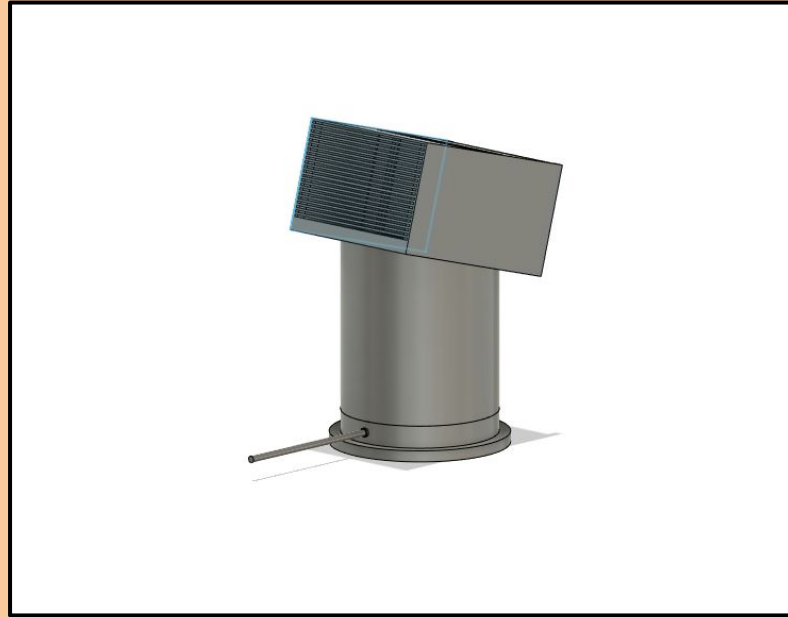


Fume Master



By: C. Antoine, M. Bousso, A. Ly, J. McKenny-Barschall, J. Platt, D. Zhang, I. Yang



What is a Fume Master?

Portable, Removable Range-Hood

Heat Resistant

Quiet

Modular

Easy to Repair

Easy to Clean



Why the Fume Master?

Greasy cooking

Air Hood TM

Smokey

->Noisy

Range Installation

->Heat damage

->Weak

Outer Shell

- Made of aluminum
- Heat-resistant (able to be used near fire)
- Comes in various colors
- Sleek ergonomic design



Figure 1: Back view of the FUME MASTER

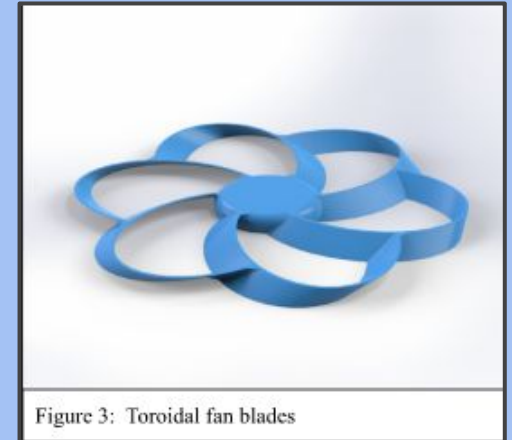
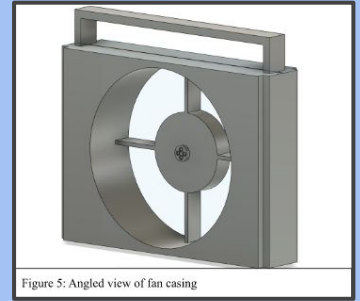


Figure 2: Front view of the Fume Master



Swappable Fan Assembly

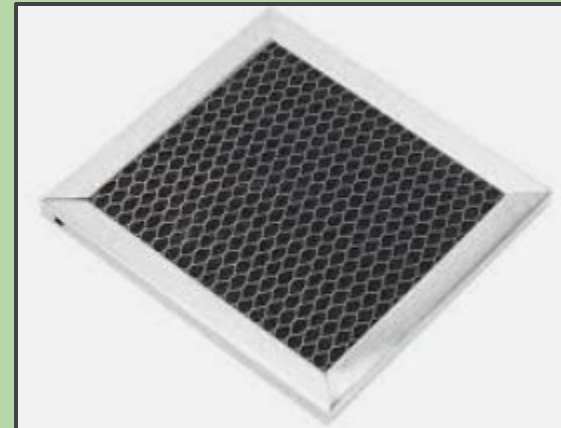
- Much Quieter
- Same Amount of Airflow
- Can be mass Produced
- Easily Replaced





Swappable Charcoal Filter

- Same Swapple Design as the fan
- Can be mass produced Cheaply
- Easily Cleaned however can be thrown away



Competition

<u>Criteria</u>	<u>Rangehoods</u>	<u>Airhood</u>	<u>Fume Master</u>
Cost	\$1,000	\$156.99	\$149.99
CFM (Cubic feet per minute)	400	100	150
Noise	Loud	Quiet	Quiet
Durability	Heat Resistant	Not Heat Resistant	Heat Resistant
Portable	No	Yes	Yes



Costs

<u>Part</u>	<u>Cost/ Unit</u>	<u>Cost/2,000 units</u>
Top Frame	\$20	\$40,000
Bottom Frame	\$20	\$40,000
Rubber Base	\$10	\$20,000
Charcoal Filter	\$1.80	\$3,600
Electrical Cable	\$1.57	\$3,140
Toroidal Fan	\$10	\$20,000
Total Parts Cost	\$63.37	\$126,740
Manufacturing Costs	\$12.67	\$25,348
Shipping Costs	\$1.05	\$2,095
Total cost	\$77.09	\$154,183

Pricing

Competitor

Price: \$156.99

Established market

Fume Master

Price: \$149.99!

Quieter!

Safer!

Profit margin: \$72.09!



Target Market

Apartment Renters

Via: Brick and Mortar Stores

Example: Target/Costco

Online Stores

Example: Amazon/ Our own Website





Marketing

Ad Block	Influencers
<p data-bbox="216 473 581 525">Requirements</p> <ul data-bbox="216 541 749 663" style="list-style-type: none"><li data-bbox="216 541 749 592">-Graphics Designers<li data-bbox="216 609 606 663">-Photographer <p data-bbox="216 746 475 798">Timespan</p> <ul data-bbox="216 814 469 865" style="list-style-type: none"><li data-bbox="216 814 469 865">-7 Weeks <p data-bbox="216 948 556 1000">-Prices: 2.5 k</p>	<ul data-bbox="981 473 1514 1065" style="list-style-type: none"><li data-bbox="981 473 1195 525">-Tik Tok<li data-bbox="981 609 1219 660">-Youtube<li data-bbox="981 746 1271 798">-Instagram<li data-bbox="981 882 1176 933">-Twitch<li data-bbox="981 1016 1514 1067">-Price: 5k per month



Evaluation

Attributes:

Airflow

Filtration

Noise

Heat Resistance

Field test with:

Airflow sensor

Weight of filter

Decibel meter

thermometer



Task Schedule

Starting Point: July 2024

Prototype and Evaluation: 2 months

Manufacturing: 3 months and 14 days

Marketing/ Sales

- 1. Ad space on Social Media: 7 weeks**
- 2. Sponsorship deals for influencers : 8 weeks**

Ending Point: December 2024

Why Invest?

- Easily Mass Produced
- Long Lasting Product
- Good Profits
- Affordable prices
- Large Market

