

## Meeting Minutes

MSD 1

Ryan, Chris, John, Matt

12/2/2011

First order of business is figuring out schedules for work.

Everyone is free on: (In green on the attached graph)

### **Wednesday 1-4**

Thursday 6-8

Fridays except 11-12

We also have shorter blocks, earlier in the week (in yellow on the attached graph)

Mondays 8:30 onwards

Tuesdays 6:30-8:00

### **Challenges:**

- Other MSD group will tear down the pump soon, might need data ASAP?
  - Maybe convince them to do easy probes for first few weeks
- Finding good anchor points for dampers
- Data (vibes and thermal and weight and inertia)
- Customer requirements
  - What are they?
  - When do they want them?
  - How feasible are they?

### **Discussion of pitching moments and vibrations:**

- Cutaway diagram from Chris's thesis work to understand interior geometry
- Pitch discussion, Matt explained why there is a pitch there.
- Matt suggests stiffer dampers on the ends to reduce the pitching motion
- Also suggests piston damping with bolts to the floor
  - Easily removable
  - Set at angle to help with pitching motion

### **Thermosyphoning Pump:**

- Need data
  - Heat transfer requirements
- Understanding of how they work
- Chris volunteered to do the thermo work
- John suggests that we incorporate a starter pump connected to the flywheel, removing the external pump
- Startup might be a issue (before fluid gets hot enough to move itself)
- Will the pump get hot enough to run a syphoning system at all?
  - Cody (other group) has experience with that, might not be a feasible solution

### **Code of Conduct/Ethics**

- Examine other groups' CoC, (check edge) alter it to fit our needs, review and approve next

meeting.

-Everyone will read through the PRP, and compare and combine during next meeting.

### **Action Items**

#### ***Individual:***

Matt will contact Dave Kalivoda (Lord Corporation, Customer Applications Engineer)

Matt will review Lord Paperwork concerning previous MSD project with regards to damping.

Chris will contact Jim Sorokes (Dresser-Rand, Principle R&D Engineer) and also Scott Delmontte.

John will talk to his old boss at Pulsafeeder with regards to damping and vibration

Ryan will contact Marcus' group about existing data for themal stuff, and general intra-team meeting (fridays?)

-Also need to discuss Lockout/Tagout procedures.

Ryan will talk to Kolodje about what he wants with the whole novel flow system, and forward these notes to the advisors for future meeting times.

#### ***Group:***

Code of Conduct

Read through PRP, come up with our own understanding of customer needs, combine next meeting.