

Department of Mechanical Engineering

Team 3 - Heat Pipe Kaled Aleweehan Abdullah Almutairi Waleed Almutairi Omar Alotaibi Abdullah Ben Gheyam ME 476C

Staff Meeting #4:

Date: 07/03/2018

Attendance: Kaled Aleweehan, Abdullah Almutairi, Waleed Almutairi and Abdullah Ben Gheyam.

Discussion:

- We had out assigned tasks which are: (selecting the type of the design, initial sizing, heat operating, heat sink, wand wick material)
- For selecting the type of design: we were thinking to go with the loop heat pipe but after a nice discussion with our client we chose to go with a flat heat pipe.
- About initial sizing: we agreed with our client that our project should fit in a lab table, so the size will be 12 cubic feet.
- Heat Operation: we talked about multiple heat sources (resistance heater, hot plate, and heating element). We found a copper heating element in Home Depot. We decided to go with thermocouples to measure the temperature.
- Heat sink: we talked about the advantages of the heat sink. We discussed many types of heat sink but we agreed to go with a Radial Heat Sink. (Dimension of heat sink: 50*50*15mm)
- Wick material: Our client mentioned a store in our city which is Joann fabrics and crafts and he advise us to use cotton cloth as wick material.

For Next Staff Meeting:

Each one of the group needs to find a Technical Analysis Task for the project.

NOTE: Omar is having an exam and talked with the client already. Also, he discussed with him about his new research on thermal Conductance.