[Barrow+]

More than an ordinary wheelbarrow


REFUSE
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A wheelbarrow is typically made up of a barrow that is supported on a frame with a fixed wheel acting as a pivot. Wheelbarrows are often wooden, plastic or steel as is the case in this image. This wheelbarrow belongs to a builder whom has had around only six months use out of it. It is no longer in full working order. Research has shown that the steel wheelbarrow is the favoured choice for the majority of construction workers, gardeners and for domestic use.

This wheelbarrow, as with all wheelbarrows has succumbed to heavy usage where being gentle and careful is not taken into practice. There are serious signs of wear all over, in particular the barrow has misshapen and has many dents and areas of rust.

The wheelbarrow is made from steel, This material has excellent strength properties however it has been weakened from heavy strike impacts. This is because the only way to get dry concrete off the steel is to strike it with a hammer or shovel. Transporting concrete is a common task of many wheelbarrows.

The tyre of this wheelbarrow is punctured, on a building site or in a garden it is not unlikely that wheelbarrows will have to carry a full load across sharp debris. When a tyre is punctured on a wheelbarrow it halts progress as spares are not easily accessible. Many users will simply buy a replacement wheelbarrow instead of just repairing the wheel.

Although the range of tasks differ slightly for gardeners and construction workers, the wheelbarrows they use are exactly the same.

The Barrow+ is an innovative and highly versatile approach to the outdated wheelbarrow. The Barrow+ has been carefully thought out, especially the removable inserts system enabling it to surpass all competition in efficiency in tasks.

There are two different inserts that are easily installed and removed from the Barrow+. They are manufactured out of LDPE, a material with a great strength to weight ratio and high impact resistance. The most useful property is the materials ability to be flexed and return to its original form, making the inserts incredibly practical and efficient for a range of tasks.

The smaller of the inserts has been designed especially to work with concrete, as well as performing for all other relevant uses. Concrete does not stick to the insert when wet, and when dried out the material can be flexed to crack off the concrete. It has a capacity of 95 litres, sufficient to the capacity of an ordinary cement mixer. This insert also has carry handles and attachment loops for a pulley system, ideal for use with scaffolding.

The 160 litre capacity of the larger insert can hold bulkier lightweight loads saving time in making many unnecessary trips. There is also a designated area to lean tools and carry handles.

The strengthened steel frame of the barrow lies low to the ground for extra stability, the handles have been designed ergonomically for the user for a safe comfortable grip.

The tyres of the Barrow+ come filed with an Oko puncture resistant gel solution, able to withstand up to 9mm diameter punctures, reducing the possibility of facing downtime to repair a tyre.

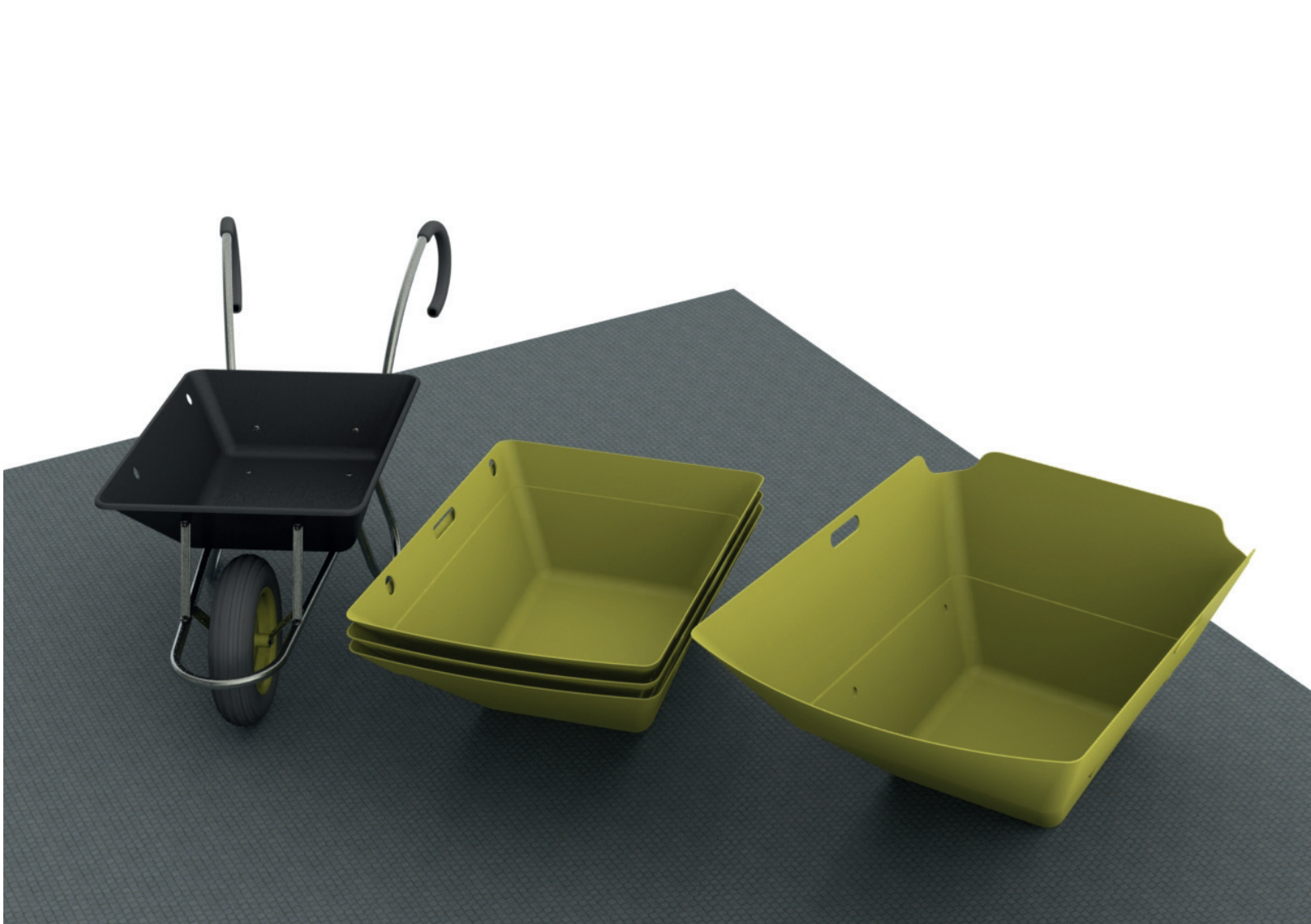
The main Concept of the Chillington Barrow+ revolves around the interchangeable inserts. Unlike most wheelbarrows that are designed to complete a large range of tasks well, the Barrow+ can be adjusted by the user by changing the insert to complete an even larger range of tasks brilliantly.

The inserts are interchanged very easily. The user simply drops the insert of choice into the Barrow+ and pushes the holding buttons on the insert through the holes lined up in the steel barrow. To remove the insert the user just pushes the buttons free of the steel barrow form the outside and is able to lift it out.

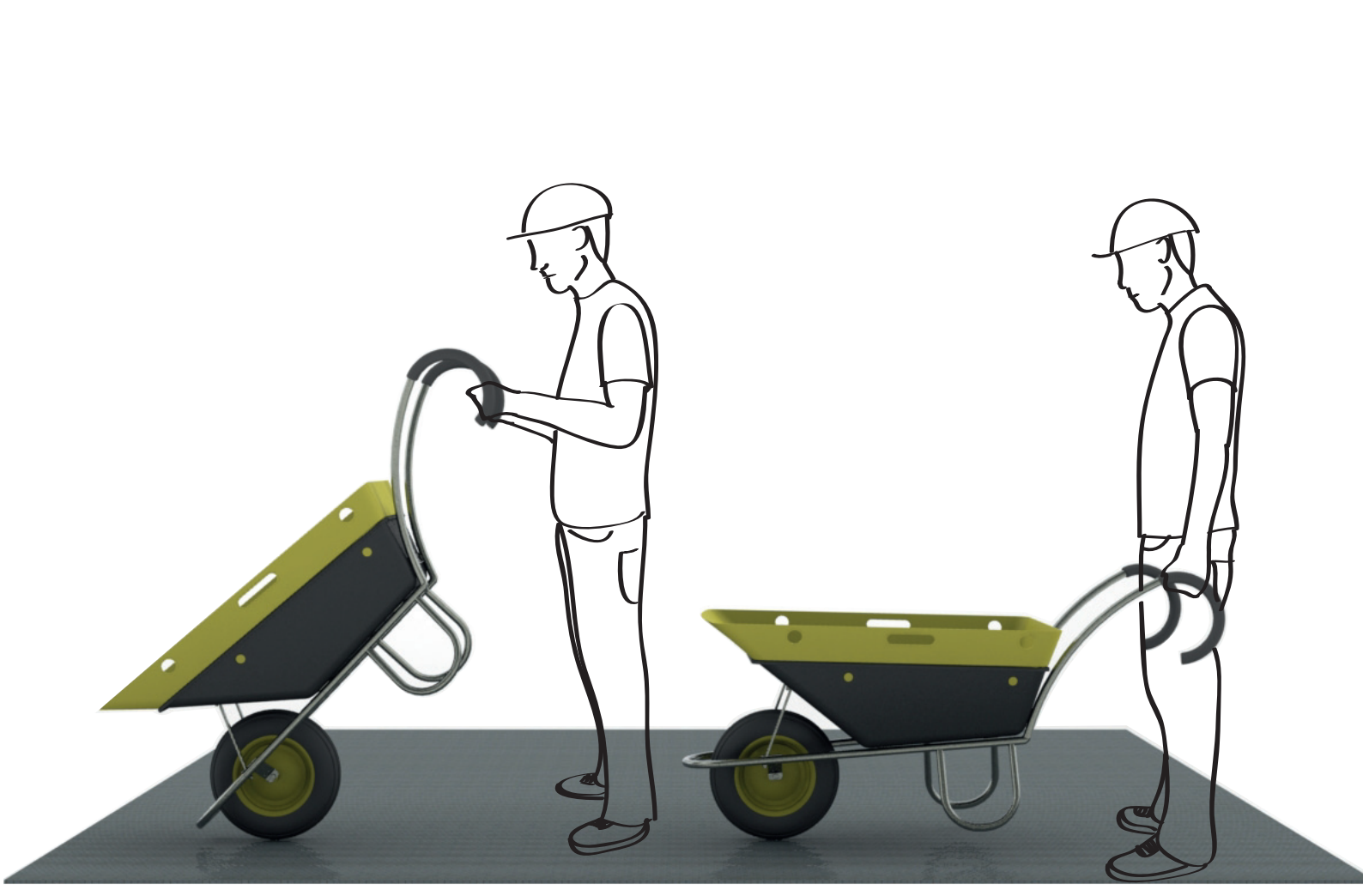
The insert has reinforced holes around the top that have been positioned to carry the load evenly. These holes can be attached to straps linked to a pully system. The means the barrow can be loaded at ground level and then hoisted up a pully where it can then be unloaded or placed straight into another Chillington Barrow+ and transported to where it needs to go. This feature is great for efficiency in scenarios where scaffolding is being used. e.g. If bricks or cement are required to be carried up to a high level.

The smaller insert along with the Barrow+ have been designed to primarily to work with concrete and cement. It has been designed to work in co-ordination with current cement mixers. The product can fit underneath most raised cement mixers and also carries an equal load.

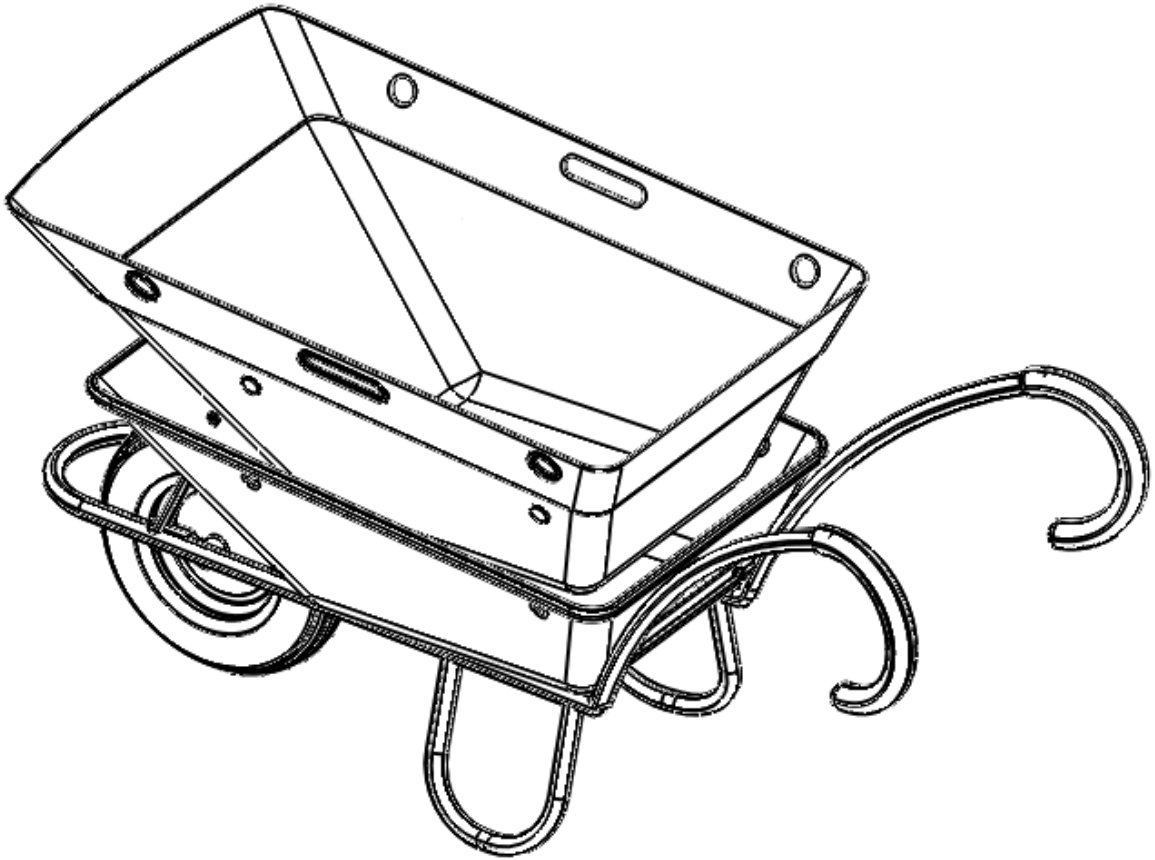
The insert's both have carry handles moulded into them at the point of balance. If the load is lightweight the user can carry it within the insert speeding up processes, the user can also utilise the insert at ground level lessening the distance in loading. If the insert is tipped at this level is can also act in the same manor as a dustpan for picking up loose debris.



The inserts come at a fraction of the price of a wheelbarrow and take up a lot less space, therefore users could have one or two Chillington Barrow+ devices on site and more inserts. By doing this a continuous cycle can be formed using the Barrow+ as a tool to transport loads whilst other inserts are being filled. The inserts are capable of stacking into one another also for space saving.



The Chillington Barrow+ has been designed with user interaction as the leading priority down to every detail. The handles differ substantially to conventional wheelbarrows, this is purely functional to the design as the curvature of the handles makes a comfortable, safe, slip-free grip to support the load. The shape of the handles also means that when the user is tipping up the barrow to empty the load they need only slide their hands around the handles rather than having to completely change their hand position. The handles are insulated in a heavy duty rubber that adds comfort when undergoing heavy usage.



Capacities:

Empty barrow: 85 litres
Small insert: 95 litres
Large insert: 160 litres

Materials and Manufacture:

Inserts: Low Density Poly Ethylene, injection moulded.

Barrow: Powder coated steel, pressed and folded.

Frame: Powder coated 25mm tubular steel, bent and tig welded

Grips: Synthetic rubber, moulded

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