




Recycled Plastic Products

Over a delicious pizza dinner at The Makerspace (Durban), the Innovative Waste Design (IWD) team took off with a great problem, the waste from our take outs. Fact is, the current linear plastic packaging lifecycle is extremely wasteful and harmful to the environment yet waste is more valuable than people think and know it to be. So from that point we decided to be a solution rather than the contributors to the global issue at hand - plastic solution.

 Difficulty **Medium**

 Duration **2 day(s)**

 Categories **Recycling & Upcycling**

 Cost **50 USD(\$)**

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Comments

Introduction

As the Innovative Waste Design, we have chosen to use waste in order to reinforce the value and quality behind production processes starting with plastic combs ready for sale, a vertical garden in support of the urban farming movement and the plastic fusing process. Our mission is to upcycle waste into products and leave the world better than we found it.

Materials

Tools

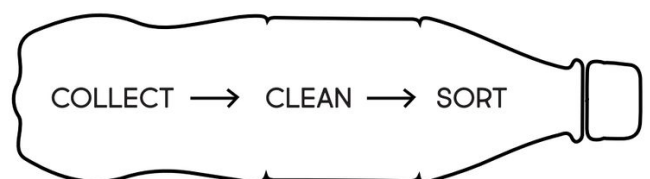
Step 1 - Intro

https://wikifab.org/wiki/Fichier:Recycled_Plastic_Products_intro.mp

Step 2 - Treatment

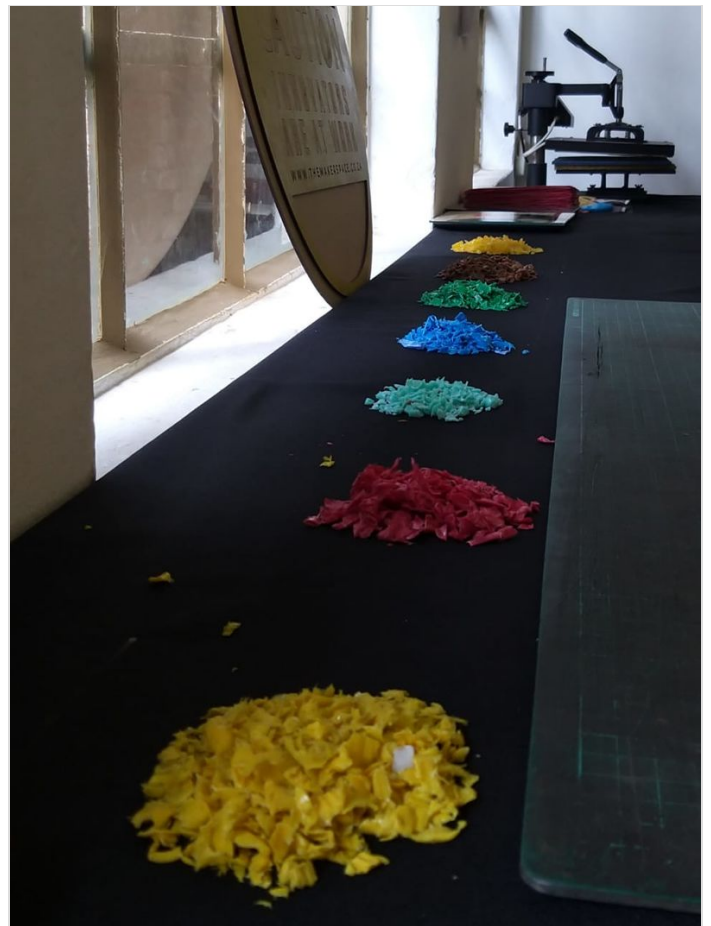
Making products out of recycled plastic caps, it is very important to ensure that all contaminants have been removed for a better quality.

THE TREATMENT PROCESS OF PLASTIC BOTTLES



Step 3 - Shred Plastic

Once the treatment process has been completed we take the bottle caps into the shredder where the outcome is crushed plastic flakes.



Step 4 - Mold Injection

We insert the plastic flakes into the plastic premer injection moulding machine, while the injector is melting the flakes into a solution, it is best to use the time to heat up the aluminum mold.



Step 5 - Final Product

When the solution is melted and ready, turn the wheel in order to extrude the melted plastic into the mold.

Cool down the mold by placing into a bucket of cold water. Take the mold out of the water and unscrew the bolts for the **grand** reveal.

The final product will have excess plastic that you will remove by trimming and sanding for a smooth finish. And that is how you get a product made 100% from recycled plastic and that is 100% recyclable.

