

boardsport technologies enterprise  
*final report*



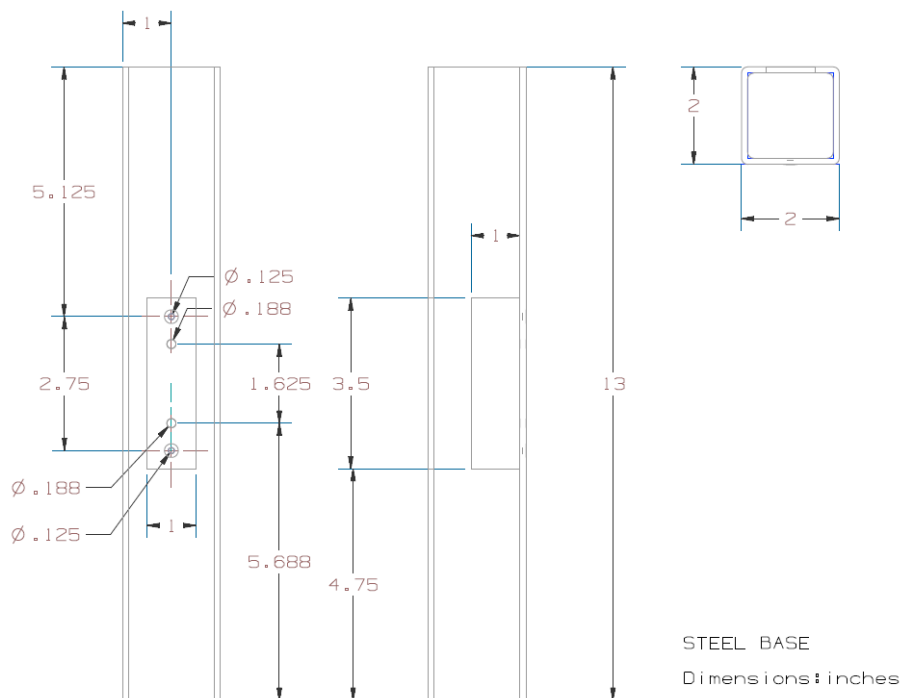
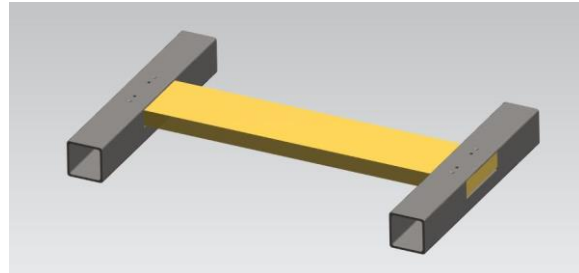
**Project Title:** CNC Skateboard Mount

**Team Members:** Kyle Feldpausch

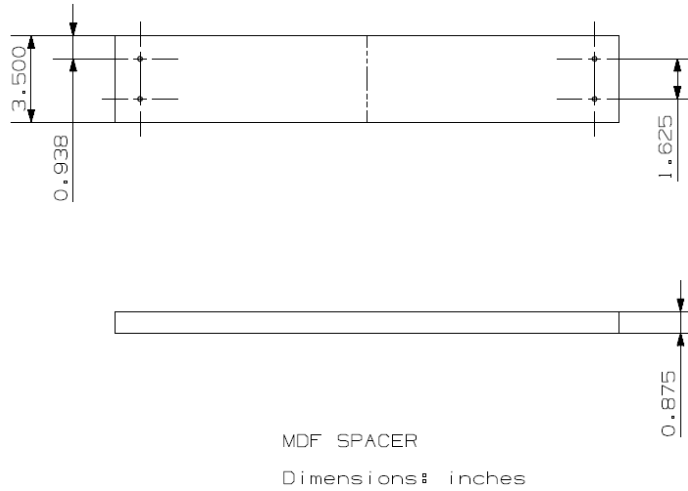
**Objective:** Design a mount to hold a skateboard stable in a CNC end mill

**Model and Design Description:**

The design consists of two steel bases and one MDF spacer. Dimensions for each are shown in the technical drawings below. The uncut board rests on top of the spacer board with similar concave and the spacer board sits directly on the mount. Four 3/16" threaded rods attach the boards to the mount.



Note: Total length varies with desired board shape



### Construction Steps:

- Cut the 2" square steel tubing to the dimensions specified in the drawing using an end mill and a drill press.
- Measure distance between outer truck mounting holes and cut MDF 4" past that measurement
- Center mounting holes on MDF and drill 3/16" diameter holes
- Line up the 3/16" holes on the MDF with the holes on the steel bases and attach with 1-5/8" screws
- Mount boards

### Construction Issues:

Self-tapping router bit cut too deep. The edges of the steel bases had to be modified to allow for the router bit to pass without hitting the mount.

### Final Product Testing Results:

The mount was able to hold a skateboard stable while being cut on the CNC mill

### Recommendations For Next Time:

- Create a steel slider in place of the MDF with pre-drilled holes capable of lining up the skateboard shape and future long board shapes for quick size changes
- Generate code to allow the use of a regular router bit as opposed to the self-tapping bit (Code needs to enter board horizontally instead of vertically)

<b>Hours Worked On Project:</b>	10
<b>Final Cost:</b>	\$0
<b>Deviation From Original Budget:</b>	\$0