

Lab Assignment – 2A
Due by next lab session (Mon, July 6th)

- Login to your SolidProfessor account and follow the SolidProfessor Lab-2A assignment (should take less than 1 hour).

Please, do not forget to complete the short on-line review quiz at the end of the SolidProfessor assignment. The review test is due by end of today's lab-session.

- 1.) Follow the SolidProfessor Practice Exercise “Pressure Disk” and create the solid model of the disk [30 pts.].

Next, add your name as a 5-mm tall embossment to the part as shown in Fig. 1. You are free to choose any font but the size should be large enough to be easily legible not less than 72 pt. (~ 20 mm) [10 pts.].

Please **DO NOT ask the TA for guidance or help** on how to create the embossed name or how to align it along the edge. All necessary commands needed to create the shown text are available/accessible from the Sketch-Text-Feature Manager Window (see Fig. 1 inset).

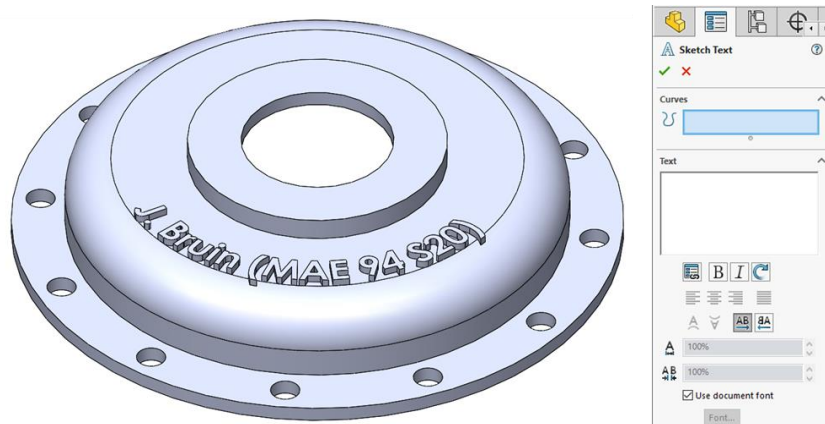


Figure 1: Screenshot of the pressure disc (left) and the “Text-Feature Manager Window” (right).

- 2.) Given the information shown in Fig. 2 create a solid model of the gear mount, save a screenshot, and complete Table 1. Please do your own research to figure out how to change/edit material property of the part (refrain from asking the TA) [25 pts.].

Table 1: Mass of Gear Mount

Material	Mass (gram)
Plain Carbon Steel	
Nickel	
Cast Alloy Steel	
Pure Gold	

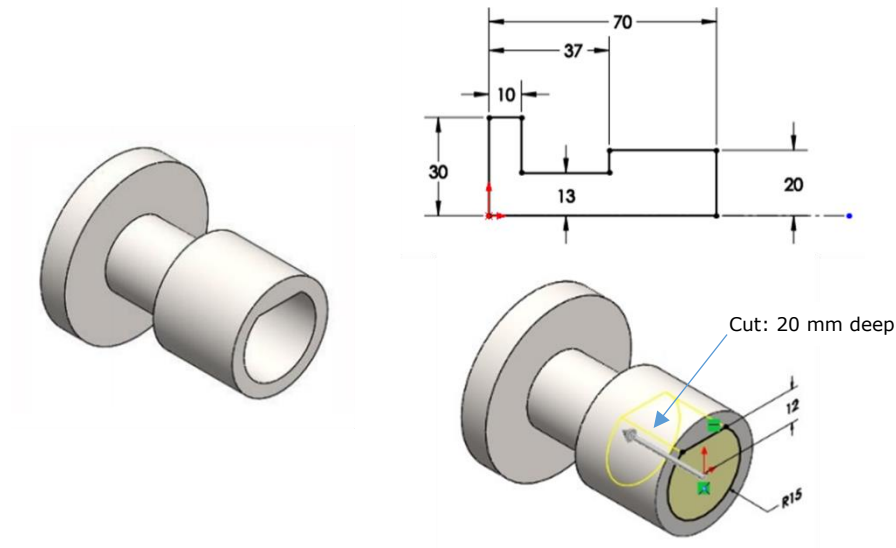


Figure 2: Detail of the gear mount (dimensions are mm).

- 4.) Roll back your “Slide_Lock_Housing” part (Lab-1B Assignment) to its original configuration (suppressed mirrored features and fillets). Again, without any assistance from the TA try to add three ribs to the part as shown in Fig. 3 – dimensions are in mm and the ribs are all 1-mm thick **[35 pts.]**.

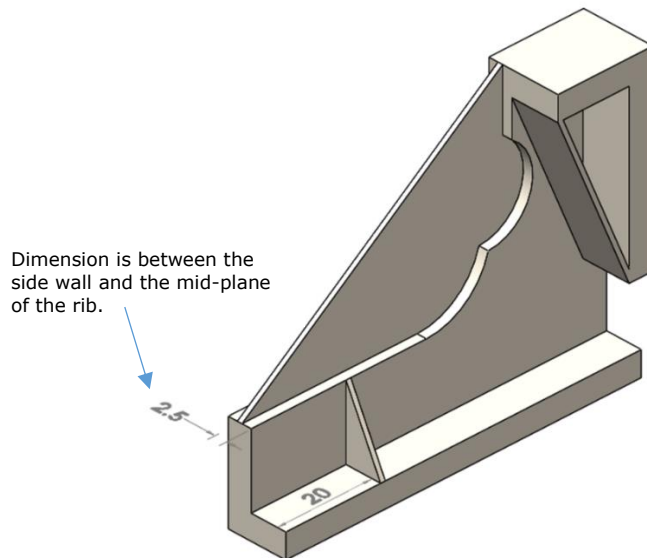


Figure 3: Original “Slide_Lock_Housing” part with no fillet and added ribs.

Deliverables :

- Upload your assignment as a single PDF file using the following file naming convention *LastName-Lab-2A.pdf*
- Upload all three SOLIDWORKS part files to CCLE.