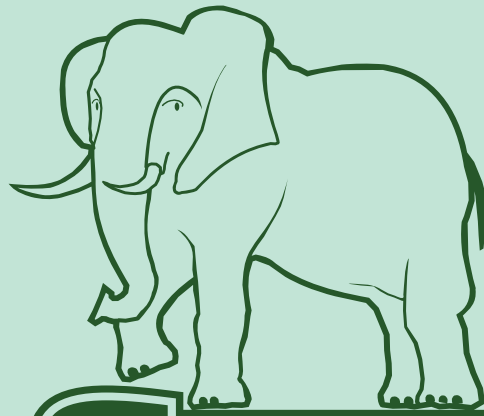


STURDY
PRODUCTS LTD



Custom Moulding



STURDY

PRODUCTS LTD

Here at Sturdy Products we have a very experienced Design Team. We have many current and potential new customers who contact us with their ideas, when we work together to bring those concepts to reality.

Our design team has a vast experience in the area of design and design engineering.

Here is a overview of the process of how a custom moulding idea comes to life.

The Brief

We work with customers to help optimise their idea. Once we have come up with the product requirements we write up a product brief so that everyone is clear and if there is anything that needs to be changed it can be done here. Our design department have many years of experience so no challenge is too big. When you are happy with the brief it is signed off and we move to the next step; Concepts.

Company: **Sturdy Products**
Project Title: **Self Leveling Trolley**
Issue Date: **14.07.2014**

PROJECT BRIEF

Objective:

Self leveling trolleys are used in laundries, among other industries. Sturdy Products are proposing to develop such a trolley which will be rectangular in shape and sized based on industrial laundry use. The floor of the trolley will be required to lower as more mass is placed on it. When the floor is unloaded it will rise to a level acceptable for manual handling.

Requirements:

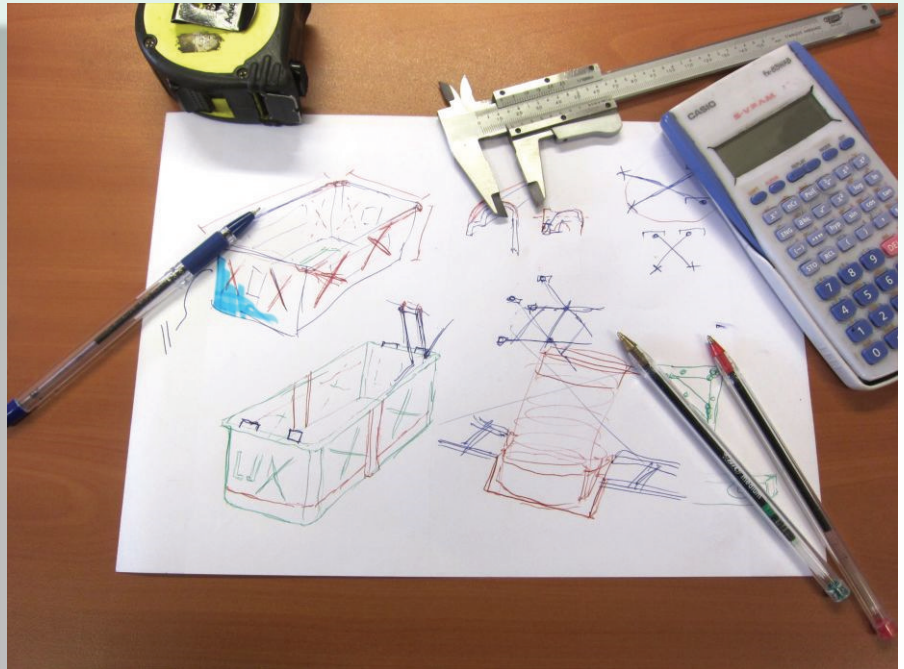
- The dimensions of the container are as follows;
External:
Length: 1600mm
Height: 800mm
Width: 950mm
Internal:
Length: 1500mm
Height: 500mm
Width: 850mm
These dimensions, or as close to these as possible should be used.
- The container shall be as light as possible (both plastic and steel content), while maximising strength and durability.
- The floor shall be fully lowered under a 170kg load (wet linen).
- The trolley shall be on four castor wheels, two lockable, that withstand minimum of 70kg each. The wheel diameter will be 75mm (total height of the castor 97mm. It may be required to use stainless steel bearings if the trolley is to be steam cleaned).
- The product shall have no sharp edges that would cause injury. All corners should be well rounded with a minimum radius of 10mm where possible.
- Material or linen shall not get stuck in any mechanism of the leveling system.
- The floor shall lower and raise in a level position and be stable at every point.
- The floor shall raise to a level within 100mm of the top of the trolley.
- There shall be no 'pits' where dirt of fluid can gather and remain.
- The complete trolley including the frame for which the leveling floor is mounted, shall be water resistant and not rust.
- There shall be an LD. pouch incorporated in the design. Which will be A4 in size. It shall not be made from perspex.
- The product shall be made from compounded material so as not to have any colour give-off.
- The gap between the floor and the sides of the trolley should be kept to a minimum.
- The underside of the trolley shall be open to allow access to the framework for servicing and maintenance/
- Strengthening ribs and panels shall be considered during the design.
- Consider panels for signage.
- Parts subject to wear and tear shall be standard off-the-shelf parts.

Signed: _____ Signed: _____ Signed: _____

Date: _____ Date: _____ Date: _____

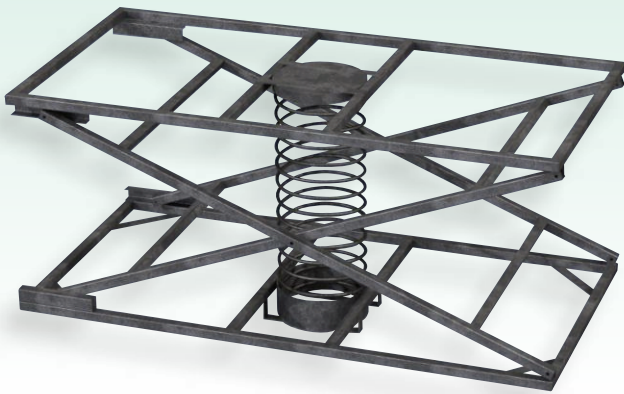
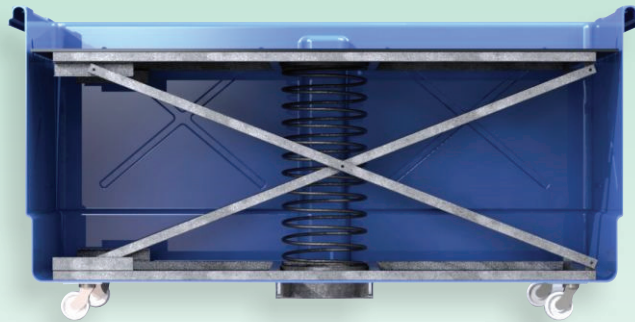
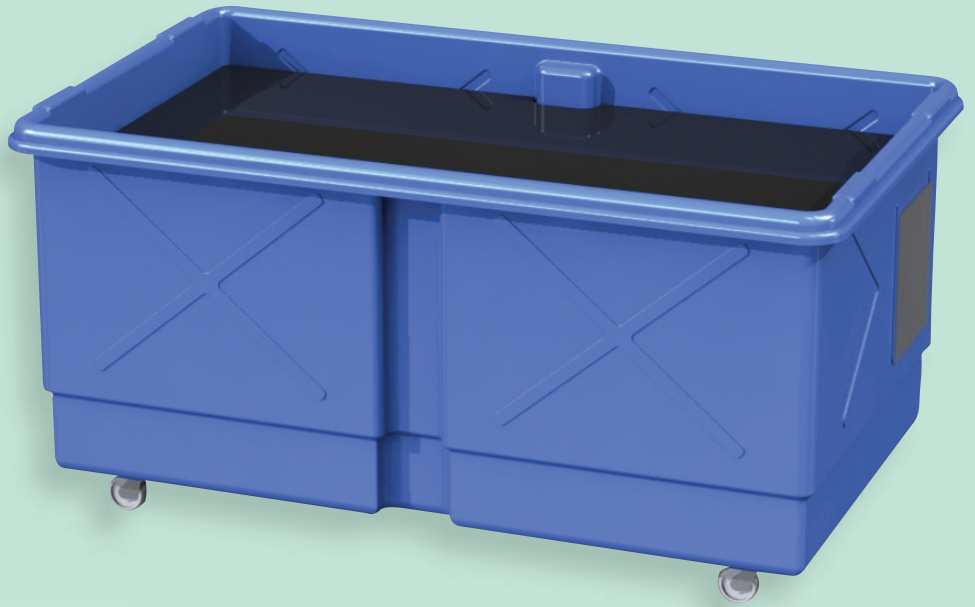
Concepts

Our design department meet and discuss the best way to fulfil your requirements. At this stage we generate multiple concepts and later develop the most promising ones until the design is finalized. We do this while staying conscious of labour and material cost to enable the most efficient production



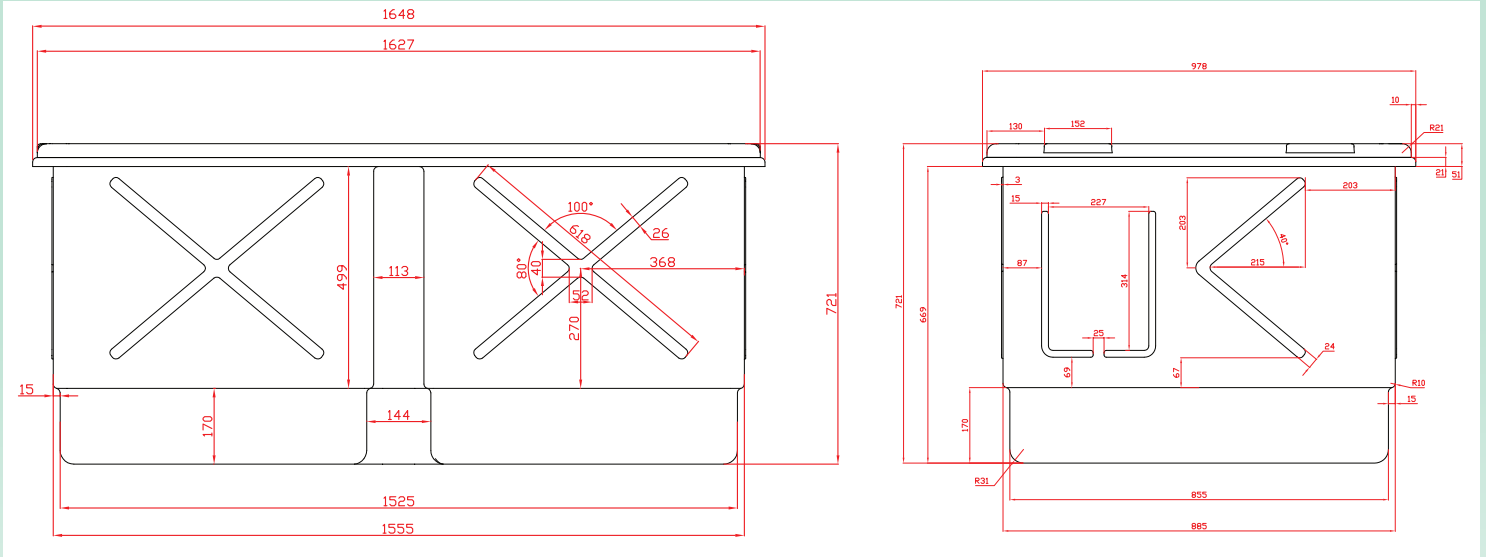
3D Design

Our design department have great capabilities when it comes to 3D design and graphics. It is possible for us to generate a replica of what your product will look like. If you want to take it further we can produce life-like renderings in real environments, whether it's in your garden, loading a full container load, cut in various pieces or even exploded view showing the individual components of the product.



2D Drawings

Once everyone is happy with the 3D design we move on to creating technical CAD drawings, both for your sizing of the product and for our own use while fabricating the mould of your product.



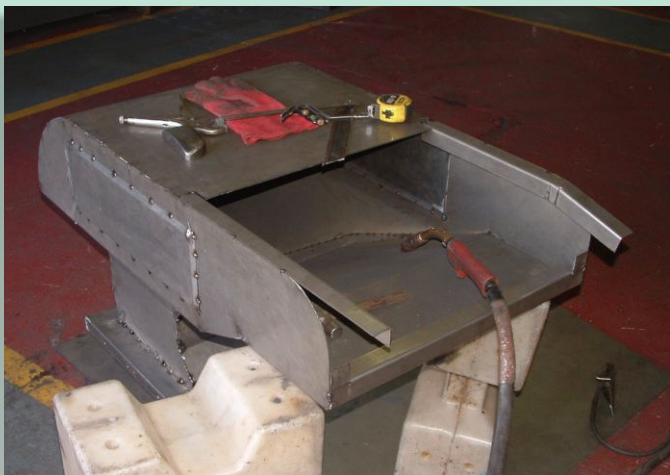
Costing

We have very good working relationships with our suppliers so if there are any extra parts/ components you require we are confident we can get you the very best prices. We will calculate costings for the mould, the costs to produce the product and we are confident we can offer you a very competitive price for your products.

Weight		Estimated Mould Fabrication (Complete Mould)
Material		
Colour		Fab. Shop hours
Consumables		20 Clamps
Wastage		CR4 Material
Fittings		40mm X 8mm X 3.5m Flange
Gas		
Printing		Fittings
Labour		x2 Swivel castors, x2 braked castors
Extra Labour		x 4 bearings
Electricity		x4 M12 x 50 Bolts
Currency		x4 M12 Nylock Nuts
Transport		x4 M12 serrated washers
Mould		x2 M8 x 65 Bolts
Cost		x20 M8 x 45 Bolts
		x22 M8 Nylock Bolts
		x44 M8 x 25mm washers
		Spring
		5mm plastic sheet for floor
		Galvanize Frame
		Steel for frame
		Labour for frame
		Clear Polycarbonate A4 size

Mould Fabrication

Our mould fabricators are very experienced and can produce vastly complex moulds for your product. Depending on the complexity of the product, the mould fabrication lead time may vary but we can send you updates and pictures of the progress of the moulds as they are manufactured. Once the mould is complete we progress to production of initial samples.



After production of initial samples these products are measured and tested to ensure the product reflects the product design. Any modifications/improvements can easily be introduced on site and the product may be re-evaluated in a very short span of time.



So contact us with your idea and see
what we can do for you!





STURDY PRODUCTS LIMITED
Blessington Industrial Estate,
Blessington,
Co. Wicklow,
Ireland

Tel: +353 (0)45 865044

Fax: +353 (0)45 865721

E-mail: sales@sturdyproducts.com

Website: www.sturdyproducts.com

Looking forward to hearing from you.