

## **\*\*Re-usable Head used for Mop Floor Refills\*\***

### **• Innovation Overview \***

Domestic Mop Floor Refill, presently in the market has "Plastic Head" permanently attached to the "Microfiber/Cotton Cloth" and as a result after 3-4 months of use, when the "cloth" is worn out, unfortunately it will end up in nature along with the "plastic part that is permanently attached to it" although the latter has not completed its life cycle yet.



See Domestic and Commercial Mop Refills Sold in Amazon.eu:

<https://amzn.eu/d/8UQG1HD>

With laws applicable worldwide "To Reject the Use of Single-Use Plastic" there is an urgent need to replace, as much as possible, "Single-use plastic products" with the "Re-usable ones" in support of Circular Economy.

Every piece of plastic dumped in landfill is creating huge environmental challenges, as they degenerate into toxic microplastics that end up in the ocean.

With the aim to reduce plastic pollution caused specifically by the Plastic Head permanently attached to Mopping Cloths, our innovative project offers a new design: Reusable Head, designed to be easily attached to the Mop Cloth, so that when the "cloth" is worn out and has completed its life cycle, it can be detached and thrown into Nature without the plastic head.

<https://youtu.be/HzfQ56WS-Uc>

<https://youtu.be/MW2clke93s8>

The HEAD acts as a **connector** between the Mopping cloth and the Stick. The Head can be any material sufficient to be strong and rust resistant such as Wood, Aluminum, Stainless steel or Plastic that are classified as safe ones.

WET Mop Floor Refill can be classified:

- a) **Heavy Duty Industrial Mop Floor Replacement** –are used for cleaning large areas;
- \* Mop Replacement are constructed to be attached and detached to Reusable Industrial Gripper or Clamp Heads (Photo 1)
  - \* **It** Requires about 400 grams of **pre-stitched** absorbent fabric (Photo 2)
  - \* Heavy duty industrial Mop Replacements are used only with the **Side-Press bucket**. (Photo 3)



**KeFanta**  
Loop-End String  
Mop Heavy Duty C...  
★★★★☆ 53  
300+ bought in past



**Kphico**  
Looped-End String  
Mop, Heavy Duty C...  
★★★★☆ 121  
100+ bought in past

**Photo 1**

2 Pack - Large Microfiber Tube Mop 400GSM  
- Heavy Duty Industrial Wet Mop Head  
Refill, Commercial, Thick Fiber, Replacement  
Heads, Extra Absorbent

Amazon's **Choice** in Commercial Replacemen...



Photo 2



### Amazon Basics Side Press Wringer Combo Commercial Rectangula...

4.7 ★★★★★ (5,320)  
2K+ bought in past month

**\$64<sup>61</sup>**

Or \$21.54/month for 3  
months (no fees or interest)

✓ **prime** One-Day

**FREE delivery Tomorrow 10  
AM - 3 PM**

Amazon brand

Photo 3

b) **Domestic/Commercial Mop Refill** are used for small areas like homes, office etc.;

\* They require about 200-400 grams of absorbent Mopping cloth which is permanently attached to the Plastic Head. The Head act as a connector of Mopping Cloth and the Stick **(Photo 4)**

\* Domestic/Commercial Mop Floor are using bucket with squeeze function **(Photo 5)**



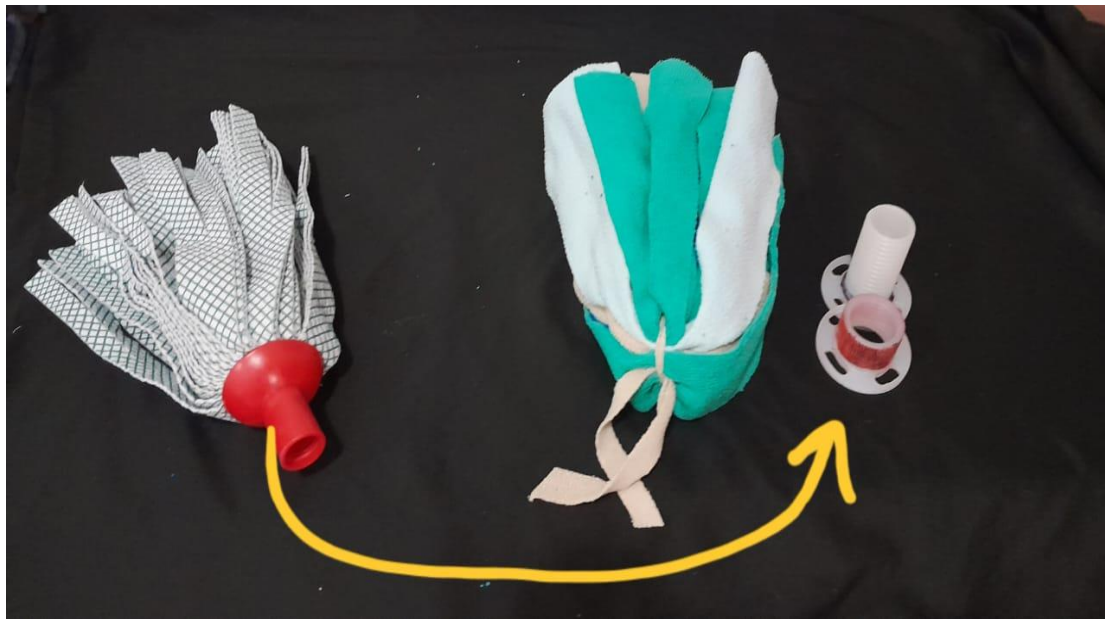
**Photo 4**



**Photo 5**

**c) Our innovative idea will bring in market a Re-usable product with the following benefits:**

- \* The **Mop Head** will be sold separately from **Cloth Refill** (*Photo 6*)
- \* It can be used for both small and large areas.
- \* Would make **Mop Refill Manufacturers** neither pre-sew the CLOTH (saving Energy and Manpower on Heavy Industrial Mop Refills) nor permanently glue the plastic head on Domestic Mop refills
- \* This would enable **Mop Refill Manufacturers** to market their product by simply tying the textile strips together allowing consumers to attach it to the Mop Head themselves, at home, office etc.
- \* Having a Re-usable Head base of any kind of shape (circular, rectangular, etc.) and in different sizes would allow the product to be used both in buckets with side-press function, as well as those that work with the squeeze function. (Photo 6)



**Photo 6**

<https://youtu.be/HzfQ56WS-Uc>

## • **What is unique about this Innovation \***

Our idea to have a Re-usable Mop Head is an improvement of the existing product \*Domestic & Commercial Mop Refill\* presently sold in the market:

Our innovative product offers:

\* The **Head** to be sold separately from the Moping Cloth, giving the consumers the option to easily Attach & Detach them from each other when needed

\*The Moping Cloth simply is tied around the neck of the reusable Head.

No **need to be pre-stitched**, therefore saving Manpower and Energy on sewing machine.

By bringing this new product in the Market, consumers will contribute to divert away the Plastic part of the Mop from landfilling before the Mop Head finish its life cycle.

Here is the summary of its unique aspects:

**\*\*Main purpose:**

-Reduce plastic pollution by diverting the plastic Mop Head away from landfilling.

**\*\*Secondary purpose:**

#1. If this innovative product becomes available on the market, it will indirectly contribute to the reduction of "textile pollution", saving valuable natural resources by extending the life of clothes made from fabrics with high water absorption properties such as Fennel, fleece, blankets, children's cloth, towels etc., by offering the Fashion Industry and Clothing stores such as H&M, Walmart etc., the option to use their "Textile waste and Unsold clothes" turned into Mop Refill, simply by cutting them into strips, and tying up the Textile pieces to sell afterwards as Domestic and Commercial Mop Refills instead of sending their waste to the incinerator.

Publication: H&M burns up to 12 tons of clothes per year

<https://www.fashionnetwork.com/news/h-m-burns-up-to-12-tonnes-of-clothes-per-year,886882.html#fashion-week-paris-men-fursac>

(Note: undoubtedly part of those H&M Unsold clothes shipped every year to incinerated, are clothes made from fabrics such as Fennel, Fleece, Microfibers etc., which can easily be turned into Mop Refills)

#2. Consumers also have the option to use their "Unwanted clothes" such as flannel, towels, blankets, etc. as Mop Refills by simply cutting them into strips and



attaching to the Mop Head, giving them the option to end their life cycle. There is no need to sew strips!!

Video Demonstration show how much water an Unwanted blanket I had at home (turned to Mop Refill) absorbs Vs Microfiber Mop Refill I bought in the market:

<https://youtu.be/8odTbC3pIdQ>

#3. And last but not least. If Fashion Industry and Clothing stores will consider to construct their textile waste and sell them as Mop Refills, then the Global Textile Industry. (which is ranked as the second largest polluter on our planet) would be forced to reduce the production of the fabrics for Industrial and Domestic Mop Floor, which will significantly reduce "Atmospheric Gas Emission" and have a positive impact in our ecosystem.

### **How does this Innovation fit into a Biosphere**

Statistics show that 13 million tons of clothes are filling our landfills every year and of course part of those "Textile Waste" are fabrics with High water absorption properties.

By having Re-usable Head used for Mop refills available in the Market not only will reduce plastic pollution but will help to divert away from the landfill part of the **“Unsold-clothes”** and **“Textile Waste produced during Fashion Manufacturing”** therefore will have positive impact in our ecosystem due to:

#1. Reduction of plastic pollution

#2. Recovering carbon footprint from Textile waste & Unsold clothes w/High water absorption properties that have already been manufactured, while making the most of the energy already put into them during manufacturing.

#3. Consumers will benefit financially by purchasing Mop refills sold from Recovered textiles rather than from products manufactured specifically for them.

#4. Forcing Global Textile Industry to Reduce production of Fabrics for Mop Floor Refills.

#5. Since our new product does not require a pre-sewn moping cloth to be attached to the head, so Energy and Labor will be saved on sewing machines, unlike what is required for heavy duty industrial Mop refills that require sewing.