

Design - Build - Deliver

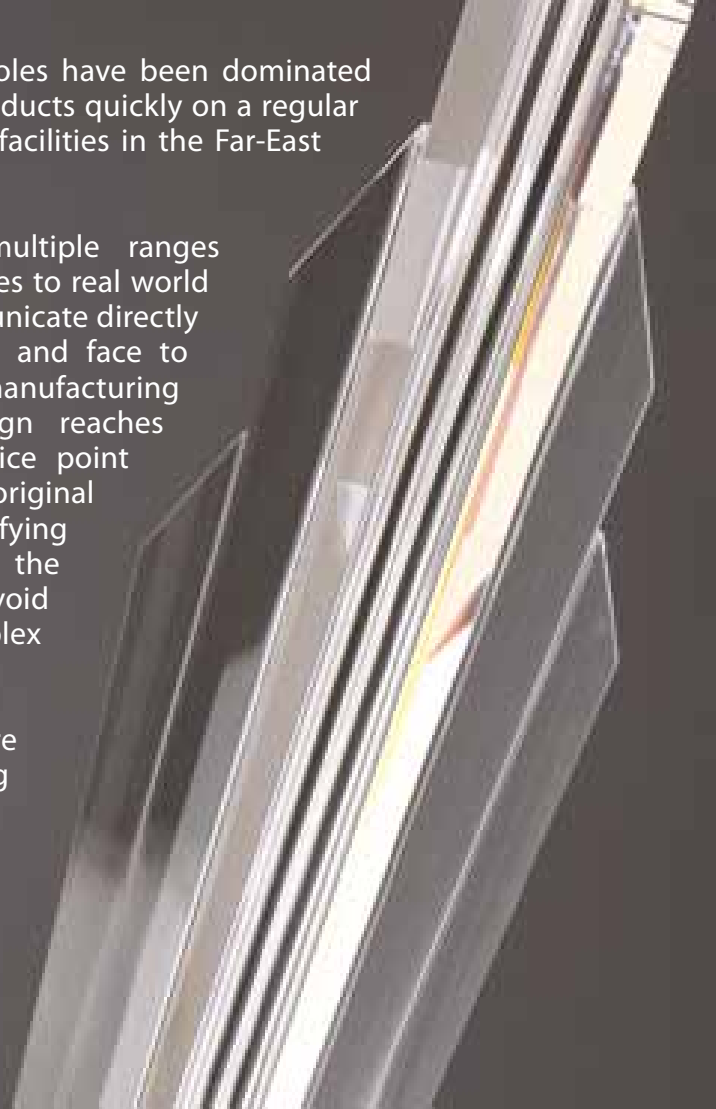
Peter Legg - Industrial Design



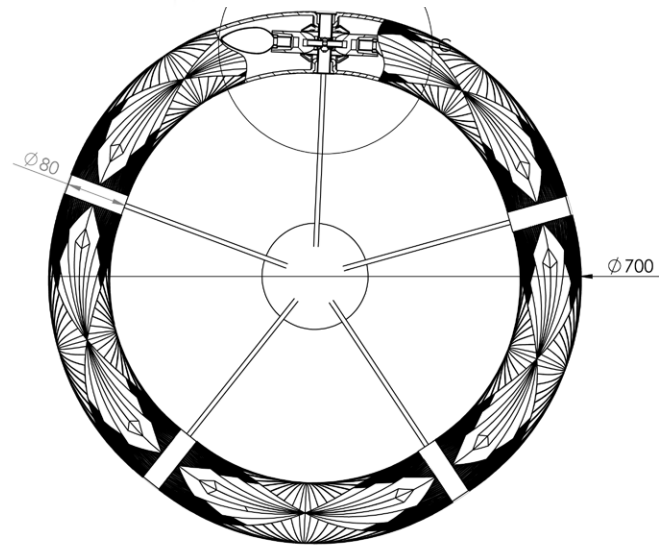
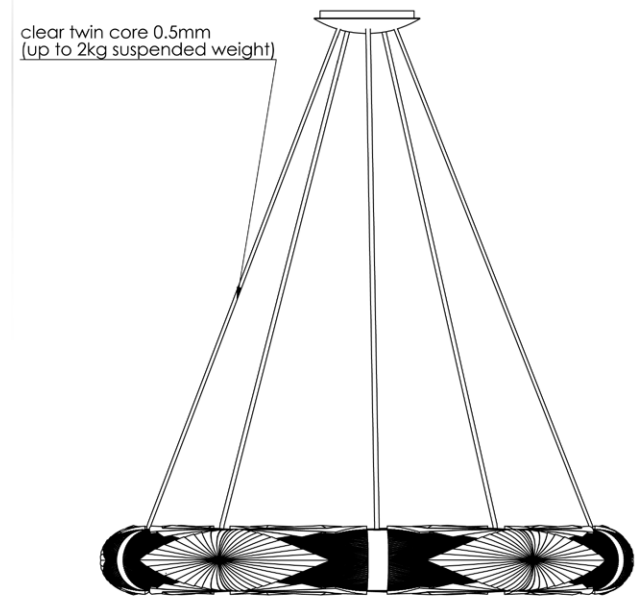
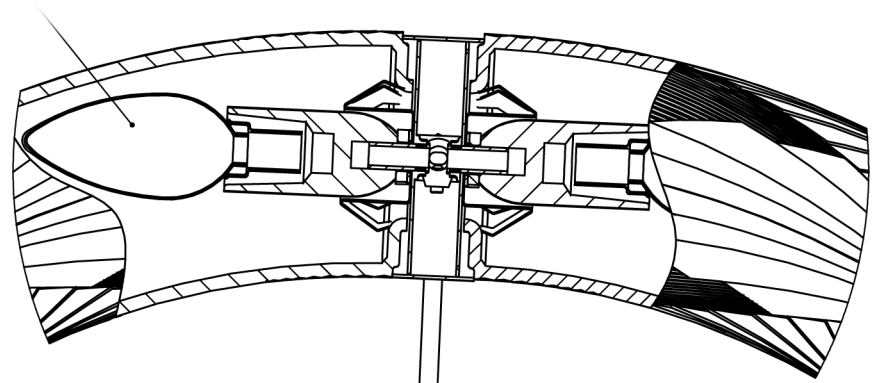
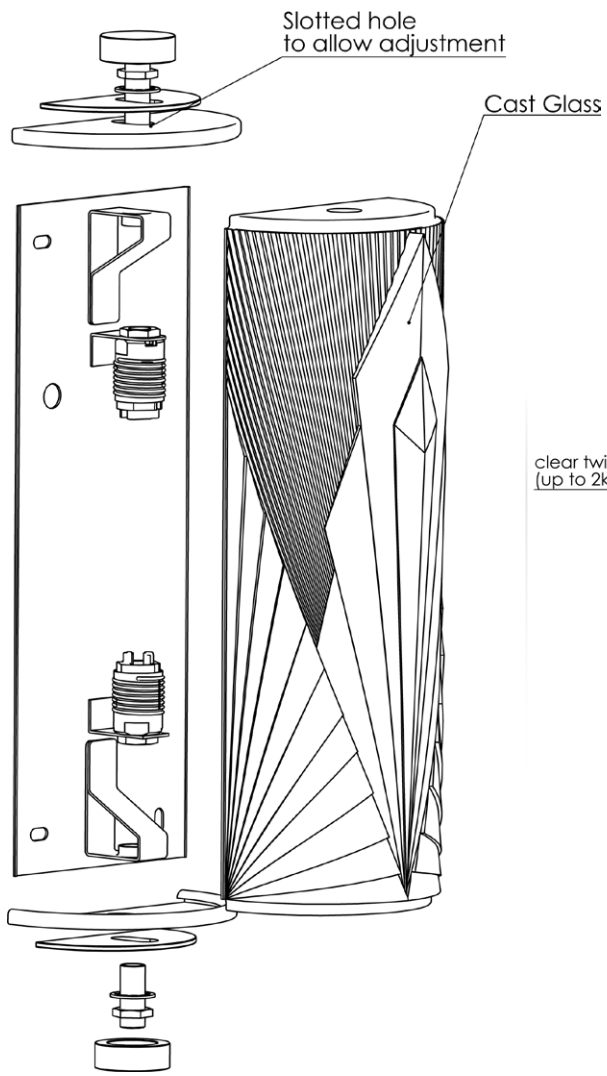
During the last 10 years my roles have been dominated by the need to deliver new products quickly on a regular basis. Through manufacturing facilities in the Far-East and India.

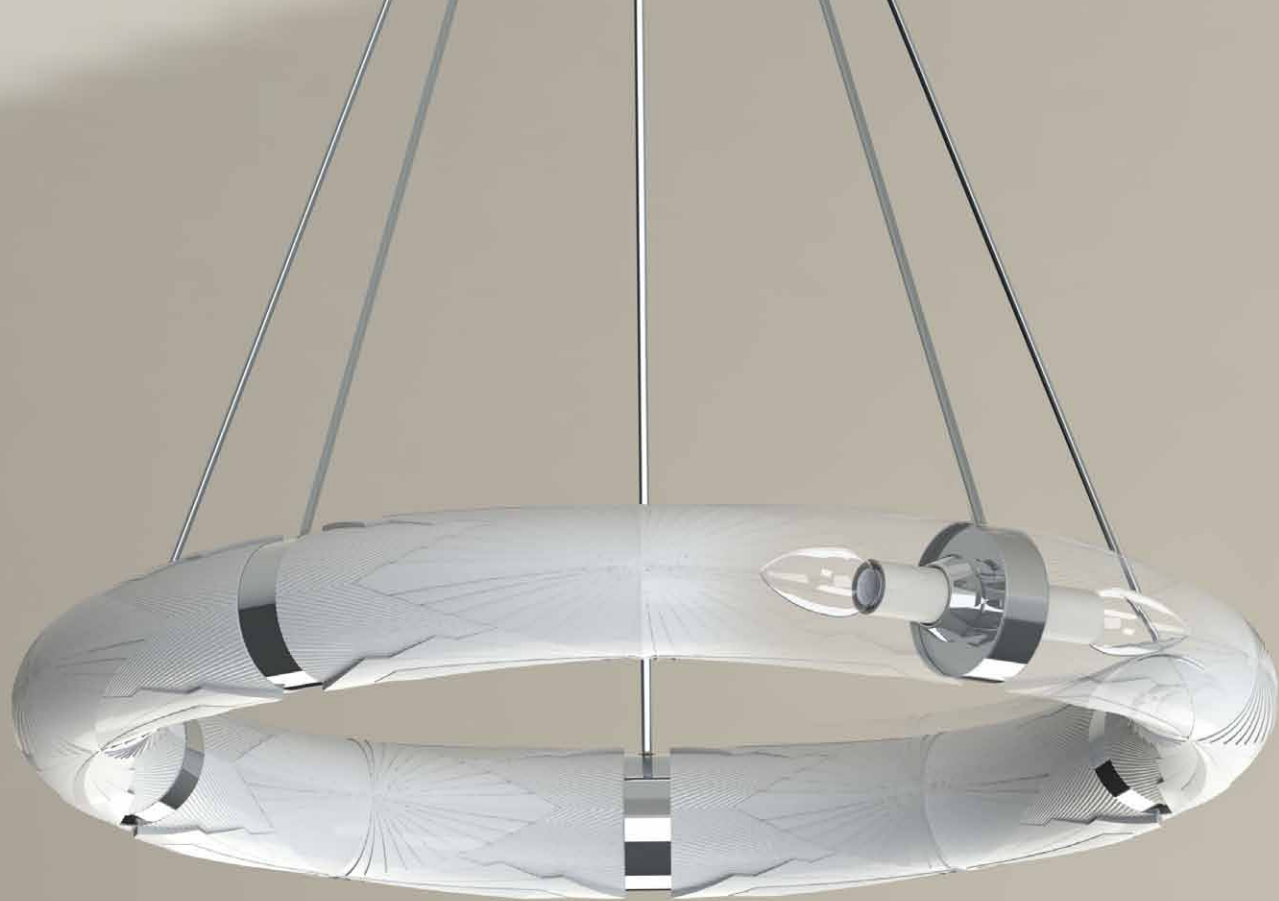
Designing and managing multiple ranges across a broad range of factories to real world commercial deadlines. I communicate directly with factories both from afar and face to face; discussing the best manufacturing techniques, seeing the design reaches production at the correct price point without losing the spirit of the original design. Whilst also identifying quality control points during the manufacturing process to avoid high defect rates on complex products.

Although my current role is more aesthetic than engineering based. Designing lighting is still relatively demanding requiring a good knowledge of electrical standards & designing to cope with difficult materials with high tolerances.









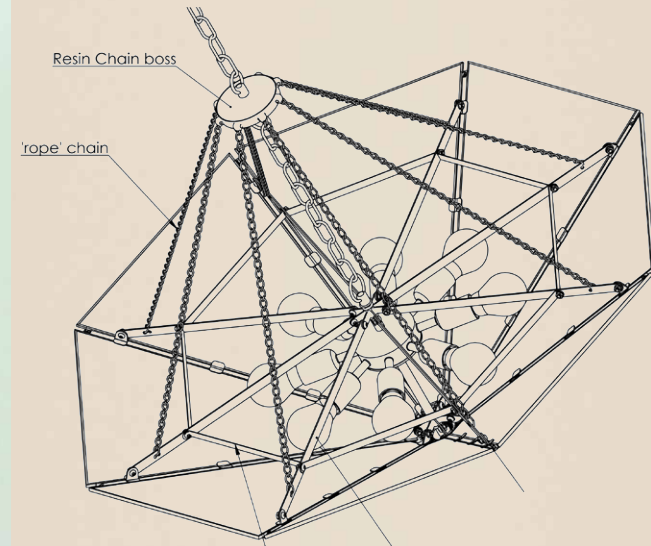


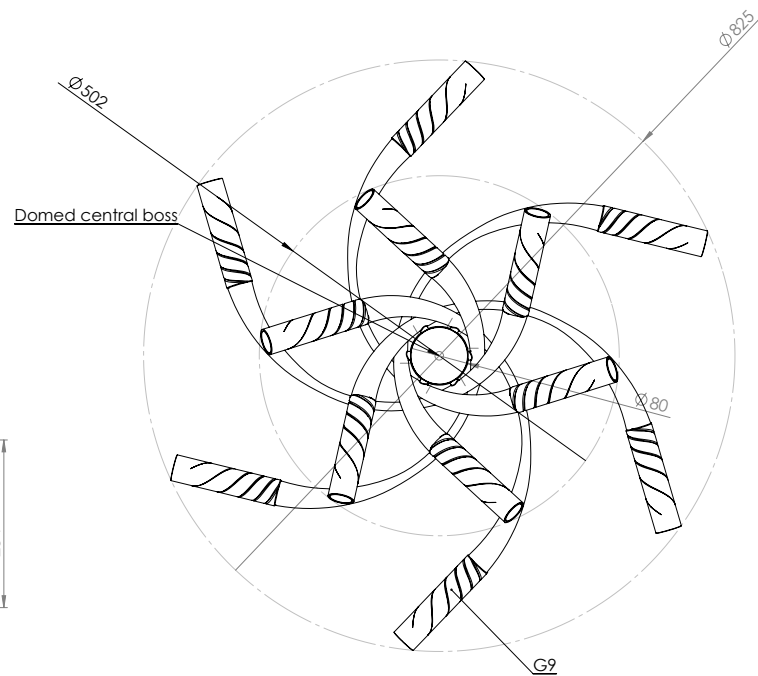
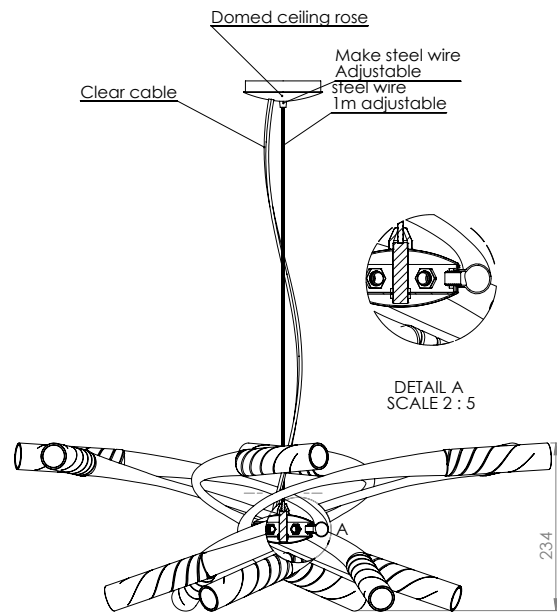
Various Tiffany Designs 2010-2015



A flat pack 1 metre 'Mega Pendant'. Having seen the size of the packaging of our one piece mega pendants and looked at how slowly this stock that filled the warehouse moved. The brief was set to design a new flat pack version.

The new design would enable the stocking of multiple designs and configurations without taking up masses of valuable space. The replaceable panels made this product fit for a more commercial use where panels could be replaced if damaged, taken out for cleaning or re-designed all together. Care had to be taken ensure the greatly varied shapes and sizes of this hand made product would always fit without fail.





Pictured is Helios a G9 fitting with tapered tubes and cut glass shades.



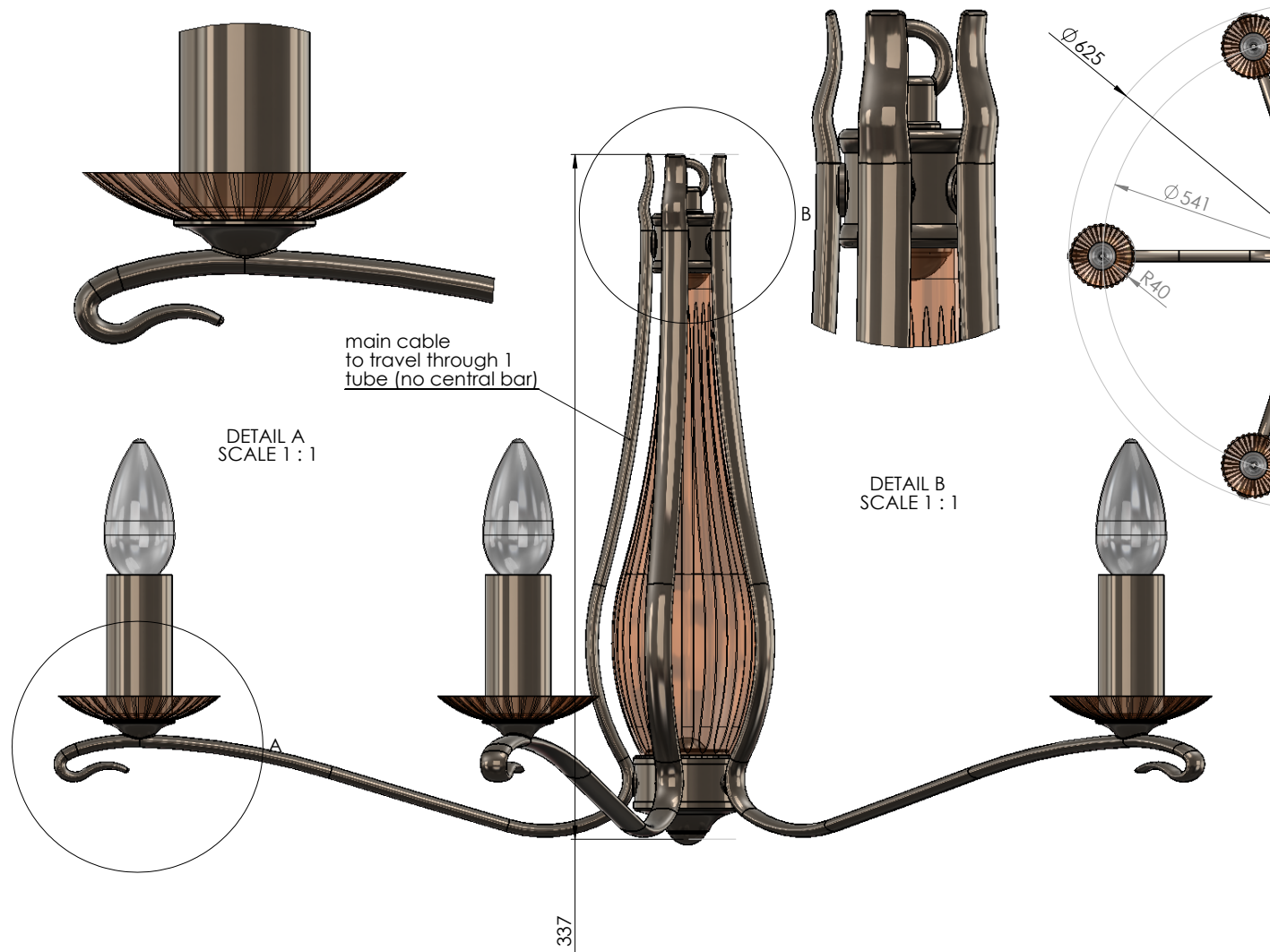




During my time at Interiors 1900 I have helped to source factories for both existing products and also factories with new capabilities such as cut crystal and blown glass. I spend a good deal of time in the far east building up a good relationship with both the factory sales teams and their R&D departments even teaching them new techniques and methods of producing products .

It is the building of these relationships and a good understand of a factories capabilities, that allow me to quickly progress a product from a 3D rendering through to final prototype and into production.





Classical lighting range in the Arts & Crafts style. A challenging range to develop combining glass elements with metal.



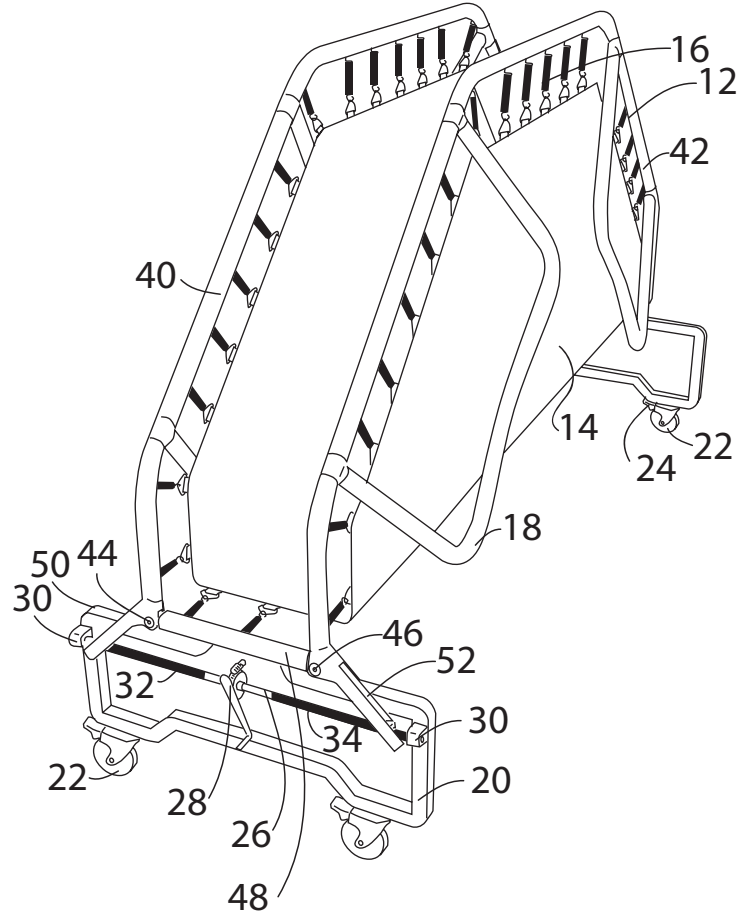


From concept to shipping in less than 12 months this is my first patented product. Foreseeing the saturation in the market for standard trampolines FWT asked me to come up with something to turn the trampoline market on it's head. The idea, make it fold, safely and easily

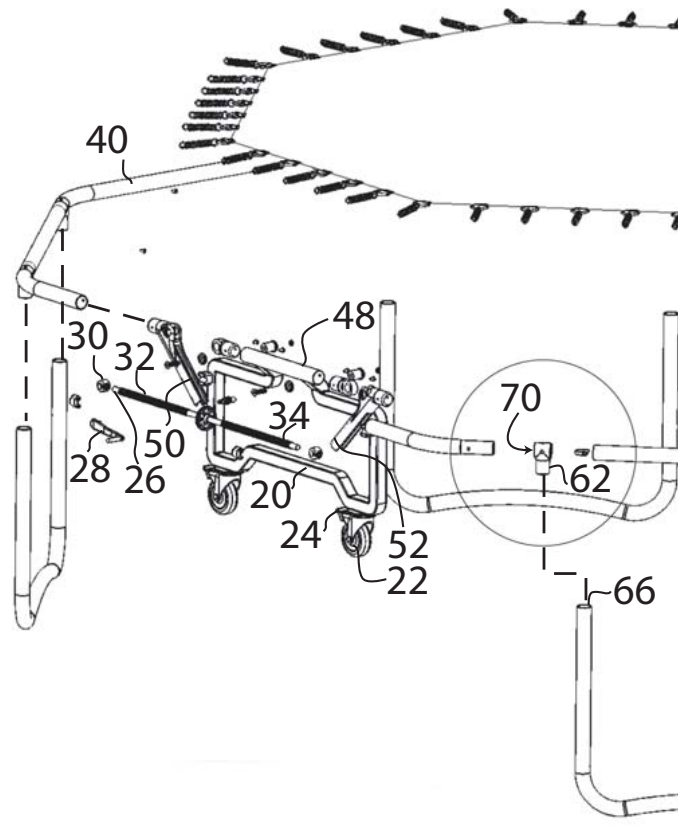
Having never designed a trampoline before, the initial concepts were designed in a month and then little over a month later I was in China resolving technical issues regarding manufacture with factories. After proving the product was feasible, I liaised with the QA teams to ensure the trampoline was safe and passed CE standards. A few months later the factory were tooling up for mass production.



Throughout the process of designing the Folding Trampoline I was liaising with patent lawyers advising them on any new features and providing them with suitable drawings for the patent.



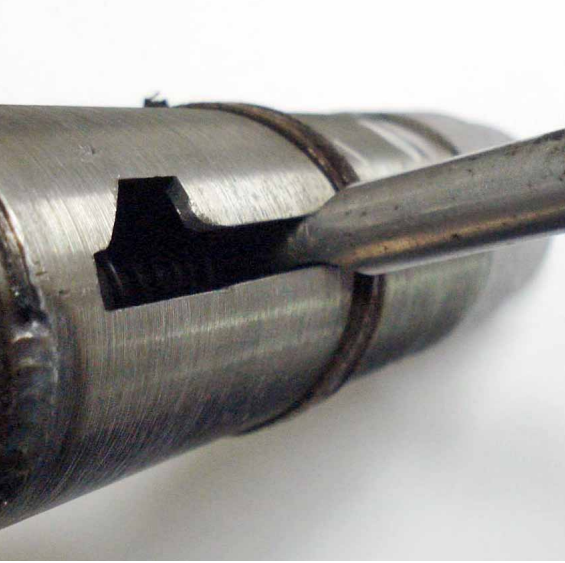
After a year on the market and a good response from customers, I revisited the trampoline now with a better understanding and more time. Eager to improve on the product a new design was conceived utilising gas springs.



It is designed to be easier to use, quicker and cheaper than the previous model. The initial prototypes look set to achieve these goals.

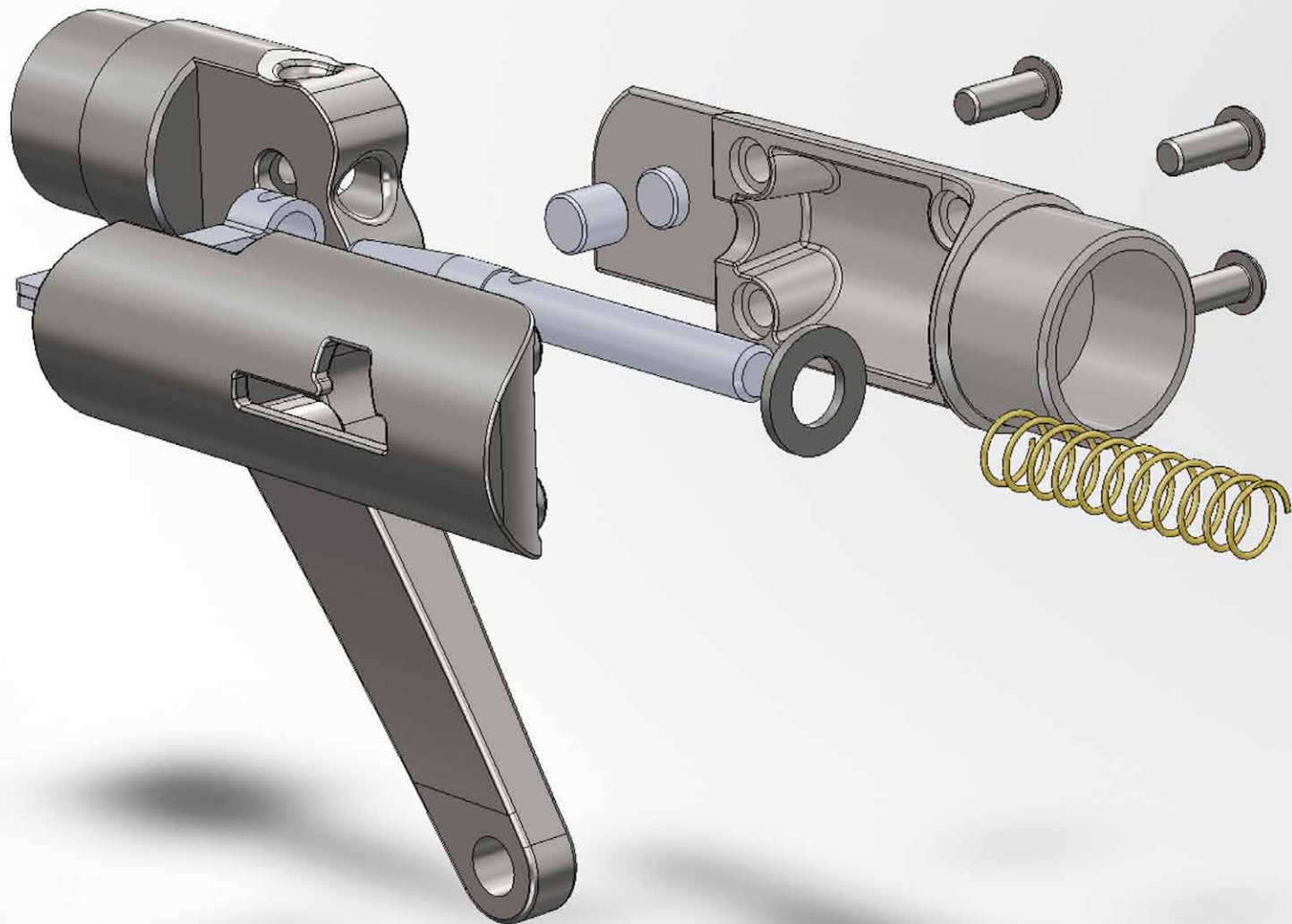


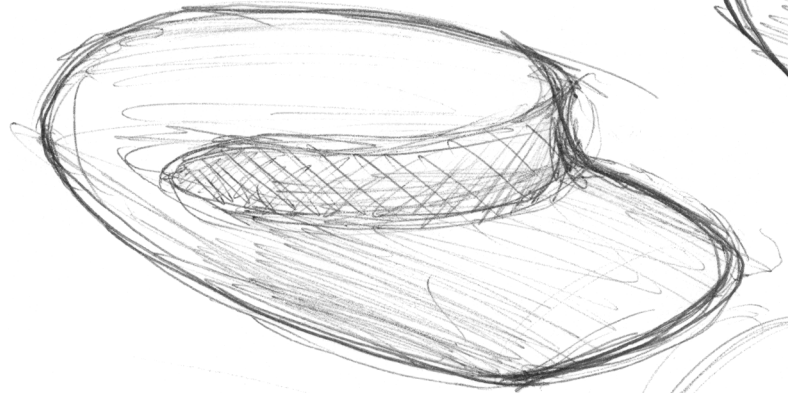
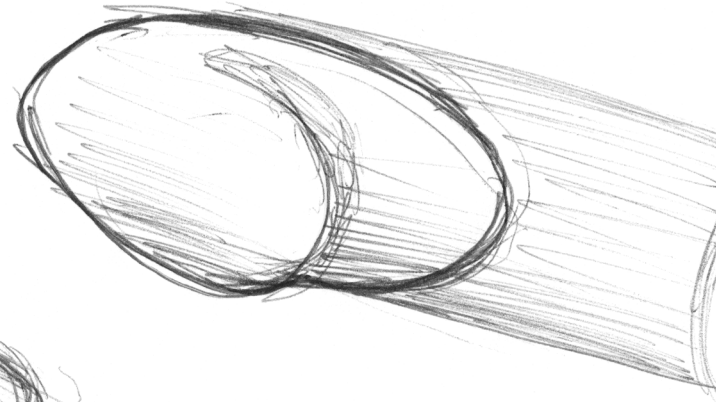
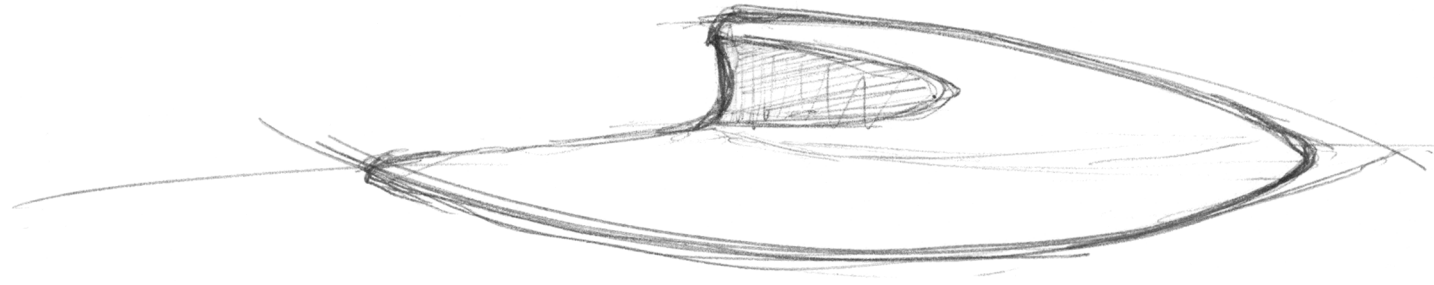




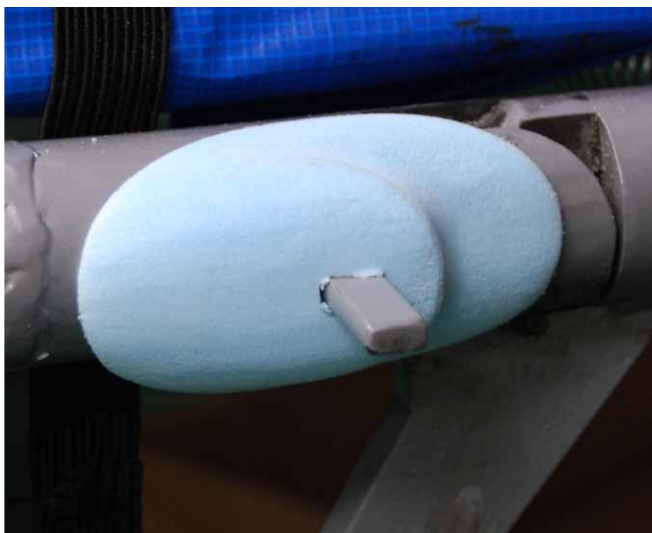
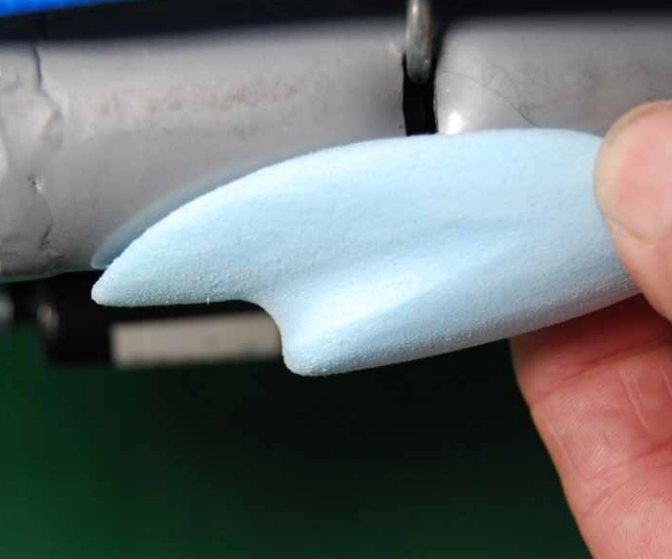
Having taken away the expensive gearbox of the previous folding trampoline. The importance of the locks being engaged became a primary concern. For ease of use I decided that the locks should engage when folded flat. Not an easy task when it has to be unlocked and folded by one person. I came up with 4 'uniquely patentable' designs of lock, ranging from a very elegant fully enclosed mechanism with just one button, to this very simple latching lock, activated by a cam on the hinge.

When cost and manufacture is involved simple wins every time.





A key area of user interaction of the new trampoline was the locking handle. Time was spent making this more appealing and intuitive to use by customers, experiments were made using blue foam modelling to determine a shape which could not be accidentally caught by users of the trampoline, whilst still provide enough grip when unlocking.



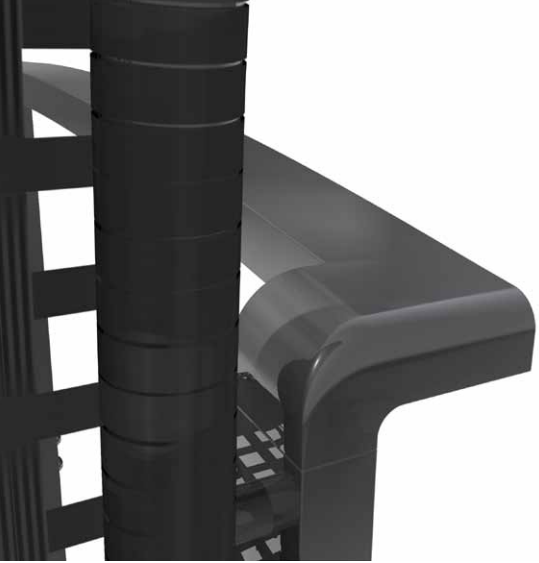


The first customer FWT had won based purely on their new design capabilities, was John Lewis, effectively a step up in terms of market position.

John Lewis asked for a simple elegant garden set, I offered them a range of options, they eventually settled for what was to be called 'Mirage'. A subtly detailed table rim combined with a mixture of modern black glass and graphite powder coat and traditional rattan weaving.







Besides cost the most important constraint of my designs is shipping size. Nearly all my designs for FWT are flat packed, however some are stacking, some even are both.

I like to determine the best method for the product early on in the design process and always design with these constraints in mind. I can even predict container fill very early on in the process as well as providing accurate technical drawings to allow cost predictions before a sample is made.

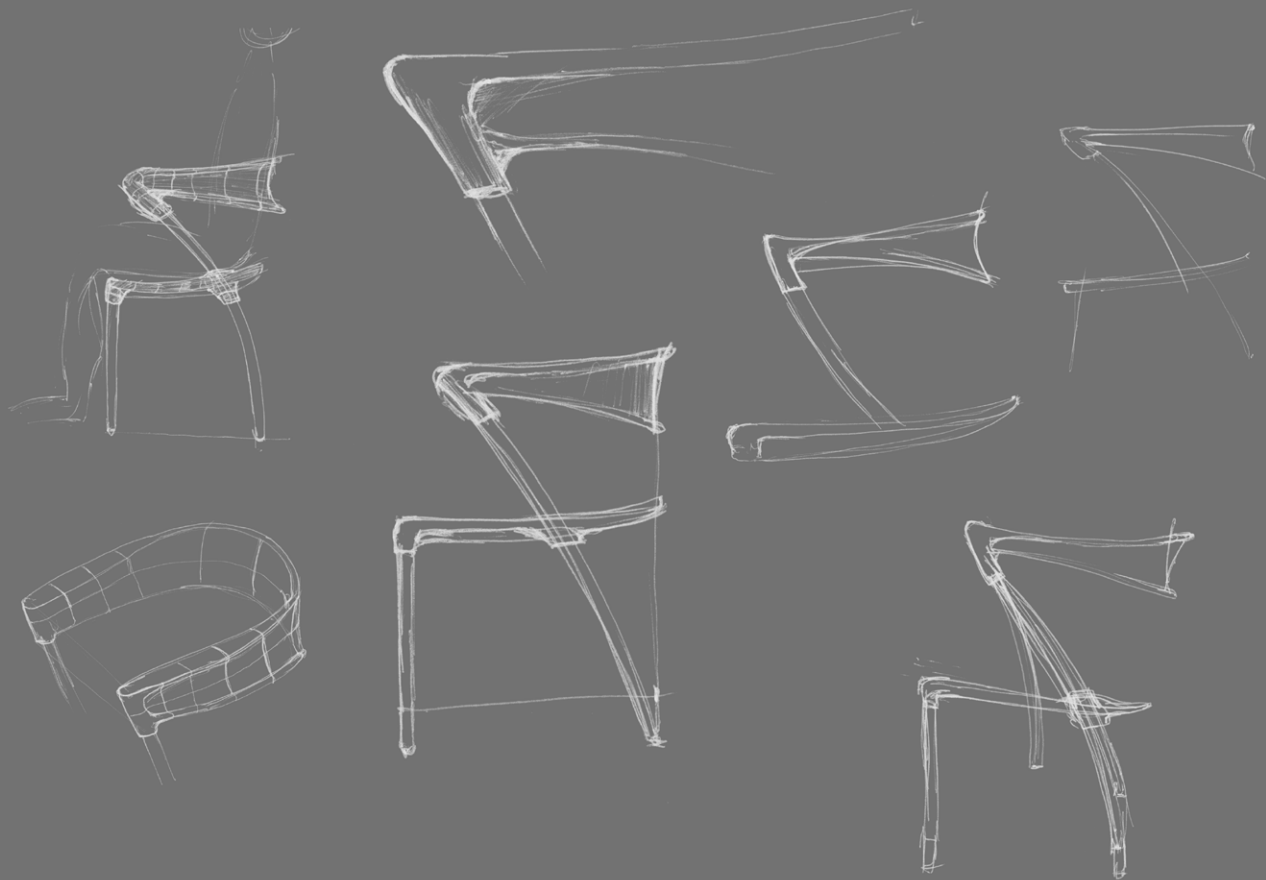






A work in progress, after spending a couple of years designing garden furniture, I became fascinated by sand casting, and the freedom of form that it offers. Looking at cast furniture it has so far only been historical reproductions.

Eager to break the mould I set upon creating a contemporary organic design, whilst still trying to keep the box size small for shipping purposes. A constraint which is always present when manufacturing in the Far East.





Organic Chair - 2008

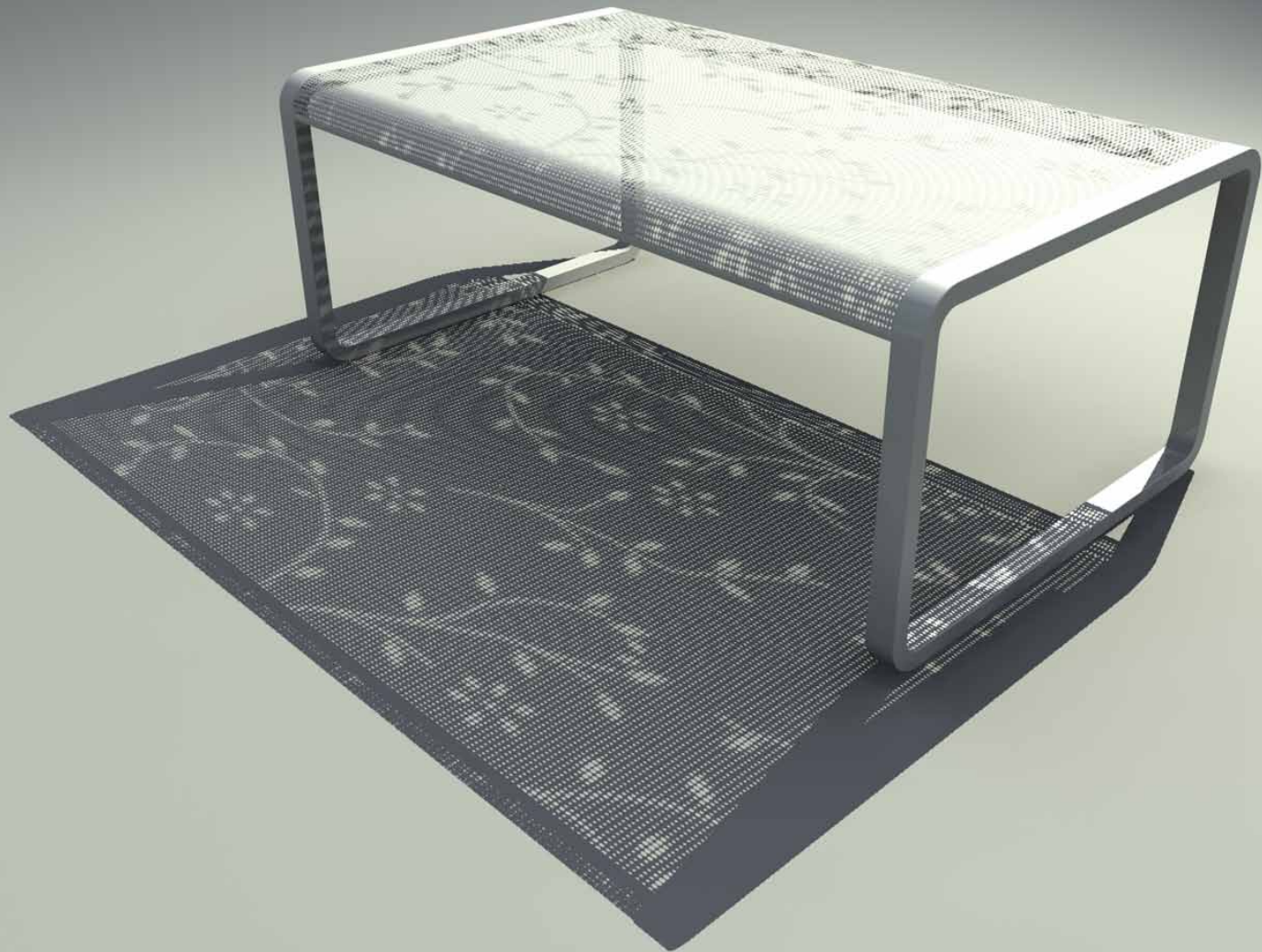


A seemingly simple table with a hidden secret. The perforations in the table are punched in three different sizes, while sitting at the table the pattern looks random then, when the sun casts a shadow through the table an elegant trailing leaf pattern falls on the ground.

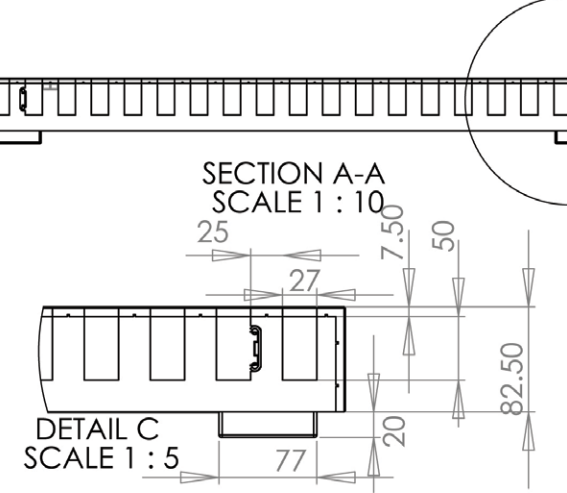
Utilising 3D visualisation made it easy and quick to convey the intent of the design to the customer.

‘Surprisingly chic for B&Q’ - Telegraph Magazine

Sold through B&Q 2008



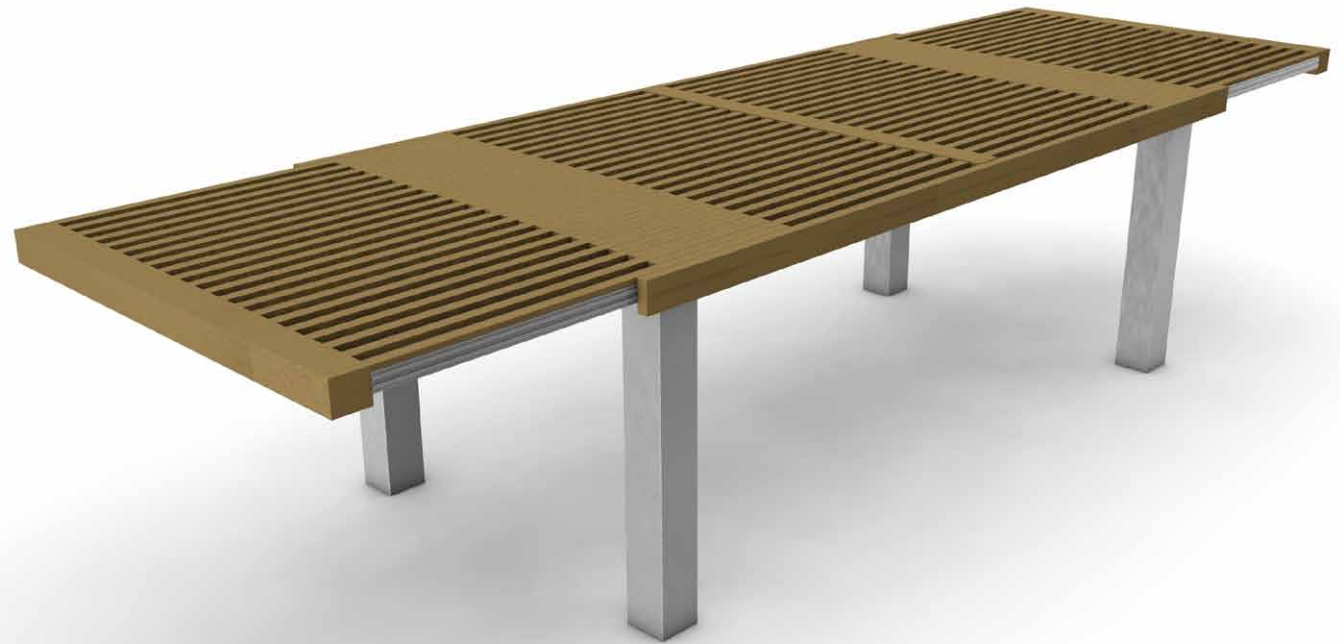




Always eager for a new challenge I wanted to create an extending table which appeared solid when closed.

The initial concept impressed the owner of the company so much that he had to see one. Working closely with the factory sample makers I discussed tolerances, running gear and locks until a prototype could be made.

The result worked perfectly, but wasn't feasible to produce in the quantities the company are used to. It did give me immense experience in communicating to engineers with no knowledge of English.







With no customer in mind this sunlounger was born from a scribble under a word, very simple and elegant.

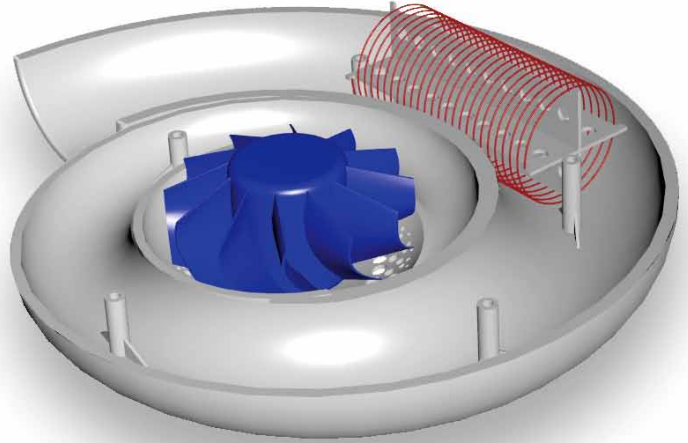
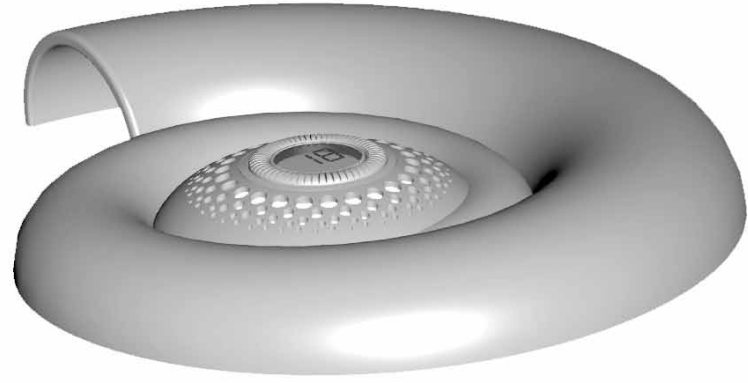
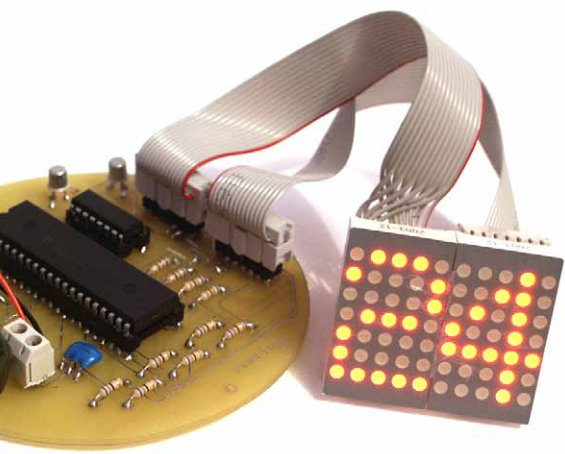






With the brief to reduce the cost of an existing table I opted for an elegant design of sweeping legs. The design saved nearly 2 metres of material and reduced the number of cuts and welds on the undercarriage from 20 to 8. The resulting saving increased profits by \$40,000 in one year. Whilst sales figures show that the table is selling better than the previous design.





A small heater fan, inspired by the Nautilus shell. Controlled by a digital thermostat. Turn the dial to select the temperature on the clear display. Nautilus will work to maintain this temperature.

This is just a student project to demonstrate my previous 'mechatronics' training. Involving both digital and analogue electronics. Although not an electrical engineer, this allows me to have a better understanding of electrical systems and enables me to communicate better with other engineers.





**B&W** Bowers & Wilkins



During my time at Native Design, I experienced working with some prestigious clients my roles included:

- concept generation
- ergonomic and aesthetic foam modelling
- construction of working prototypes





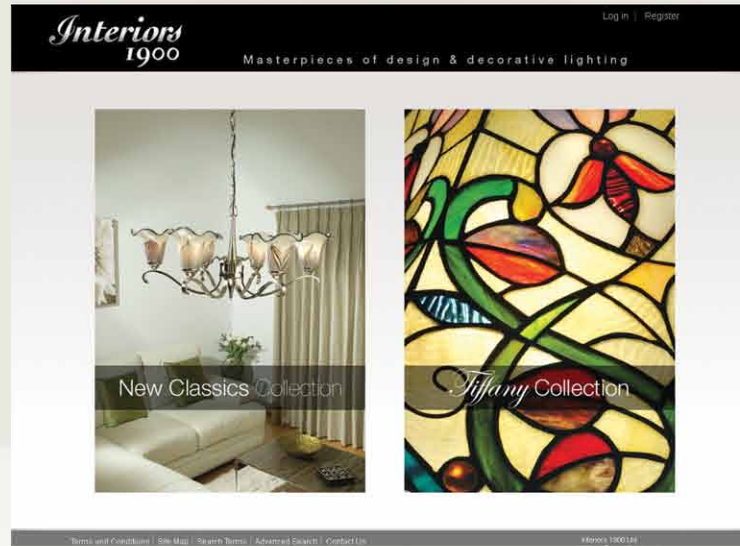


Working with smaller companies has given me a great deal with experience in marketing both brands and products. As well as designing the packaging and brand guidelines I am responsible for ensuring that these are followed correctly dealing with printers in the UK far east and Portugal and also directly with factories to ensure the products are packaged in accordance with the brand.

At Interiors 1900 I oversee all the branding, website, catalogue and photography. This involved designing all flat work for the website and overseeing the construction. The catalogues are art directed by myself and I have the responsibility that they are printed correctly and on time.









More of a hobby but also an exercise in branding and styling. I have designed, restored and created numerous bicycles for people. On this page is a bicycle made for the Tweed company 'Dashing Tweeds' it is made from carbon fibre and real tweed fabric, the fabric is layed on the carbon fibre in the same way as the rest of the tubes are made up, using the same resin, making the tweed actually part of the structure of the bicycle.

On the right is a proposal for Brooks and Levi's Denim to create a similar creation this time using, carbon fibre, denim and copper plated steel. This is to promote their new collaboration on the Cambium Denim saddle.





