



# Headquarters Manufacturing

# **NZ FACILITY**

In Auckland, New Zealand, our headquarters purpose-built 2000sqm factory, established in 2010, meeting our diverse manufacturing needs.

Humidity & temperature controlled

# Clean Room

C-Tech has a world class 600sqm high stud positive pressure, humidity and temperature controlled clean room. This infrastructure for our Pre-preg work has increased capacity for production as well as further improving the quality of the manufacturing processes.



Subtractive Manufacturing

# 5 Axis CNC Router

Our Routech R200 5 Axis CNC router is used to machine foam cores, moulds, jigs, prototypes, 2D and 3D sheets and complete post production processing in house.

XYZ bed size: 5.5m x 1.5m x 1.0m



Custom Built

# **Roll Wrapping Machines**

C-Tech has a range of custom built roll (also known as mandrel) wrapping machines. The wrapping machines improve quality of laminate consolidation and can handle tubes up to 1200mm in diameter, 15m long.



Temperature & pressure controlled

## **Autoclave**

C-Tech's pressure and temperature controlled autoclave can cure components up to 15.3m long and 1.44m in diameter in one piece.

Max Internal Length:	15.3m
Max Internal Diam:	1.44m
Max Temperature:	180°C
Max Pressure:	7 ba



Eastman S125

# Plotter

Eastman S125 Pre-preg cutter/plotter.

Flatbed size: 10m x 1.5m





# SPAIN FACILITY

Located in Cabanes, Castellón, our new expansive 2205sqm factory, with an additional 700sqm yard, offers limitless possibilities.

Humidity & temperature controlled

# Clean Room

C-Tech Europe has a world class 555sqm high stud positive pressure, humidity and temperature controlled clean room. This infrastructure for our Pre-preg work will continue to increase capacity for production as well as further improving the quality of the manufacturing processes.



Custom Built

# **Roll Wrapping Machines**

C-Tech Europe has a range of custom built (NZ replicas) roll wrapping machines (also known as mandrels). The wrapping machines improve quality of laminate consolidation and can handle tubes up to 300mm in diameter, 13m long.



Temperature & pressure controlled

## Autoclave

C-Tech Europe has a pressure and temperature controlled autoclave can cure components up to 13m long and 1.5m in diameter in one piece.

Max Internal Length:	13m
Max Internal Diam:	1.5m
Max Temperature:	120°C
Max Pressure:	5 bar



Material Processing

# **Pre-preg Cutting Machines**

C-Tech Europe has slitting and 2D cutting machines to accurately process prepreg materials ready for lamination.



25yrs

97

1000+

# **Manufacturing Processes:**

capabilities with our plotter, CNC

machine, tools & pattern cutting mean

we can provide an end-to-end solution.

both our New Zealand and European facilities. We employ proven techniques, such as mandrel wrapping and female moulding, with our custom tooling. Our commitment to excellence is further amplified through oven and autoclave curing, ensuring strength at its core. Every component undergoes meticulous assembly, painting, and finishing detailing, culminating in products that exemplify our dedication to quality. to quality.



#### Our Services Composite Part Production **Product** Manufacturer **Development &** Our facilities are set up to provide a steady, consistent, reliable production **Prototyping** specialise in manufacturing run of composite parts. Handling both premium custom carbon fibre parts. We small and large production runs for keep up to date with the latest materials Our team are experts in composite customers including the manufacture of and technology to ensure our customers materials and manufacturing, turning OEM (original equipment manufacturer) receive the best solution for their needs. your ideas into reality. Our experience parts. QC is a huge priority to us, ensuring in product development and production our products are of the highest standard. across an array of manufacturing **CNC Machining** methods will ensure your project is on Design & the right path, saving time and costs. & Tooling Engineering Manufacturer Our design team have an innovative We use high durability composite practical mindset, engineering tooling for all of our projects. Our

## Industries We Service

skills and extensive knowledge of

composites that we have used to

range of

engineer products for

applications.

successfully

a diverse

experts can support virtually any performance-lead carbon fibre project.



# **Materials**

C-Tech processes over 30,000sqm of Pre-preg fibre each year. We use the latest materials available to satisfy the customer's mechanical, chemical and heat requirements.



#### Pre-Prea

#### Fibres:

- Carbon
- S-Glass
- E-GlassKevlar

#### Resin Systems:

EpoxyPhenolic



#### Core Materials

#### Machined In-house

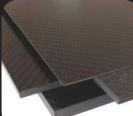
- Honeycomb
- Foam



#### **Tooling Materials**

#### Machined In-house

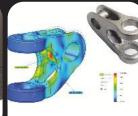
- Aluminium
- Carbon
- Tooling
- Board



#### Carbon Plate

#### Machined In-house

 Autoclave cured carbon fibre plate



#### Metals & Alloys

#### Machined, Printed, Integrated

- Titanium
- Alumium
- Steel

# **Surface Finishes**

Designed to make your composites corrosion resistant, UV protection and aesthetically pleasing, C-Tech provides finishes sustaining the long term appearance of composite products.



#### Standard

Unidirectional or Cloth Finish

Glossy, unidirectional (spiral wound), cloth (woven or twill weave) effect.



#### Clearcoat

Unidirectional or Cloth Finish

Smooth, clear and glossy cloth or uni finish.



### Sanded

Unidirectional or Cloth Finish

Sanded finish ready for painting or gluing, cloth or uni option.



### Peel-ply

Unidirectional or Cloth Finish

Textured finish designed as a gluing surface. It can be used inside tubes to create a gluing surface in areas that are hard to sand. This finish also provides a good grip on tubes either cloth or uni.



#### Painted

Unidirectional or Cloth Finish

Sanded and painted, giving a high gloss and the best UV protective coating and a high quality finish. We can offer any colour that is commercially available for spray painting.



We design and manufacture world-class carbon fibre tubes for a huge range of uses.



# **Our Locations**





Trusted by 1000+ companies around the world to supply premium carbon fiber solutions.















# **GLOBAL**



Alex Vallings

"Ginge" has been a key innovative figure in the history of New Zealand's skiff sailing development and is well known by those at the top of international sailing. His strong knowledge of material properties and drive to innovate led to the development of C-Tech's reputation as a company that manufactures superior, high-quality composite products.



Lyn Holland

Lyn has been with C-Tech since 2001 when she merged her own software company with C-Tech. She is a keen sailor and has a background in software development, librarianship and administration systems. C-Tech is heavy on data and details, Lyn keeps C-Tech's data management up-to-date with the rapidly evolving IT landscape.



Chris Kitchen

Chris has a background in mechanical engineering, marketing and business management. Prior to joining C-Tech in 2014, Chris spent 10 years building Weta Marine with his father from a garage project to a successful international business that has manufactured and sold over 1,000 composite sailing boats around the world.



CTO | riley.dean@c-tech.co.nz

# Riley Dean

Riley joined C-Tech in 2021 after working in multiple America's Cup campaigns with Oracle and American Magic. He brings a wealth of experience and passion to our design team. Riley has also been heavily involved in the development and design of the Bieker Moth.

# **SALES**



Batten Sales | alastair.campbell@c-tech.co.nz

#### Alastair Campbell

Alastair joined C-Tech in 2016. He is a keen sailor and brings industry experience and sailing miles to the batten sales team. Al is always keen to take on a challenge and push what is possible.



last Sales | tim.willetts@c-tech.co.nz

# **Tim Willetts**

Tim has over 30 years' experience specialising in composite masts. Along with his knowledge, he brings to C-Tech innovation and passion to deliver the best solution to customers.



Tube Sales | sam.cray@c-tech.co.nz

#### Sam Cray

Sam joined C-Tech in 2023, having grown up in Auckland and lived in the UK for 4 years, working for Cyclops Marine, developing digital load sensors. With an experieinced background in mechanical engineering.

# **SPAIN**



General Manager | Alberto.Soler@c-techcomposites.com

#### Alberto Soler

Alberto grew up near the C-Tech Spain facility in Castellón, Spain. After studying engineering at Southampton University, he has held engineering, technical, and management roles at Future Fibres, Persico Marine, Longitude Cero, 3D Tech, and the INEOS Britannia.

# **LOGISTICS**



Logistics | jim.fitzsimons@c-tech.co.nz

#### Jim Fitzsimons

Jim has been with C-Tech for over 15 years and is an expert in shipping long, slender fragile packages from NZ to the world within tight timelines. Prior to C-Tech Jim was a technical sales engineer at Airtech supplying composite equipment to the European aerospace industry.