

TEAM MINUTES - 10/02/20

Location: Zoom
Present: ALL
Time: 2:30-4:00
Writer: Jaden Cavender

Agenda Items

1. Prototyped and conducted failure analysis on possible centrifugal force operations. Initial design followed the same centrifugal operation that a clothes washing machine uses to stick clothes to the side of the receptacle while operating. Design had to be reconsidered due to the nature of where the sand would be sticking, and if it could be separated into vertical rather than horizontal layers. Conducted acceleration analysis.
2. Discussed augur power sources and the possible use of a pressurized water turbine that could translate a moment of mass inflow into mechanical work separating the sand from a drum.
3. Reviewed other team designs for vertical sand filtering and cleaning. One possible idea included the use of the 3d part sent in the elutriation package. Slots could be cut according to the volume of the sand in a revolving drum and screens could be put on the side of the cuts, maintain augur action and vertical filtering. More prototyping necessary.
4. Set duties for next time, including further refining of sand sorting prototypes, initial design of sand cleaning receptacle, integration of plans.

Action Items	Owner(s)	Deadline	Status
Write minutes, create cad model of rolling drum	Jaden	10/6	In progress
Refine washbox designs via drawing	Ben	10/6	
Draw new design for cleaning portion	Tobias	10/7	
Refine washbox designs via drawing	Tayson	10/6	



Continue writing
Gantt schedule,
Draw new design
for cleaning
portion

Blake

10/6

In progress

N/A

Full Group