

## Senior Design Project 12317 – Nanomanipulator

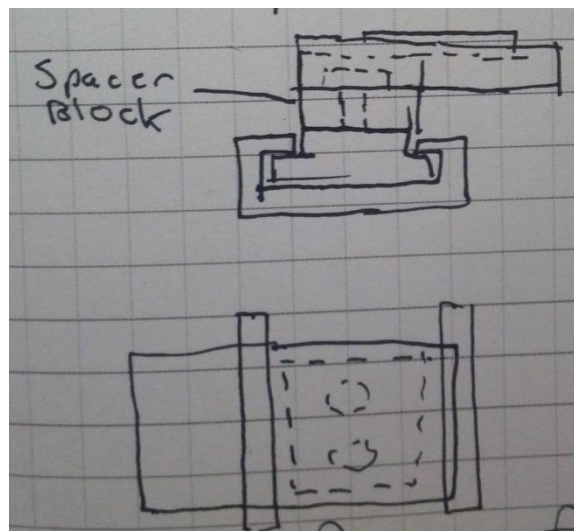
### Minutes from meeting held on 2/22/12

Present:

Brad Ling  
Rob Hughes  
Sabine Loebner  
Brad Olan  
Jaclyn Bastardi

Meeting ran from 4-6 PM in Senior Design Lab

1. Rob has found lead screw to purchase for less than 300. Also looking at ball bearing support or guide rail from Pbc liners. Discussion held over whether a base plate is needed to mount lead screws.
  - a. Establish reference point
  - b. Prevents moment generation when lead screw turns
2. Notes from DDR addressed for manipulator
  - a. No piston cylinder mounts found on market
  - b. Spring to retract placed to connect x-axis cylinder mount to y-axis mount. Put screw hole in bracket to thread piston into for y-axis retraction
  - c. Options to prevent torque
    - Put two screw holes for piston cylinder mount to prevent torque of mount
    - Look into spacer block to allow more options for mounting



3. Grading Rubric for DDR discussed.
4. Limit switches discussed
  - a. Computer programming will need to address this
5. Bill reviewed our DDR. Discussed design challenges already already discussed previously in meeting with team
  - a. Schematic will need to be posted on edge
  - b. Look at 12453 edge site.