

Minutes – Monday Meeting

11/18/13

- Zona not concerned with the switch to a stepper motor.
- Brian is meeting with Kempinski at noon on 11/19 to get advice on the motor and valve/actuator
- Jake met with one of his EE professors for one of our faculty review.
- Kyle and Brian did an initial mock-up in CAD/CREO of what the apparatus piping and layout will look like.
- Initial search for an enclosure for the electrical components came up with only one option that was priced around \$2500.
- Jake finally got a response from CCH about the torque data from the valve we requested.
- Jake also spoke to professor Slack about the stepper motor as another faculty review
 - He agreed with the motor chosen because of its precision and that it uses permanent magnets.
 - A DC motor doesn't step easily, so it's locked in place til we move it.
 - As for a position encoder, we probably need an external method- maybe a sensor at home position
 - The only problem with the position encoder is that when the system turns ON/OFF, it would take the current position as home, when it actually isn't.
 - Maybe a proximity sensor?
- Pressure Transducers- eliminate valve for 10,000psi PT since it ideal would never experience anything higher than that.
 - Pressure transducers will be facing the ground, and only the digital guage will be pointed to the ceiling.

ACTION ITEMS:

Jake/Brain- continue CAD renderings.

Mitch- meeting with valve guy from Swagelock tomorrow (11/19 @1pm)

Anushka- Start Final Presentation and Look up different proximity sensor and report back

Everyone- begin thinking about BOM for each respective component.