ME444 Engineering Piping System Design

Design Project (20 points)

Each group of 3 – 5 students shall design piping systems for a small factory building according to the following instruction:

1. Design the sanitary piping system (cold water, soil waste, vent, CW pump)
2. Design steam system (steam pipes, condensate pipes, expansion joint, boiler and accessories)
3. Design compressed air piping systems (pipes, air compressor and receiver)
4. Draw all piping systems on the floor plan. Use a separate layer for each piping system.
5. Draw schematic diagram of cold water, drainage, steam and compressed air system.
6. Estimate the construction cost.
7. Submit a report and AutoCad file(s) contain all drawings no later than the day of final examination of this course (**all AutoCad files must be saved as version 2017 or earlier**)
8. Early submission shall be rewarded 1 point per day (5 points maximum). Late submission deems -2 point per day (-20 point maximum)
9. Evaluation consists of calculations (5 points) pipe drawings on floor plan (5 points), schematic diagrams (4 points), Bill of Materials and cost estimation (4 points) and report (2 points).

Download the floor plan from http://dulyachot.me.engr.tu.ac.th/me444/plan.dwg