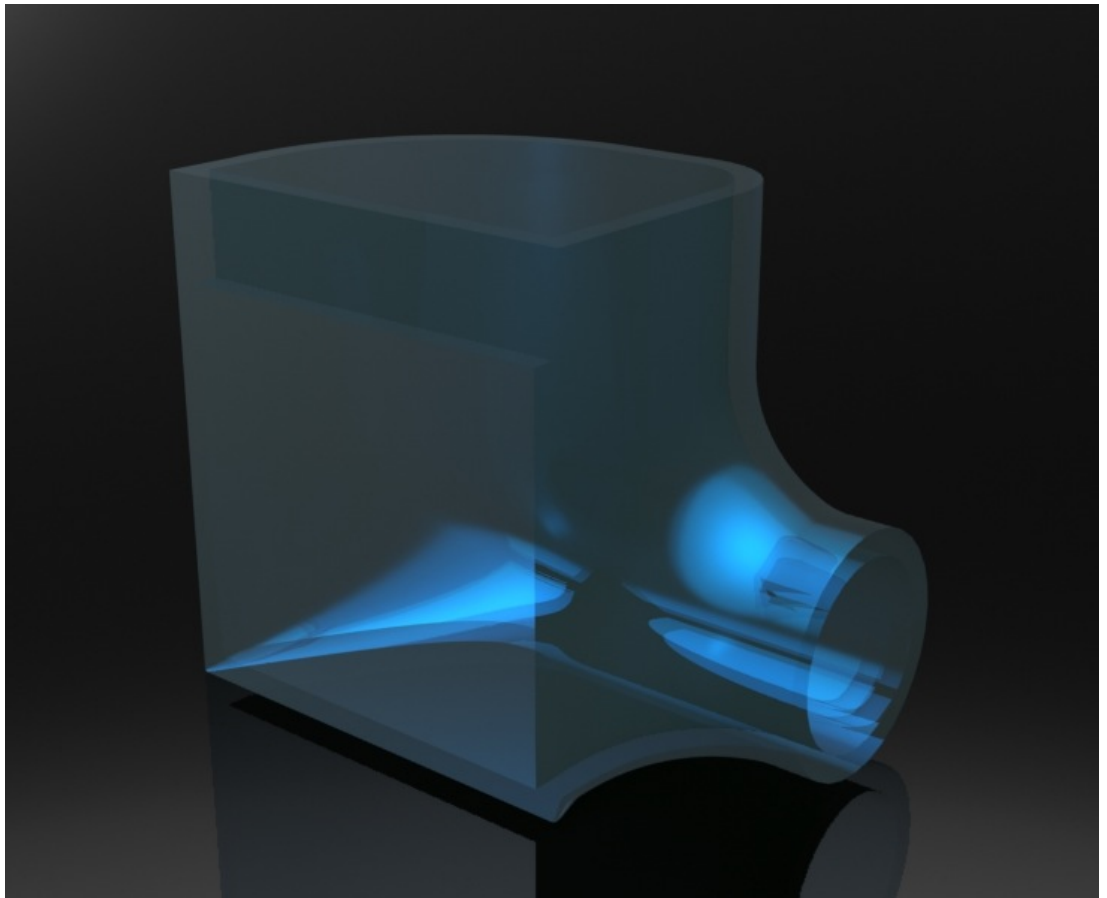


Styrotech CNC has the experience and ability to undertake a wide range of precision cutting and machining projects. Whether it's precision profile cutting of MDF, Plywood, or another type of wood, plastic or foam, or the design and cutting of intricate organic shapes, engraving, the manufacture of a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



## Styrotech CNC introduces CAD design and digitising services.

Software Partners:

alphacam

**3D**  
SolidWorks

rapidForm **XOS**  
scan

**FORMSYS**  
MAXSURF • SHIPCONSTRUCTOR  
MULTIFRAME • NAVISWORKS

Rhino**ceros**  
Rhinoceros modelling for Windows

Since 1995, Styrotech CNC has been preparing CAD for and in association with clients. Given steady demand for Styrotech CNC to prepare CAD as part of an entire job, we've decided to highlight that we can prepare CAD of virtually anything, for anyone.

With so much CAD experience, particularly relating to various board designs and marine applications such as hulls and foils for centreboards and rudders, Styrotech CNC is well placed to assist you with the creation of a CAD model of your idea.

Computer Aided Design (CAD) is the commonly used term that describes the process of creating,

modifying or optimising a design concept or idea. CAD is the tool used to develop and manufacture virtually every product that's available today - from soap dish, trophy, surfboard, car or yacht, CAD is the default 'starting point' from which an idea starts its journey into existence.

Specialising in product and industrial design, Styrotech CNC can help take your concept from idea to prototype ready CAD model. Whether it's a coffee table or chair, a cabinet, a shelf, surfboard, model yacht, centreboard or rudder, Styrotech CNC is able to take your and turn it into a 'solid' CAD model.

Since designer Kevin Trotter first started using Maxsurf to design windsurf boards in the 1980's to involvement in the Americas Cup, Styrotech CNC has maintained a longstanding commitment to using CAD.

**"Specialising in product and industrial design, Styrotech CNC can help take your concept from idea to prototype ready CAD model."**

Throughout this 30+ year journey, Styrotech CNC has gained vast experience in using CAD, leveraging its capabilities and creating innovative solutions to the challenges that arise.

- Styrotech CNC is as comfortable working with organic shapes (for example the Kina, images below, left hand side) as well as geometric shapes (for example

surfboards/boats and components).

- According to your requirements, we can modify existing CAD files according to your specifications.
- Styrotech CNC has considerable practical experience in the optimisation and streamlining of CAD models for use in CNC Machining, manufacturing and further design applications.
- We have access to, and the knowledge of how to use 3D Digital Scanning (FormScan 3D) in conjunction with CAD and CNC machining. Working closely with FormScan 3D brings with it access to the Rapidform software package, which opens up further software manipulation possibilities.

For your next idea or concept, give us a call - we can help take your idea from sketch to finished CAD model and, using both our equipment and access to strategic partners, ultimately reality.

*Right:*

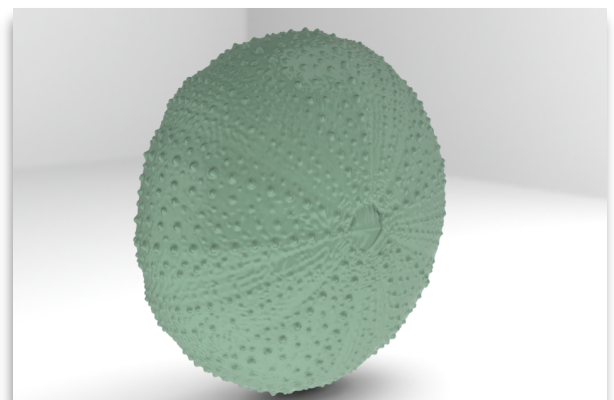
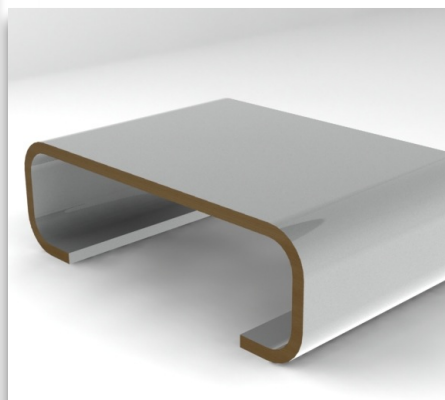
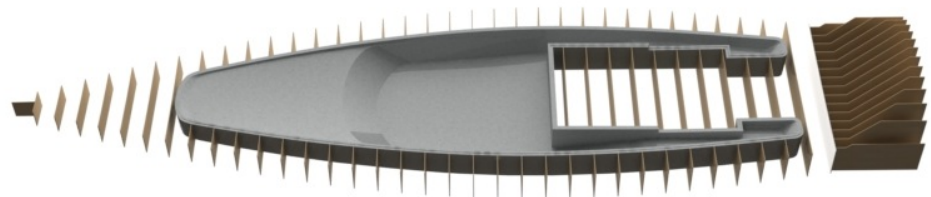
Reflecting the original design, Styrotech CNC designed and cut a mould for the deck and superstructure of a Warwick 75' yacht.

*Far right:*

Installed on Wellingtons waterfront, Nga Kina (Michel Tuffery MNZM) comprises nine giant KINA shells, each varying in scale from 2 - 3 metres in diameter. In conjunction with FormScan 3D, Styrotech CNC prepared the CAD model and CNC machined each shell.

*Immediate Right:*

Starting with a concept, Styrotech CNC prepared CAD and CNC machined this coffee table.

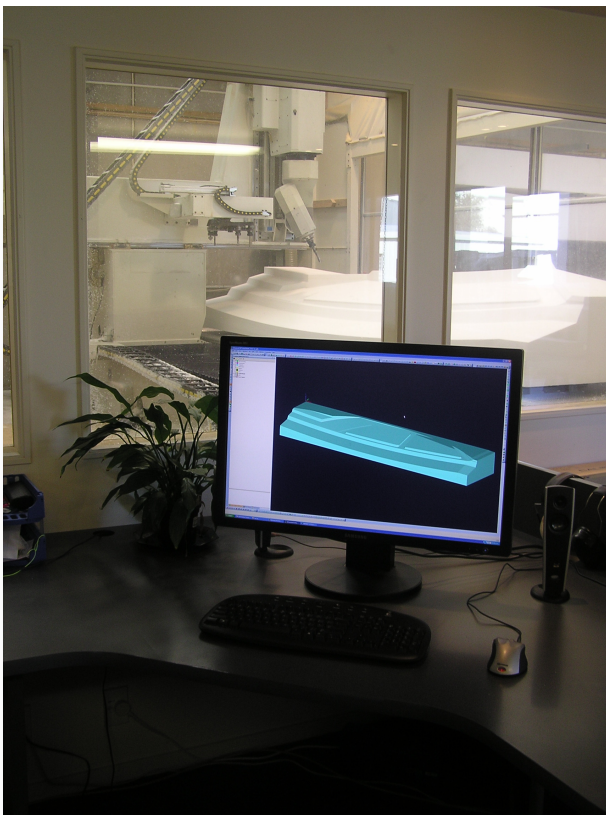


# CAD Software Tip:

## Saving files in different formats - why & how.

One question that we're often asked is how to save CAD files in different formats (rather than letting the softwares' default setting select the file format that'll be used). By saving a file in a different format means they can be opened by a range of different software applications.

The main reason for this is that it's often easier to use the original software to save a CAD file in the format required, than try and make modifications to the file that's already been saved.



It is usually possible to save a file in a different format, and this will allow us to open and use the file for CNC machining.

So the purpose of this article is to highlight that, by saving a file in a different format at the outset, you might be able to make it easier for contractors to use the file.

Summarised opposite are a range of examples demonstrating the possibilities of using Solidworks software to save a file in different formats.

### Rhino3D

(saving a Solidworks file as Rhino 3D .stl)

File > Save As

Select File Type > .stl

Enter a name for the .stl file.

Save

Select Binary .stl Files

### SolidWorks

(saving a Solidworks file as a .stl)

File > Save As

Set Save As Type to .stl

Options > Resolution > Fine > OK

Save

SolidWorks is software that will not allow forward or backward compatibility of files. One way of working within this limitation is to save the file as a parasolid (.x\_t) in order that users with a different version of Solidworks to that which the file was created in can still open it.

Despite being able to open and view the file, it will however still prevent you from manipulating the file.

In order to save a file as a parasolid, follow these steps:

File > Save As

Set Save As Type to parasolid (.x\_t)

Save

### Pro-engineer

(saving a Pro-engineer file as a .stl)

File > Save a Copy

Set type to .stl

Set chord height to 0. The field will be replaced by minimum acceptable value.

Set Angle Control to 1

Choose File Name

OK



# Styrotech CNC has a new sign!

If you're coming to see us, look out for our new sign at 24 Manga Rd, Silverdale. The sign, which was made here at Styrotech CNC serves two purposes – it demonstrates what can be achieved here using 3-Axis cutting and replaces the old, rather tired one.

Now we need to get the block-work cleaned up, the mailbox painted and the support structure will look as good as the sign!



## Check out our Facebook Page!



With two – three weekly updates, the number of people who have taken an interest in our page is starting to grow.

Check it out – there might be something on the page that interests you... but if you don't look, you'll never know...

## FormScan 3D

FormScan 3D is New Zealand's leading provider of 3D Scanning for Engineering, Inspection and creating CAD Data. Styrotech CNC works closely with FormScan in order to help bring to reality a wide range of projects.

The website has an interesting portfolio of the work that FormScan has done, including projects that were completed in conjunction with Styrotech CNC.

To learn more about FormScan 3D, the work they do and how they can help you with your next project, check out the website ([www.formscan3d.co.nz](http://www.formscan3d.co.nz)), or the Facebook page ([facebook.com/formscan3d](https://facebook.com/formscan3d)).

