

sdmay19-03: 3D Metal Printer - Phase II

Semester 2 Week 8 Report

March 25th - March 31st

Client/Advisor: Dr. Bigelow

Team Members

Thomas Waters — *Computer Engineer*

Ariel Rizhsky-Yakobson — *Computer Engineer*

Jacob Gosse — *Electrical Engineer*

Alvin Rymash — *Electrical Engineer*

Armand Hernandez — *Software Engineer*

Summary of Progress this Report

We were able to speak with Dr. Bigelow this week and this helped to make some progress. Multiple parts for the finishing of the printer were adjusted, including the brackets and mounts for the powder and print beds, to make sure that they stay in line. We also are working on have a usable power supply for the laser.

Pending Issues

We have to manufacture our own power supply cable for the printer, requiring a new cable be ordered, as well as stripped and connected to the adapter which will connect to the printer.

Plans for Upcoming Reporting Period

Our plan for the upcoming week is to strip and connected the new wire to the the adapter which will connect to the printer. Once this is done, we will also have to find a 220-250 volt power socket, to plug in, as the laser needs a higher current and voltage than traditional 115 wall sockets can provide.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Thomas Waters	Did second tests of attachments and measurements of bracket, and mounts for print bed and powder bed.	4	30
Ariel Rizhsky-Yakobson	Worked on getting power supply for the laser and preparing to use guide laser for initial testing.	4	30

Jacob Gosse	Assisted in secondary testing for mounts and brackets, and took necessary measurements for proper alignments.	4	30
Alvin Rymash	Machined the parts needed for leveling the brackets and mounts.	4	30
Armand Hernandez	Continued work on the 3D model slicing and parsing to gcode.	4	30