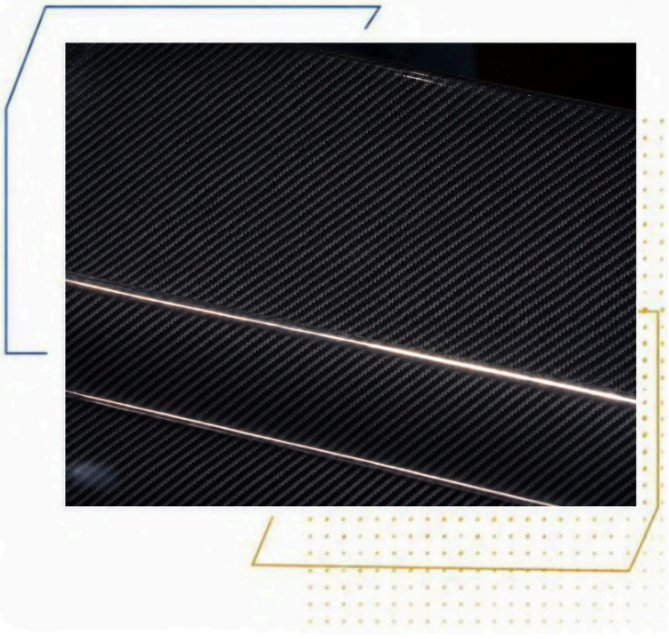
Thursday

Practical Content



- Manufacture of an exposed-carbon guitar case lid by vacuum infusion, using epoxy resin with plain-weave, twill and biaxial (NCF) carbon fabrics and 2 mm Millifoam PET KER 80 GR-2.0 foam.

- Casting high-compressive-strength, low-density Resoltech 2080M25 foam inside the underwater generator blade mould.



Friday

Practical Content

- Preparation of different monolithic and sandwich laminate test specimens to study laminate strength according to carbon fibre orientation. Analysis of the manufactured specimens: the importance of fibre orientation and sandwich structures.

- Manufacture of a small carbon fibre master model for mould making on a glass-fibre composite mould, using pigmented, spray-applied VI5090 tooling gelcoat and epoxy resin.

- Demoulding and study of the parts made during the course.



Where are our training courses held?

Castro Composites has excellent facilities covering more than 1,200 m² in the Areas Industrial Estate in Tui (Pontevedra, Spain), with fully equipped training rooms for practical demonstrations. We also offer training at our clients' facilities, with tailored proposals to meet their needs.



Who has benefited from our training courses in recent years?

1. **Client companies of Castro Composites** involved in any of the sectors described above, such as: Skydweller (Aeronautics), RFA (Rocket Factory), Iceye Spain (Aerospace), Asea Brown Boveri (ABB), King Agro (agriculture), Ubitech, Sociedad Andaluza de Componentes Especiales (S.A.C.E.S.A.), EUROCOPTER SPAIN (Rota base, Cádiz), BTREN Bombardier (trains), PATENTES TALGO (trains), TRETY (Automotive), TEKPLUS (UAVs), AMORIM (Core Cork Manufacturer), INGEMAT (Engineering in Composites), TALIO Engineering, Astilleros Cata, Zyvax (Release Agent Manufacturer), Constructora Eshor, Transformados Ocaña (wind, construction, automotive, etc.), ACCIONA BLADES (wind), Grupo PSA Peugeot-Citroën (automotive), COMINDEX, GURIT SPAIN (pre-impregnated manufacturer), Grupo Navec (chemical sector), Viesgo Energía, Marine Instruments, Mondraker (carbon bicycle manufacturer), ENAER (National Aeronautics Company of Chile), National Aeronaval Service of Panama, Edge Autonomy Letonia (drones), etc.

2. **Public organisations** such as the University of Vigo (School of Industrial Engineering and the School of Technical Engineering), University of Navarra, the Polytechnic University of Madrid, Polytechnic University of Catalonia, University of Temuco (Chile), Vocational Training Xunta de Galicia, etc.

3. **Technological centres**: Automotive Technology Center of Galicia (CTAG), AIMEN Technology Center, AITEX, CTM Technology Center Foundation (Manresa), Gaiker Foundation (Vizcaya), Galician University Business Foundation, Cidaut Foundation (Valladolid), Ascamm Foundation (Barcelona), CEDER-CIEMAT (Center for Energy, Environmental and Technological Research) of the Ministry of Economy of Spain, Prodintec Foundation (Asturias), etc.

4. **Individuals or freelancers:** starting a business project or seeking professional development.

What is the duration and schedule of the course?

4 intensive days, Tuesday to Friday.

Schedule:

8 AM-3 PM

Classes will commence promptly at 8 AM. Please note that the start time cannot be delayed to accommodate late arrivals.

What is the price of the course?

€999 per trainee + VAT

VAT exempt for businesses in other EU countries with a valid VAT number.

The price includes coffee and a mid-morning snack.

Spanish companies may subsidise the course through Fundación Tripartita (FUNDAE). This funding is not available to private individuals.



More information:

https://www.bonificatucurso.com/centros/resinas-castro

When is the course held?

16-19 February 2027

4 intensive days, Tuesday to Friday.

Schedule: 8 AM-3 PM

€999 per trainee + VAT

VAT exempt for businesses in other EU countries with a valid VAT number.

How to register

To register for the course, contact us via WhatsApp or email. We will send you the registration form and the additional information you need to complete your registration.

Contact via WhatsApp

+34 604 017 483

Email

mkt@castrocomposites.com

Recent courses






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The Composites course by Resinas Castro, led by Alejandro and his expert team, is outstanding in every aspect. It focuses on the key theoretical knowledge required to understand the use of composites. The course is intensive in hands-on practice using a wide variety of products and technologies. It is thorough in sharing experiences and details that must be taken into account in order to achieve high-quality parts. Energetic, motivating, and generous in the way Resinas Castro shares the extensive knowledge accumulated throughout its history and interaction with clients. Taking this Best-in-Class course is an investment that guarantees both success and satisfaction. Congratulations to Resinas Castro for offering such a complete and essential course for companies and individuals interested in composites.

EMILIO ESTEBAN

GURIT - Global operations manager



Never has a company slogan been more accurate: "We enhance your skills." And if you didn't know you had them, they help you discover them. From the very first phone call, I felt warmly welcomed by this company. It has been the best money I have ever invested in training: outstanding knowledge of products and methods, excellent documentation, and highly generous practical sessions in terms of both materials and dedication. But if I had to highlight one thing, it would be the support and guidance they continue to provide after the course, because some things simply cannot be measured in money. In times like these, that means a great deal. And something very important to me, from a gender perspective: treatment that goes far beyond excellence.

IRANZU ZORZABALBERE

Uznari Kayaks



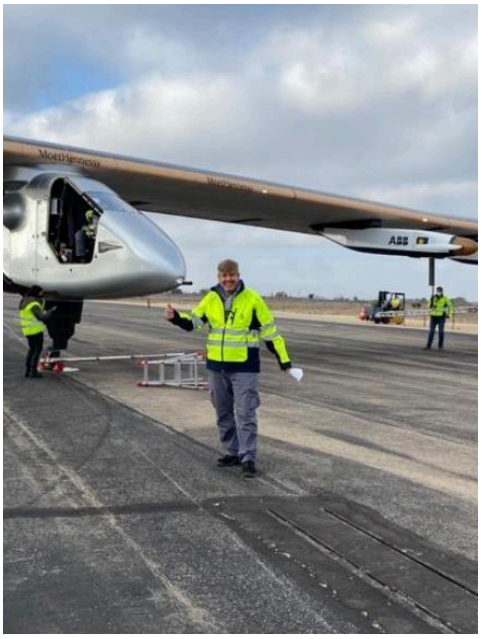
Our Skydweller team had the opportunity to take part in a specialized carbon fiber course taught by Castro Composites.The course covered in detail the different types of resin combinations, their compatibility with carbon, glass, and aramid fibers, as well as manual lamination, infusion, and prepreg techniques.

The theoretical part was clear and well-structured, with in-depth explanations of the mechanical and chemical properties of each material.One of the most valuable aspects was the hands-on session, where we had the opportunity to work with different resin formulations under real application conditions.For the Skydweller team, this course was especially relevant, as we work with high-performance aerospace structures.

The knowledge gained will enable us to refine our manufacturing and maintenance techniques for critical components, ensuring greater efficiency and performance in our operations. Additionally, interacting with Castro Composites experts provided us with new perspectives and innovative solutions for applying composite materials in our projects.This experience was key to strengthening our knowledge and skills in the application of advanced technologies for the manufacturing and repair of composite structures in the aerospace industry.

The course at Castro Composites exceeded our expectations in terms of technical content, quality of teaching materials, and hands-on experience.We would like to thank Alejandro Castro and his instructors for their professionalism and for delivering top-level training that will have a direct impact on the quality of our work.

RAFAEL SIGNORELLI ***Skydweller***



The carbon fiber specialization course by Resinas Castro was decisive in helping us professionalize our trade within the company. After spending a long time learning on our own, running tests, and developing products, being able to discuss our questions directly with the experts at Castro Composites gave us the final push we needed to enter a truly professional environment where quality standards are extremely high.

URKO LARRAÑAGA
123sonar

A well-known saying goes: "Power without control is useless." In the same way, no matter how much enthusiasm and determination you may have, without proper learning your project will hardly succeed. In this regard, the Castro Composites Materials Course laid the foundation for channeling all that energy in the right direction. With solid, high-quality training, the path became much easier. After many months of self-teaching, I decided to take a composites materials course. Just one day into the course, I realized how much time, effort, and money I would have saved if I had done it earlier. If, like me, you want to make a living from composites, training is essential. I will always be grateful to the Castro Composites team.



DAVID SEGADE FREIRE
Karbonius Composites

In 2016, combining my passion for aeronautics, emerging technologies, and the expansion of the agricultural industry, I saw a business opportunity in the development of an unmanned aircraft for aerial application.

Seeing that the aeronautics industry in general was increasingly shifting towards construction with composite materials, I decided at the beginning of 2017 to look for a course that would allow me to delve into the knowledge, handling, and characteristics of this technology.

After conducting an internet search and defining the alternatives based on location, date, language, and content of the available courses, I wrote to a couple of companies. After receiving the kind response from Chola Araujo, and given that they had a specific course on Carbon Fibre and Pre-impregnated, I decided on Castro Composites.

The truth is that I can only say good things about the course, and it positively surprised me in many aspects:

The organisation, resolving accommodation and meals at reasonable costs for the circumstances. The transfer from the hotel to the Castro Composites facilities.

***The theoretical lectures** in the hands of the owner himself, Alejandro Castro, extremely passionate, with knowledge not only vast but also permanently updated.*

***The printed notes** that were given to us, a very complete and didactic summary of much of what we saw, still serve me today as a help for any doubt that arises when putting the knowledge into practice.*

***The lunches and snacks** of high quality, abundance, and variety (far above what was expected).*

***The variety of practices**, which allowed us to see that all those incredible products you see in photos, and that seem like they are from NASA or a leading global factory, are within our reach with the appropriate knowledge and materials.*

***The abundance of materials and equipment** that were provided to us so that each of us could carry out various practices, often even based on our own desires to learn and experiment.*

I was surprised by the commitment of Alejandro Castro and his friendly team to the group's learning. And I found it very interesting that in addition to the courses, the company is a supplier of inputs for this industry, which means that they are not only very up-to-date with advances and news regarding new materials, but they can also recommend specific solutions based on the available materials or even obtain materials based on the client's needs.

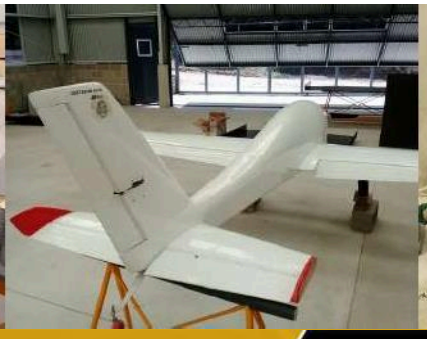
I must say with pleasure that after the course I kept in touch with Alejandro, I even made a significant purchase of materials from him for this project, and I have always been able to count on his advice for specific inquiries with the willingness to provide solutions in a completely selfless manner.

In summary, the course at Castro Composites exceeded my expectations, and made every Euro invested in it worthwhile, not only leaving us with valuable knowledge but also opening a door with a supplier/friend, who is up to date and can advise and provide us with everything traditional and new.

SANTIAGO LANDI
Grupo Euro

Unmanned aircraft for field spraying work carried out by Grupo Euro






CASTRO
COMPOSITES



RESINAS CASTRO S.L.
Pol. Indust. A GRANXA, 3ª paralela, C/ Cies 190
36400 O Porriño - Vigo - Pontevedra

Teléfono: 986 342 953

Coordenadas: N 42.11343° W 8.61786°

