# Rolling Timber II

June 18, Monday

**What we have had in the class:**

- Product Development Process
- Design process review
- Problem Statement & Product Requirements
- Budget
- Schedule plan
- Engineering Logbook
- Snapshot (1). 7/9/2018
- Snapshot (2). 8/2/2018

**What we talked in the team meeting:**

- Zak made an appointment with Scott and Dr. Beyerlein
- Reviewing the previous team recommendation
- Try to understand the issue and what is the solution? And how?
- We have 3 main things to control:

1- Mass flow rate of air

2- Mass flow rate of wood chips

3- Moisture content of wood chips

**Agenda for the next meeting:**

- Discuss the last week prepared questions with Scott and Dr. Beyerlein
- Research, examine, breaking down the circuits
- Decide the priority order to achieve this project
- We need to know to which phase we need to reach and accomplish each of the 3 tasks

# Rolling Timber II

June 19, Tuesday

**What we have had in the class:**

- Circuits would be a good choice to start with.
- Made an appointment with Sammy and Ankit to figure out the circuits. We also tried to contact two Electrical Engineering from the previous team.

**What we talked in the team meeting:**

- We can use and modify any documentation from the previous team if that will help us to achieve and make any development
- Functional performance is our clients first priority

1- Mass flow rate of air

2- Mass flow rate of wood chips

3- Moisture content of wood chips

- Testing and proving the concept by August 5th
- Shut down on September

**Agenda for the next meeting:**

- Meeting with Ankit and two Electrical Engineering guys to find out how the circuit works
- Regular meeting on Tuesday at 11am
- Need sample wood chip to do some tests
- Math model of how the mass model flow works
- How to use LabVIEW or Simulink software
- Force transducer – load cells ?

June 20, Wed

**What we have had in the class:**

- Zak made an appointment with Scott
- Meeting with Ankit figuring out how the circuits work and what kits we need.
- Set up all the parts and the components that we need on week 4 for testing.

**What we talked in the team meeting:**

- Model a small design concept and try to visualize our new idea
- Build circuits from scratch
- Things we need to build our circuits: Breadboard, wires, DMM, op-amp
- Learn software

**Agenda for the next meeting:**

- Decide with software to use: LabVIEW or Simulink
- Decide which physics to use: Free fall or Sliding
- Math model
- Testing will be on week 4
- Visit the steam plants to take a look at the throat and do the measurements
- Take pictures in the Steam plants

Rolling Timber II

June 21, Thursday

**What we have had in the class:**

- The Product Requirements Document (PRD)
- Reviewing what we have done and what approached
- Brainstorms everything we needed to achieve our projects goals

**What we talked in the team meeting:**

- We wrote down some important questions for the Product Requirements Document (PRD)
- Came up with 3 designs ideas:

1- One plate impact system

2- Two plates impact system

3- One plate slide system

- Looking and figuring out some types of sensors to get the best reading tests for our design.
- We need to know the highest and lowest lbs/s of the wood chips
- What we need to achieve in this project:

1- Task 1 up to phase 5 during summer
2- Task 2 up to whatever can we achieve
3- Task 3 up to whatever can we achieve

**Agenda for the next meeting:**

- Meeting with Scott and discuss some questions with him
- Product Requirements Document (PRD) **due 6/28**
- Research sensors type

## Rolling Timber II

June 22, Friday

**What we talked in the team meeting:**

- Circuits tested
- The pervious loadcells failed and we are thinking to figure out a way to make it work or look up different alternative force sensors
- The client insisted to use mild steel
- Solidworks design
- Modeled a small design concept
- Our client recommended us to use the mild steel for Mechanical Component

**Agenda for the next meeting:**

- Scott liked the first design idea which is (two plates impact system)
- The second design idea will be a second option if the first design idea doesn't work
- We need to know the scale factor
- Discuss the labVIEW and the Simulink
- Wood source
- Wikipage expectations
- Wikipage setup (Ankit)
- Product Requirement Document (PRD) June 25, Mon
- The second client meeting June 26, Tu
- Purchasing products
- Project portfolio