RotoRinse

How might we facilitate a **time-efficient cleansing/ drying process for makeup brushes** that exceeds current capabilities of existing solutions?

Five Whys

1. Why is cleaning makeup brushes such a hassle?

You have to exert a high amount of effort to adequately remove color pigment.

2. Why does it take so much effort to sterilize and remove color pigment?

Current cleansing solutions are unable to provide benefits within realistic time and effort

3. Why are current cleansing solutions inadequate?

Current solutions are not robust enough to fully eliminate color pigment.

4. Why are current solutions not robust enough?

There are a multitude of different makeup brushes available on the market. Engineering a solution that can balance key cleaning factors such as speed, maintaining brush integrity, and cleaning efficiency for all types of brushes is difficult.

5. Why is engineering an ideal solution difficult?

An optimized cleaning methodology that balances these key factors for different types of brushes has not been developed.

Quarter-Inch Hole

People want clean brushes and it is too difficult to

61% of users clean their brushes less than is recommended

22% say it takes too long to clean them or for the brushes to dry.

Current Solutions

Silicone Pads

Scrubbing surfaces to use instead of palms/paper towels when cleansing brushes

+ Buy once, use forever
+ Cleanses thoroughly

- Requires manual labor and has large margin for user error

BrushPearl

Uses ultrasonic technology to clean and disinfect brushes/makeup tools

+ Can batch clean brushes
+ Provides container to dry brushes after cleaning

- Users complain that cleansing is not thorough
- Requires proprietary solution
- Expensive (100$) and hefty

Lilumia 2

Automatic cleaner that
rotates brushes against a
textured silicone pad for

+ Provides container to dry brushes
+ Thoroughly cleanses brushes

- $150 and requires proprietary solution
- Can only clean 6 brushes at once
- Takes many steps to disassemble and set up device

“Why should washing makeup brushes take longer than me loading my laundry?”

- X.Sun (washes once a month)

Brushes are also very good at allowing layer after daily layer to stick to bristles, letting dirt and bacteria to get trapped within."

- Greg Goodman, Dermatologist

“To be honest I’m just not sure how you’re supposed to clean them properly”

- M. Tulsiani (buys cheap brushes and throws them out after a few months)

Survey

51% of makeup users surveyed use makeup daily or more

32% clean their brushes weekly or more frequently

Users spend an average of 13 min cleaning brushes, with upper threshold being 60 min

On average users are willing to spend ~$25


come
great
makeups
thing
Speed
replace
morning
hard
slipping
look
Automatic
purchase
stick
nice
Simplicity
reassurance
cleansing
messy
deep
include
Antibacterial
cartridges
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reasonable
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product
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new
soap
method
balancing
negatively
causing
free
damage
cleaned
whenever
water
hours
extreme

New Solution Requirements

Cleanses brushes thoroughly
Does not harm the integrity of bristles
Quick and painless user input
Low margin for user error
Competitively priced and accessible
Aesthetically elegant

Stakeholders

Primary Market - Makeup users

- Professional
- Semi-professional
- Recreational users

Retailers

- Large cosmetics focus stores (Sephora, Ulta)
- Smaller beauty supply stores (Sally Beauty, individual owned, etc)
- Online retailers/beauty subscriptions (beautylish, Birchbox)
- Television retailers (HSN, QVC)

Manufacturers

- Injection molders, assemblers, etc

White Space

Effective

Inexpensive

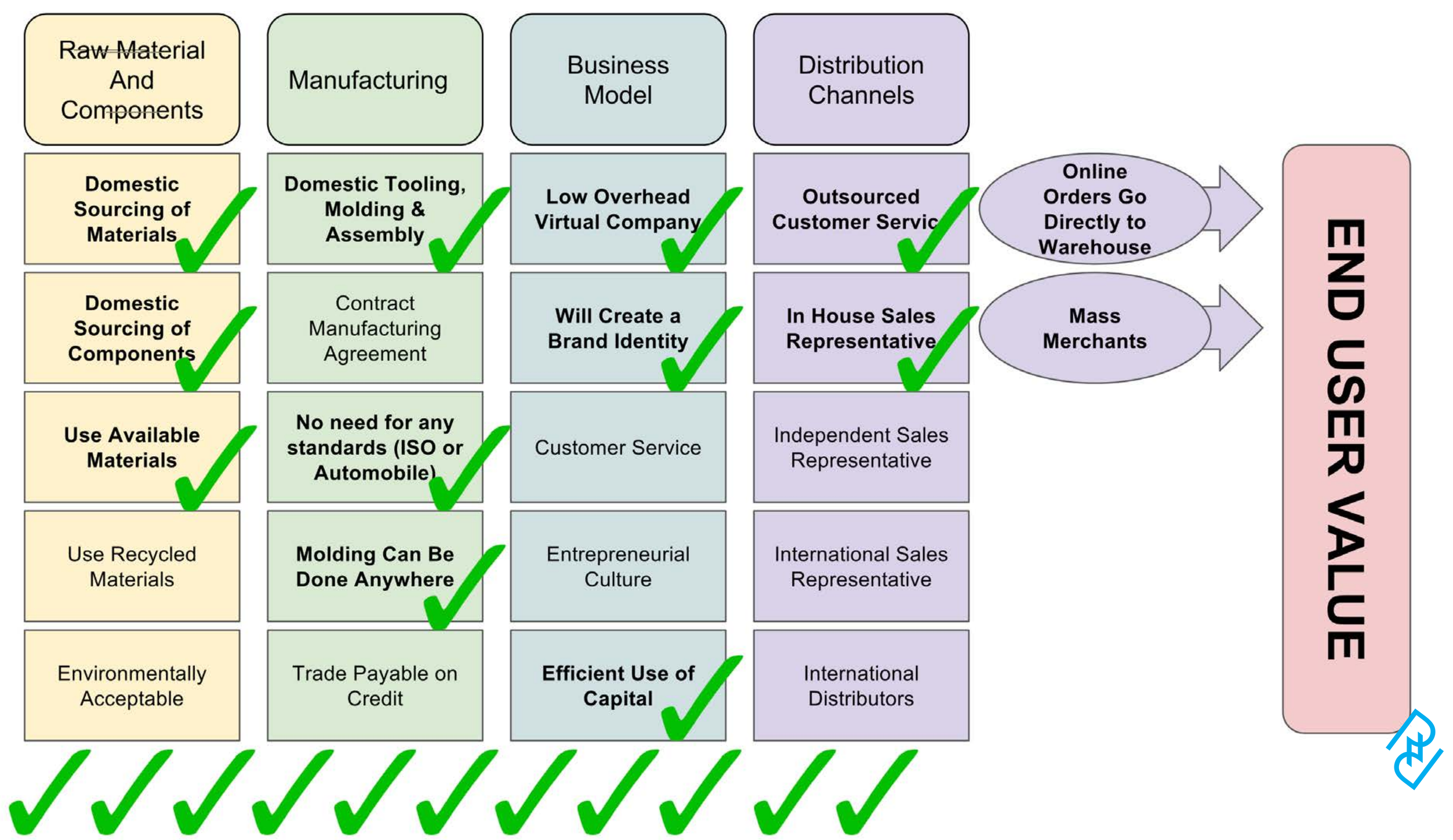
Expensive

Not Effective

Value-Chain Analysis

Areas where the design can add value:

- Faster than high end products
- “22% say it takes too long to clean them or for the brushes to dry.” - Business Wire
- More affordable than high end, existing products (~$30 compared to $125)
- Drying functions
- Ease of usability


Raw Material And Components
Manufacturing
Business Model
Distribution Channels
Domestic Sourcing of Materials
Domestic Tooling, Molding & Assembly
Low Overhead Virtual Company
Outsourced Customer Servic
Online Orders Go Directly to Warehouse
Domestic Sourcing of Components
Contract Manufacturing Agreement
Will Create a Brand Identity
In House Sales Representative
Mass Merchants
Use Available Materials
No need for any standards (ISO or Automobile)
Customer Service
Independent Sales Representative
Use Recycled Materials
Molding Can Be Done Anywhere
Entrepreneurial Culture
International Sales Representative
Environmentally Acceptable
Trade Payable on Credit
Efficient Use of Capital
International Distributors
END USER VALUE

Performance Benchmarking

Lilumia

Average total time: 26.5 minutes
Average total user input time: 12 minutes
Average user load-in time: 6 minutes
Average user load-out time: 6 minutes
Cleanliness of brush: little to no residue if load-in is successful

Lilumia actually extended user interaction time by ~10 minutes (loading brushes/removing brushes/cleansing device) instead of making the process easier - our device must improve the user experience by speeding up the user’s workflow instead of slowing it down

Handwashing - 1 minute/brush
Silicone pad - 0.4 minutes/brush
Lilumia - 2 minutes/brush

RotoRinse - 15 seconds/brush

Business Model

Feature differentiation will increase the consumer's willingness to pay

Customers (domestic)

~20 million daily makeup users
~3000 makeup artists in the U.S.
~20,000 artistic performers (dancers, etc)
Makeup crews for movie and TV productions, drag queens and models

U.S Bureau of Labor Statistics

Revenue Stream

The average makeup user spends thousands of dollars on beauty products in their lifetime
Daily makeup users willing to pay up to $25
Professional makeup artists willing to pay ~$50

http://badpr.co.uk/tag/sara-wolverson

Intellectual Property

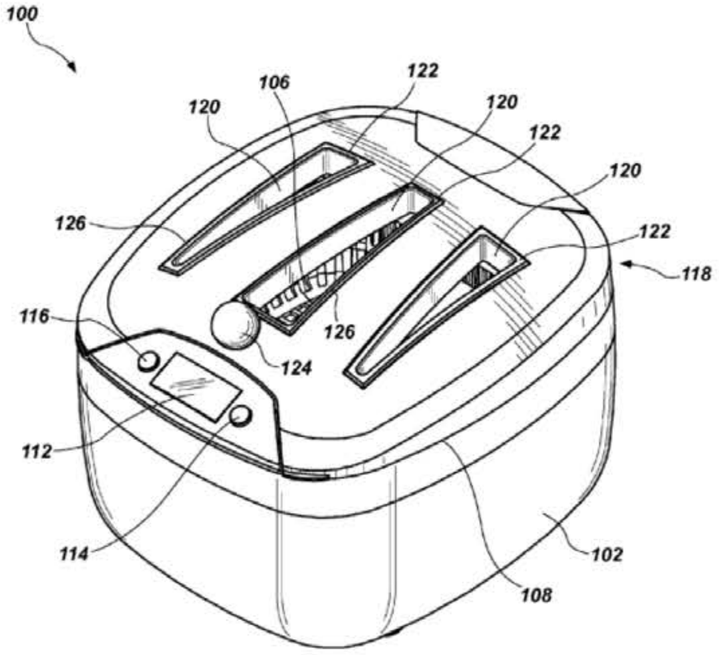

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FIG. 1

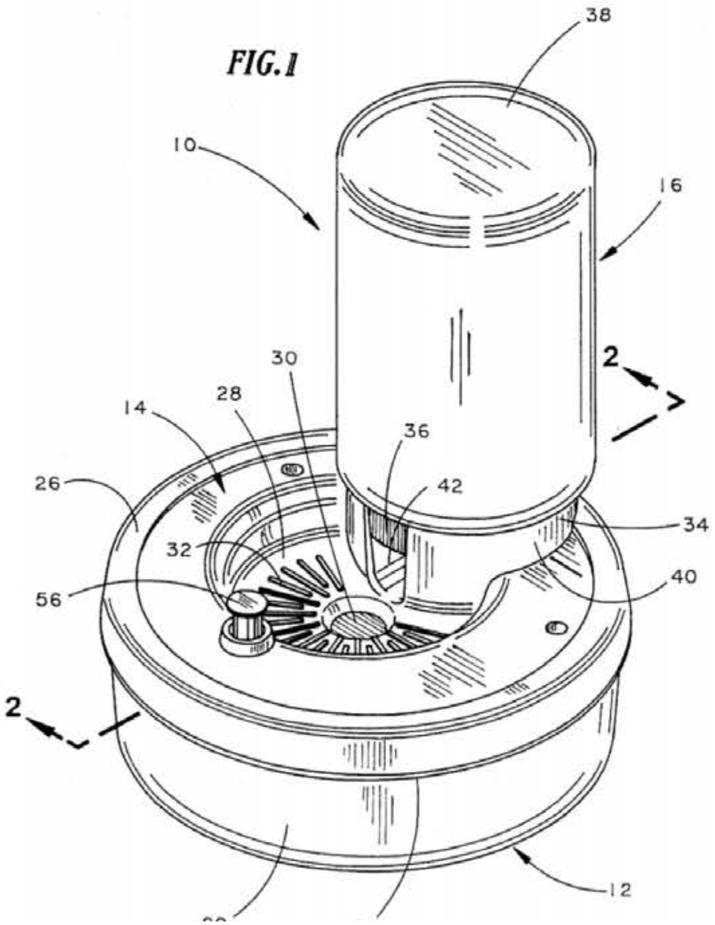
FIG. 1
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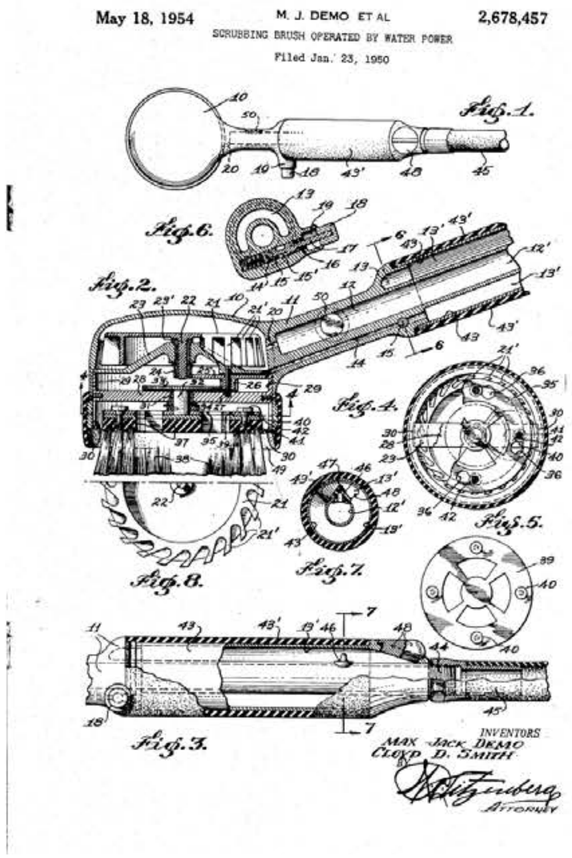

May 18, 1954
M. J. DEMO ET AL
2,678,457
SCRUBBING BRUSH OPERATED BY WATER POWER
Filed Jan. 23, 1950
Fig. 1.
Fig. 6.
Fig. 2.
Fig. 4.
Fig. 5.
Fig. 8.
Fig. 7.
Fig. 3.
INVENTORS
MAX JACK DEMO
CLOYD D. SMITH
ATTORNEY

Patent Application

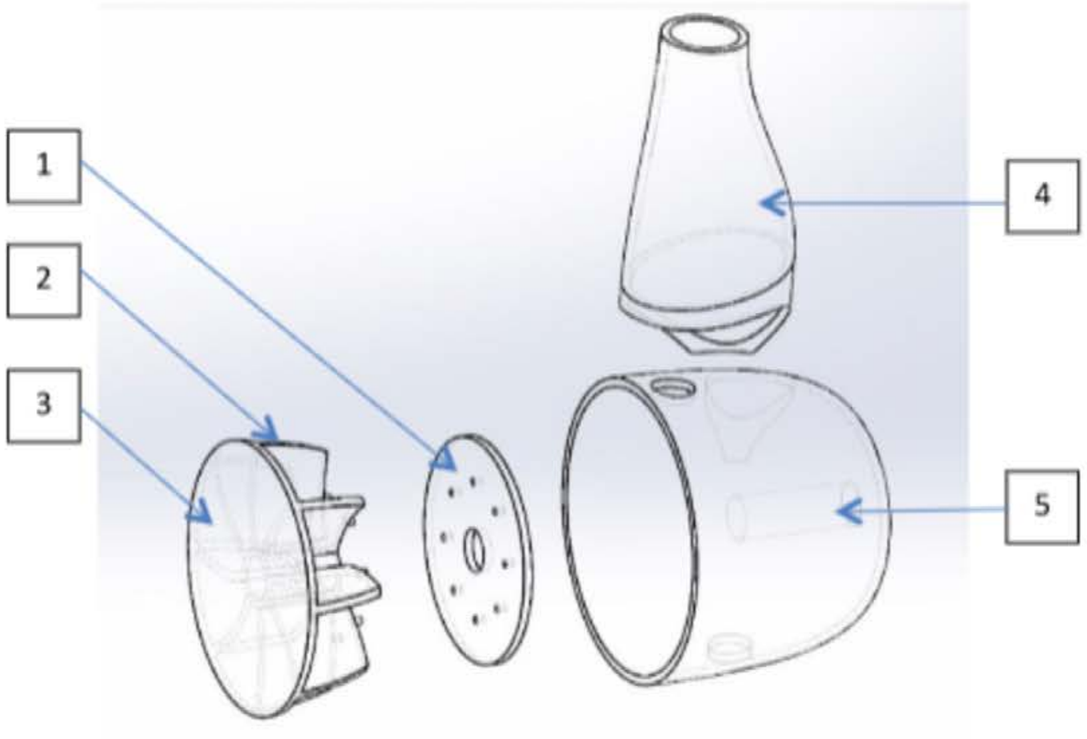
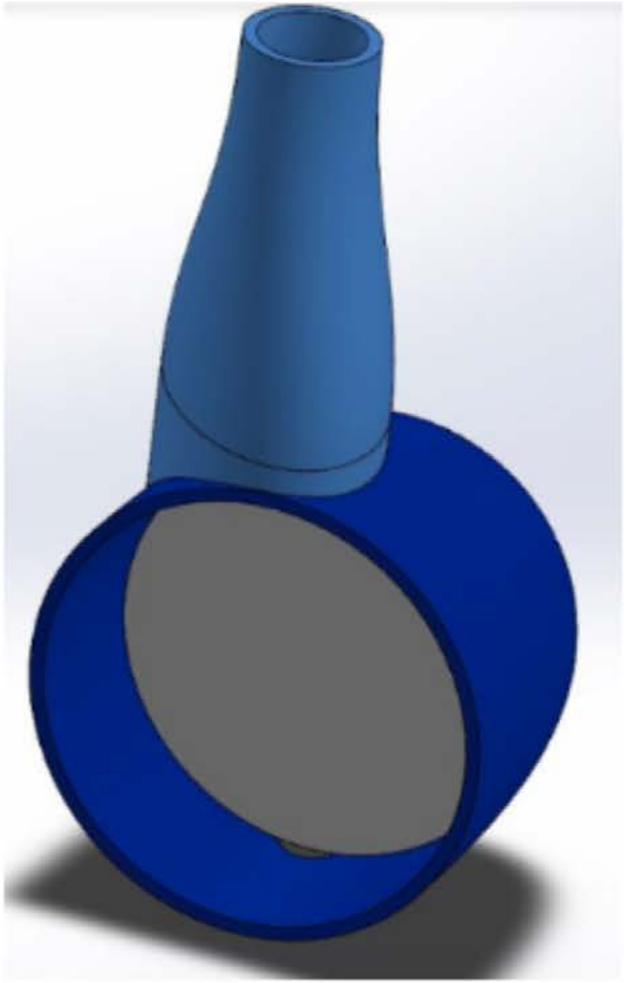


Figure 1 – All Components



Final Prototype

Functional Expectations
Pigment Removal
Ability to dry brush
Can handle multiple brushes of varying sizes

User Expectations
Minimal User Interaction*
Under $50
Visually appealing

RotoRinse