AFM 9000

PRESENTED BY **PINK A**

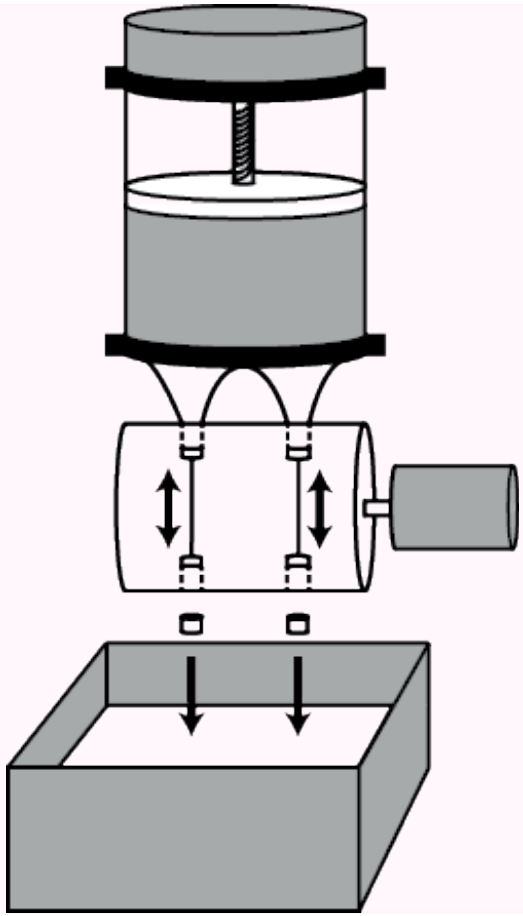
The Problem

- Clover wants to automate their falafel frying process
- Currently have a dedicated employee forming and frying falafel during the lunch rush
- Food trucks are a growing, $2.7B market with over 20,000 food trucks in the US

Challenge

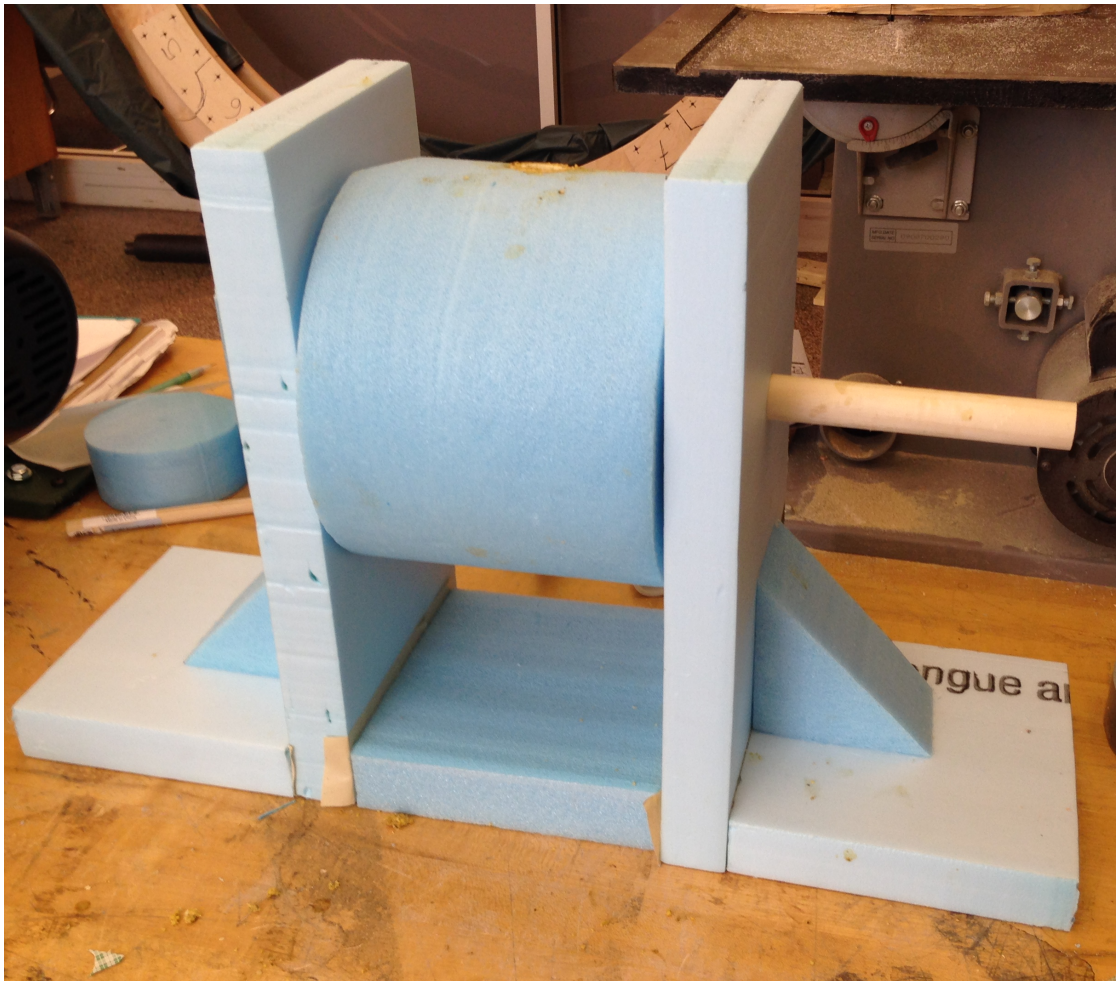
- Very tight space requirements
- Necessary to output consistent, well-packed falafel
- Needs to output at least 1 falafel every 2 seconds
- Resilient design that can withstand being above a hot fryer

Concept

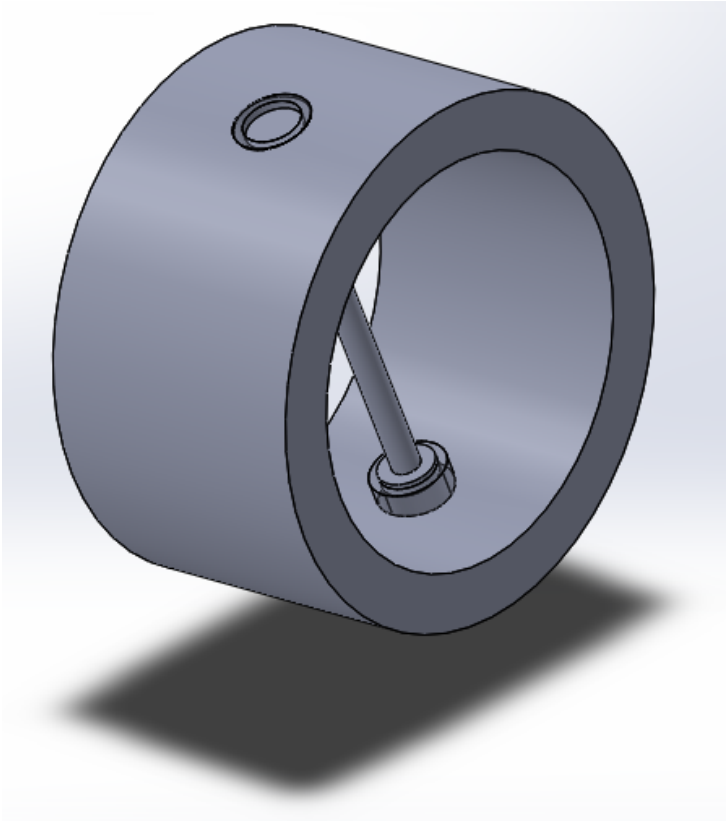


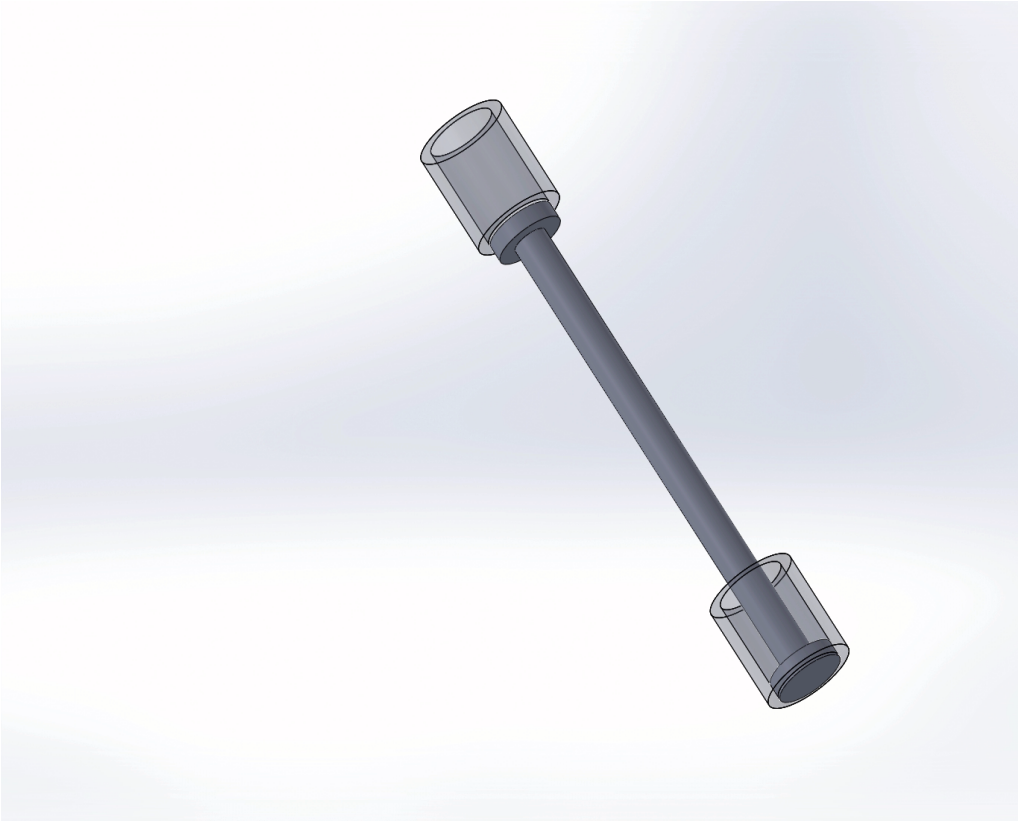
- Customer places order, machine begins
- Falafel batter pumped from container into shaper
- Shaper rotates and ejects cylindrical falafel into oil

Sketch Model

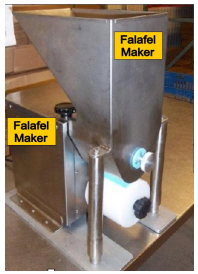


Sketch Model





Benchmarking

	 **Falafel Throwing Machine**	 **BM60 Falafel Machine**	 **Tamirson Automatic Falafel Maker**	 **Radwan Falafel Machine**
Price	$3250	$2995	$2550	$1800
Production Rate	1 ball per second	1 ball per second	1.3 balls per second	1 ball per second
Size	36in x 18in x 24in	18in x 14 in x 21 in	18in x 12in x 20in	28in x 14in x 24in

Next Steps

- We have a working model on which to base our design
- Need to work at speeding up the shaping process
- Design the pumping mechanism that will get the falafel into the shaper