

Styrotech CNC has the experience and ability to undertake a wide range of precision cutting and machining projects. Whether it's precision profile cutting of MDF, Plywood, or another type of wood, plastic or foam, or the design and cutting of intricate organic shapes, engraving, the manufacture of a complex geometric structure or your specific requirements, Styrotech CNC Ltd. have forged a name as industry leaders for contract CNC services.



## Welcome to the first issue of GEOMETRY, Styrotech CNC's new quarterly newsletter.

Each quarter Styrotech CNC is going to be sending out the latest issue of GeoMetry, and this will contain updates on our technology, capabilities and an overview of some of the projects we've recently completed.

The first newsletter starts out by giving you a bit of an overview of what's happening at Styrotech CNC, what the biggest changes are that we're making and an update on what we're currently working on.

At the moment, Styrotech CNC is in the midst of going through something of a transition. Not in terms of the services we offer, or the way that our business is structured, but in the way that we present ourselves and highlight the services we offer to you. The machining, our 'bread and butter', remains the number one focus as does our commitment to quality and delivering you – our – customer with the finest CNC machining job that's available anywhere.

A big part of this program is based on highlighting the huge amount of experience Styrotech CNC has in using **CAD**, which goes way back to the mid 1980's when Kevin Trotter first started using **CAD** to design windsurf boards. Using **CAD** to do something as 'artistic' as this was not only a New Zealand first, but also a world first for the windsurf industry. This early commitment to **CAD** resulted in windsurf boards that were unmatched in design, symmetry and performance, and this experience contributes directly to the quality of design work Styrotech CNC undertakes here every day, and is applied to every design job undertaken. So you can be sure that, if Styrotech CNC is working on **CAD** for you – as it has done for numerous customers – that it'll be completed to the highest possible standard.

When it comes to **CAM** (Computer Aided Manufacture), or more specifically in our case

### Software Partners:

alphacam

3D  
SolidWorks

rapidform XOS

FORMSYS  
WINDSURF • SHIPCONSTRUCTOR  
MULTIFRAME • NAVISWORKS



CNC machining, Styrotech CNC first became involved with this in 1994, when it introduced New Zealand's first CNC routing machine, the SCM R2 "Greenie" (you can see designer Kevin Trotter with the SCM R2, below right). This machine, in conjunction with the R132 (3 axis) and R200 (5-axis) is still in operation today, and continues to deliver work that's as accurate and capable as when it was introduced. Again, this repository of experience is utilised and put to good use every day in completing the jobs we're asked to, some of which are extraordinarily complex.

Chances are, if you're reading this, you'll have seen our new website and everything that goes with it. This is a big part of highlighting what we're working on at the moment, what we've done in the past, how to obtain quotations and get in touch with us. Complementing our services, which are detailed on the new website, is our portfolio. In the portfolio is a range of some of the projects we've completed, and each of these serve as a living example of what we can do, and how Styrotech's technology can be applied to different situations.

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There's also a section where you can learn a bit more about our history, the range of services we offer and the suite of software we make use of every day.

As well as our renewed website, we've also established a presence on LinkedIn and Facebook (facebook.com/styrotech). On our Facebook page you'll find up to date pictures and information on the wide range of work that we're doing right now, and see how what we're doing might apply to your next job.

Of course, we're always looking for feedback in how we might do things better. So, if you do have any comments, please feel free to get in touch and let us know what you think!

*Right:*  
An early Styrotech windsurfing ad from 1987, reflecting an early commitment to CAD and evidence of excellence on the water

*Far right:*  
Designer Kevin Trotter with the SCM R2 "Greenie" CNC machine, (far right) which was initially used in the manufacture of windsurfer hulls, but has since been involved in everything from cutting truck bumpers to Americas Cup designs. This machining is still in service today.





“I can confidently say that utilising this CNC technology made all the difference to my experience as a builder when constructing such a complex architecturally designed home.

Not only did the specialised equipment make it economically viable for Coastbuild to construct such complex designs quickly and effectively, the quality and precision of Styrotech CNC’s workmanship was second to none and our client couldn’t be happier.”

Tim Smith  
Coastbuild New Zealand Ltd.  
Director



## Architectural Update: Marellan Drive, Red Beach.

The home under construction on Marellan Drive, Red Beach is nearing completion, and many of the interesting shapes designed into the building have now been made a reality.

Many of the architectural features have been made possible through the use of CNC technology, in conjunction with Styrotech CNC's range of software packages. Doing so made it possible for the architects to design unique, organic shapes that deliver an interesting yet well balanced overall 'look'. However, the downside of the high use of 'organic' shapes in the design could, if built 'traditionally', present construction challenges. Despite this, the builders (Coastbuild) found it relatively easy to construct the home given the almost exclusive use of CNC cutting technology - the builders described building the house as something like assembling a kit-set - albeit a very large, complex one.

Consequently, the overall structure was cost effective to create - completing a house such as this without using CNC technology would have been exceedingly difficult, not to mention expensive. However, the commitment to using CNC

extends to the interior fittings of the house, including for example the kitchen bench. The shape was created using CNC cut profiles which were then assembled and used as a basis to mount stainless steel, thus creating the kitchen bench. Likewise, the staircase - a central feature of the building made extensive use of CNC cut profiles to not only create the circular shape but also ensure that each step fitted perfectly.

Due to the house being built using a combination of modern construction and boat-building techniques, it's exceptionally durable. It will require a minimum of ongoing maintenance, thus reducing running costs. Given its location, the house will be exposed to the ocean environment. The salt air would - for a more conventionally built house - mean that by using construction methods reflecting techniques used to build boats, strength and durability is enhanced.

To learn more about the way that the Red Beach property was imaginatively designed and subsequently built, and how the benefits of CNC could be used in your next building project, please feel free to contact us.

# Visit us on online: [styrotechcnc.co.nz](http://styrotechcnc.co.nz), facebook & linkedin.

With the launch of the new Styrotech CNC Website, it's now possible to check us out online and learn a bit about our background, experience and the services we offer.

As well as an this you'll find information on the technology, software and machines we use - the combination of these assets as well as our close relationship with FormScan 3D really provide the 'horsepower' behind what Styrotech CNC regularly do.

In addition to this is a section dedicated to real life examples of the work that Styrotech CNC has recently undertaken.

Lastly, theres an online "Get A Quote" form that you can fill in (you'll find this on the top right hand side of the

menu bar on the new website) and is designed to make the process of receiving your deign or idea, and turning it into reality as efficiently as possible.

Finally for this issue, we're pleased to announce that Styrotech CNC has joined the social media revolution - we're on facebook (facebook.com/styrotech). This is going to be our 'real-time' communication channel containing frequent updates on what we're up to, and what's in the workshop at the moment.

We're also on LinkedIn, where our page focuses on Styrotech CNC's core capabilities. To access this page you'll need a linkedin account - all you need to do is type 'Styrotech CNC' in the search box and we'll show up.

