

sdmay18-05: 3D Metal Printer

Week 5 Report

October 1 - October 7

Team MembersBen Pieper — *Researcher / Communicator*Jett Ptacek — *Meeting Organizer / Researcher*Kevin Oran — *Mechanical Design*Caleb Toney — *Design / Meeting Notes*Rachel Shannon — *Researcher***Summary of Progress this Report**

This week consisted of continuing to refine designs for the print bed and 2 axis motor layout. Some specifications on the laser head were received towards the end of the week, which allowed designs to begin to be finalized. Research was continued on safety sensors, the PC was acquired, and research on the CAD file processing algorithms was begun.

Pending Issues

We need to get the print bed and sealed chamber design more developed, and then meet with the machine shop again to talk about manufacturing options. We

Plans for Upcoming Reporting Period

We plan to continue to work on the mechanical design of the sealed chamber and print beds, conclude research on CAD file processing algorithms and make a plan for software development, finish selection of safety sensors and prepare and order for them.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Ben Pieper	Ben researched safety and environmental sensors, worked with ETG and Dr. Zambreno to acquire PC	4	28
Jett Ptacek	Jett researched software algorithms for CAD file processing,	6	28
Kevin Oran	Refined designs for print bed and powder chambers	6	34
Caleb Toney	Continued research on wiring through box	3	24
Rachel Shannon	Was out all week on a trip to Grace Hopper Conference	0	21
