

ME251A- Laboratory No. 9

The parts of a pipe vice are shown in figure on next page. You have to draw the three views of the assembled vice such that a hollow circular pipe of inner diameter 30 mm and outer diameter 35 mm and length of 50 mm is clamped in the vice.

- i) Front view- no sectioning- show hidden lines (see note below)
- ii) Top view-sectioned as per sectioning plane XX indicated in front view which is at an elevation of 35 mm from the bottom
- iii) Left side view of the assembled vice- show hidden lines (see note below)

You need to dimension the overall length, width and height of the assembly only in the assembly drawing.

Note: Hidden lines of major outlines of parts inside the main body should be shown.

Make a template using A3 size sheet and not A2 size sheet as this drawing can be easily drawn on A3 sheet. This you can make ahead of time.

Many of you are not using the proper line types and line thicknesses, follow the line thicknesses given below.

Visible lines- 0.5 mm thick

Hidden lines- 0.3 mm thick

Dimension lines- 0.3 mm thick

Hatching – 0.25 mm thick

All colors (lines and fonts) should be white.

Further save the autoCAD file for this exercise with your roll number and date e.g. **123762_oct_07 and save it in the folder ME351A on your desktop. In some of your machines only the pdf file was found no CAD drawing file was found. This cannot be accepted.**

A video showing assembly of the pipe vice can be found at <https://www.youtube.com/watch?v=K1LGZD4XJuk>



