

Making a bespoke product line with the FormBox



Professional Case Study

From sketch to small batch of objects in one day

Using a laser cutter and a FormBox, Charlie was able to go from a single laser cut prototype to a small batch of objects in one day.

Significant cost savings

Due to the compact size, Charlie was able to bring all of his work in-house. This created significant savings in both time and money.

Unique Color and shape

The FormBox unlocks the endless potential of combining casting with CAD and traditional workshop machinery.





"Using the FormBox in combination with a laser cutter allows me to go from idea to a variety of different physical iterations incredibly fast. It's a super useful machine for my design practice"

Charlie Humble-Thomas





Charlie is a London based industrial designer. He used the FormBox to make a short run of beautifully designed stationery accessories for a client, cutting down his prototyping time, budget and production costs.

Charlie Humble-Thomas is an industrial designer based in London. Throughout his career, he has worked with such clients as Samsung and Honda whilst also creating his own self-initiated projects.

Charlie likes to take a hands-on approach to the design process, often creating his models and prototypes manually, then combining them with the latest technologies to produce beautiful contemporary works.

The Challenge

Charlie was tasked with the brief of creating a set of stationary prototypes for an independent homeware manufacturing company. The client had a keen eye for detail and materiality and wanted the prototypes to be as close to the end product as possible, in as little time as possible - something difficult to achieve without going to mass production.





The Solution

Charlie used the FormBox in combination with a laser cutter to create forms with a finely tactile surface. He first modelled the form in CAD then split it up into many separate slices. These slices were then cut out of card using a laser cutter and glued together. This process created a natural 'ridged' pattern on the surface of the form.





This ridged shape was then vacuum formed using the FormBox to create a set of molds. By filling these molds with a casting material called Jesmonite, Charlie was able to make a set of objects in different colours designated by various pigments.

Charlie created three different designs of his stationary set. Each of these was prototyped very quickly and shown to the client as the design progressed. This created a tighter feedback loop and enabled them to reach a more refined solution ahead of schedule.





Cost Comparison

	External Vendor	Mayku FormBox
Setup cost	£2500+	£599
Part cost	£50	£3
Prototyping time	2-3 weeks	1 hour of laser cutting
Production time	2 weeks	1 day