Team: P19433 **Engineer: Nicklaus Dahl**

Phase 8 Plan

What were the outcomes of the prior phase?

1. What did I plan to do?
    a. Finish installing power converter and SSR
    b. Install and test new heaters
    c. Continue programming and testing Teensy
    d. Install and wire IR temperature sensors
    e. Install screen, write display code for screen on Teensy
2. What did I actually do?
   I was able to complete all of the above tasks except installing the screen and writing display code. Since we did not have as much time to work directly with the melter for testing as we would have liked, testing other aspects of the electrical system that needed to be completed first were pushed back, pushing off installing the display into the beginning of the next phase.
3. What did I learn? How were plan and reality different?
   I learned that once we had our plan set and design finalized, actually building and getting to a point where we were ready to test was a quick task. Most of the electrical system was finalized and hooked up during this phase, and it worked with almost no setbacks or issues once in place.

Team level goal for next phase

Our goal for the next phase is to complete the wiring of all heaters and other electrical components. We will then review the test procedures and make adjustments to the design if necessary. The door materials will be purchased and assembled, and insulation will be installed with washers and bolts. The team will continue to work on the technical paper and Imagine poster to receive feedback before the deadlines. The team hopes to have a fully functioning machine with recycled sheets during this phase.

What do I plan on doing to ensure that my team has a successful review at the end of the next phase?

1. Order a new IR sensor to replace the one that was lost (<1 hour, week 1)
2. Install screen and write display code (2 hours, with Deryck)
3. Continue programming and testing Teensy (throughout phase, with Deryck)
4. Obtain a protoboard to set the Teensy and electronics in permanently (1-2 hours, with Deryck)
5. Install IR sensor attachment on frame (1 hour, with team)