

HR 2 BREAKDOWN

TEAM: Rural Food Processing Capstone Team (19F16)

Due Date:

Friday, March 6, 2020 at 11:59pm

Provide several pics of the current state of your completed system thus far here:

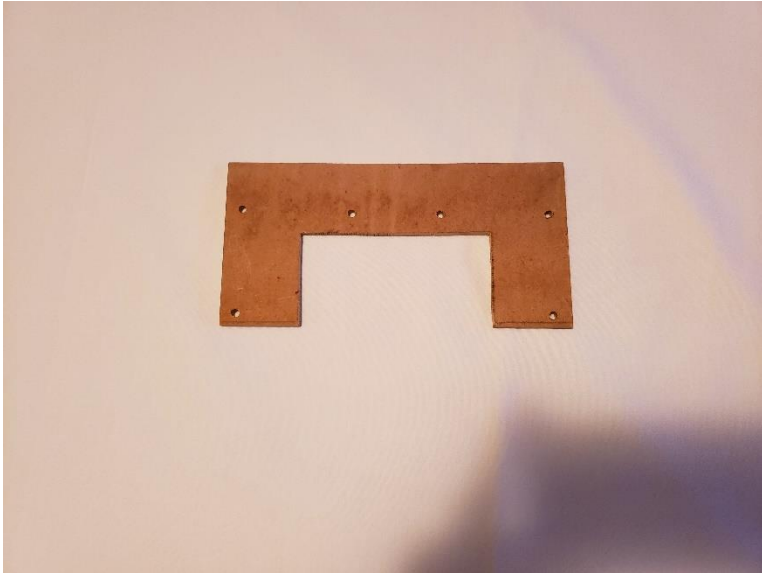


Figure 1: New end bracket



Figure 2: New wooden prototype - side view



Figure 3: New wooden prototype - top view



Figure 4: New dispenser subsystem

The following are the Action Items each person completed between Hardware Review 1 and Hardware Review 2:

Team Member: Samantha Morrison

Action Item	Date Completed	Result/Proof of Completion
Testing the new dispenser for adequate flow	2/5/2020	Modified the dispenser so that the output flow was similar to the expected diameter of the rolls
ERs and TPs revamp memo – complete section assigned and revise document	2/14/2020	Completed section 1, added to section 2, and revised all sections for additional adherence to the grading rubric expectations
Update website	2/13/2020	Website links, images, and information was updated to reflect the current status of the design prior to website 1 deadline
Obtain cocoyam and leaves for testing (and prepare)	2/29/2020	Obtained cocoyam from market down in Phoenix and brought back to be ground and prepped for testing. Ground cocoyam and prepared leaves into approximate proper sizing in order to expedite testing procedures and eliminate the need to prepare the cocoyam on site at time of testing
Implementation memo – complete assigned section and help to revise	2/28/2020	Completed information in section 1.2 regarding design changes and information on the iterations on the prototypes. Also, revised and provided feedback for greater adherence to the grading rubric.
Update CAD roller model	3/2/2020	CAD model for new wooden roller is now reflected (CAD continually updated for additional changes, which is why date completed is more recent for recent changes)
Create basic CAD model for purchased roller	3/4/2020	Created basic model for demonstration purposes of the midpoint presentation
Midpoint presentation – own slides and revising	3/5/2020	Completed personally assigned slides that were presented by me on 3/4/2020, then continued to revise the remaining presentation slides for updates to the content, formatting, etc prior to presentation in class

Team Member: Nygel des Vignes

Action Item	Date Completed	Result/Proof of Completion
Build Wood Prototype	2/23/2020	Complete Wood Prototype
Revamp memo	2/12/2020	Edit document, consolidate repetitive ERs
Order 2nd wood prototype materials	2/28/2020	Received all materials to build new prototype
Update Budget	3/1/2020	Budget remaining is sufficient to finish project
Find Cocoyam substitute	2/15/2020	Created a flour mixture that worked well also ordered cocoyam powder to try
Order alternative caulking gun	2/28/2020	Ordered a cheaper caulking gun for \$4.99
Midpoint Presentation	3/4/2020	Completed current state of system slides

Team Member: Musab Al-Balool

Action Item	Date Completed	Result/Proof of Completion
Testing on new dispenser	02/05/2020	Tested the new dispenser in the maker lab
Modified the old roller prototype	02/05/2020	Modified the old roller prototype by shortening the silicon sheet.
ER's and TR's memo	02/14/2020	Worked on ER's section.
Implementation Memo	02/28/2020	Completed manufacturing of roller and dispenser section.
Midpoint Presentation	03/04/2020	Completed the implementation / Manufacturing slides

Team Member: Humoud Alanjari

Action Item	Date Completed	Result/Proof of Completion
Testing new dispenser	02/05/2020	Faster and more efficient dispensing
Modify the 3-D printed prototype	02/05/2020	Shortened the silicon sheet distance to make the rolling process more efficient and faster
Hardware review memo	02/07/2020	Wrote description about the dispensing and rolling and uploaded pictures for dispenser and roller
ER's and TR's memo	02/14/2020	Edited the Engineering requirement to fit chuck
Implementation Memo	02/28/2020	Wrote introduction and wood prototype of manufacturing
Midpoint Presentation	03/04/2020	Completed Future work and Testing slides

The following are the Action Items for each team member between HR 2 and the Final Product presentation:

Team Member	Action Items	Date Due
Samantha Morrison	<ol style="list-style-type: none"> 1. Design new handle for roller 2. Poster 3. CAD Drawing Package 4. Set up text of operations manual 5. Set up text of assembly manual 6. Testing prototypes 7. Rheometry testing 	<ol style="list-style-type: none"> 1. 3/20/2020 2. 4/1/2020 3. 4/6/2020 4. 3/22/2020 5. 3/22/2020 6. 3/28/2020 7. 3/9/2020
Nygel des Vignes	<ol style="list-style-type: none"> 1. Create another wood prototype 2. Seal new and old prototype 3. Research ways to make new handle 4. Poster 5. Testing of plastic and wood prototype 6. Get pictures for manual 7. Video of manufacturing 	<ol style="list-style-type: none"> 1. 3/22/2020 2. 3/22/2020 3. 3/14/2020 4. 4/1/2020 5. 3/28/2020 6. 3/22/2020 7. 3/22/2020
Musab Al-Balool	<ol style="list-style-type: none"> 1. Building the C-shaped handle for roller 2. Sealing the roller with palm oil 3. Poster 4. Testing the roller system 5. Working on the operation and assembly manual 6. Creating a video of the manufacturing process 	<ol style="list-style-type: none"> 1. 03/22/2020 2. 03/22/2020 3. 04/01/2020 4. 03/28/2020 5. 03/22/2020 6. 03/22/2020
Humoud Alanjari	<ol style="list-style-type: none"> 1. Testing the new caulking gun option 2. Sealing the roller. 3. Poster. 4. Set up pictures for Manual for user to build the prototype. 5. Testing the final prototypes 	<ol style="list-style-type: none"> 1. 03/22/2020 2. /03/22/2020 3. 04/01/2020 4. 03/22/2020 5. 03/28/2020