Team Name: sddec21-11

Team Members: Colin Firth, Tary Todd, Aaron Martin, Chris Johannsen, Dale Young, Addison

Ulrick

Report Period: Sep 13-Sep 27

## **Summary of Progress in this Period**

• Pilot laser turns on in software

- Got camera working with video adapter and new power supply
- Cleaned up lab
- Started work on sending laser commands in MATLAB
- Continuing work on defect function
- Attached lens to laser
- Added previous progress report to website
- Created homing function for printer

## **Pending Issues**

- Some team members still need lab training
- Acquisition and in-depth understanding of oxygen sensor
- Voxel generation needs to be tested in depth
- Choosing Ethernet or Serial communication for the laser needs to be finalized
- Obtain admin permission for the computer to install software from ETG
- Obtain ethernet card/adapter from ETG
- Homing function should be calibrated once laser positioning is finalized.

## **Plans for Upcoming Reporting Period**

- Continue to review and understand the source code and the project overall
- Continue to refactor the source code and convert from C# to MatLab
- Finish developing the Slicer GUI
- Create a Gcode Verification Program
- Implement functionality to add defects to metal cubes
- Update Website
- Measure spot size of pilot laser for calibration.