STOPtop

a grease fire extinguishing lid
Would people use STOPtop?

25 STOPtop user interviews later...

- Most users are comfortable handling grease fires
- "It won’t happen to me" mentality
- Hot oil splatter is a more common concern
splatSTOP

a re-designed oil splatter guard
User Needs & Background

50% work-related scald burn injuries from cooking oils [1]

25-36% of adults consume fried food every day [2]

$7 billion US kitchen cookware market [3]
A protective pan attachment that:

- Prevents hot oil burns
- Keeps stovetop clean
- Is easy to use
## splatSTOP Product Contract

<table>
<thead>
<tr>
<th>Customer Need</th>
<th>Product Attribute(s)</th>
<th>Engineering Specification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protects from hot oil splatter</td>
<td>Oil splatter containment</td>
<td>Minimize oil - skin contact</td>
</tr>
<tr>
<td>Safe to use on stovetop</td>
<td>Heat Resistant</td>
<td>&gt;10 minutes of full flame exposure</td>
</tr>
<tr>
<td>Easy to attach</td>
<td>Time</td>
<td>&lt;10 seconds</td>
</tr>
<tr>
<td>Easy to store</td>
<td>Size</td>
<td>Less than 20” x 14” x 1” in smallest configuration</td>
</tr>
<tr>
<td>Portable</td>
<td>Weight</td>
<td>Total weight less than 0.6 lbs</td>
</tr>
<tr>
<td>Easy to clean</td>
<td>Dishwasher Safe Material</td>
<td>&gt;3 hours submerged in 140°F water</td>
</tr>
</tbody>
</table>
# splatSTOP Product Contract

<table>
<thead>
<tr>
<th>Customer Need</th>
<th>Product Attribute(s)</th>
<th>Engineering Specification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protects from hot oil splatter</td>
<td>Oil splatter containment</td>
<td>Minimize oil - skin contact</td>
</tr>
<tr>
<td>Safe to use on stovetop</td>
<td>Heat Resistant</td>
<td>&gt;10 minutes of full flame exposure</td>
</tr>
<tr>
<td>Easy to attach</td>
<td>Time</td>
<td>&lt;10 seconds</td>
</tr>
<tr>
<td>Easy to store</td>
<td>Size</td>
<td>Less than 20” x 14” x 1” in smallest configuration</td>
</tr>
<tr>
<td>Portable</td>
<td>Weight</td>
<td>Total weight less than 0.6 lbs</td>
</tr>
<tr>
<td>Easy to clean</td>
<td>Dishwasher Safe Material</td>
<td>&gt;3 hours submerged in 140ºF water</td>
</tr>
</tbody>
</table>
How can we design a better oil splatter guard?

Hinge design

Curtain design
How can we make attachment easy?

Hinge design

Curtain design
How can we minimize oil-skin contact?

**Market Standard:**

**Hinge Design:**

**Curtain Design:**
Market & Pricing

$10
Splatter screen [4]

$25
Hinged splatter screen [5]

$30
splatSTOP
Next Steps

- Determine optimal splatSTOP height from user tests
- Test dishwasher safe materials for curtain
References


