



Graphic Communication: What is it and How Can we teach it to Engineering Students?

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Attributes include the ability to:

- ✿ undertake problem identification, formulation and solution
- ✿ communicate effectively, not only with engineers but also with the community at large
- ✿ function effectively as an individual and in multi-disciplinary and multi-cultural teams



Drawing Advantages the Practicing Engineer:

- ✦ need for practitioners to be effective communicators
- ✦ ability to draw to support ideation during the design process



Drawing included in this course

- ✦ Freehand sketching
- ✦ CAD



Focus of the course

- ✿ Practical industry based, manufacturing project experience
- ✿ Risk management processes and practices
- ✿ Ability to relate design concepts to others
- ✿ Formal drawing skills



The Instructional Methodology

A project-centred learning approach was introduced with the theme of valve systems. The theme was followed through the course components:

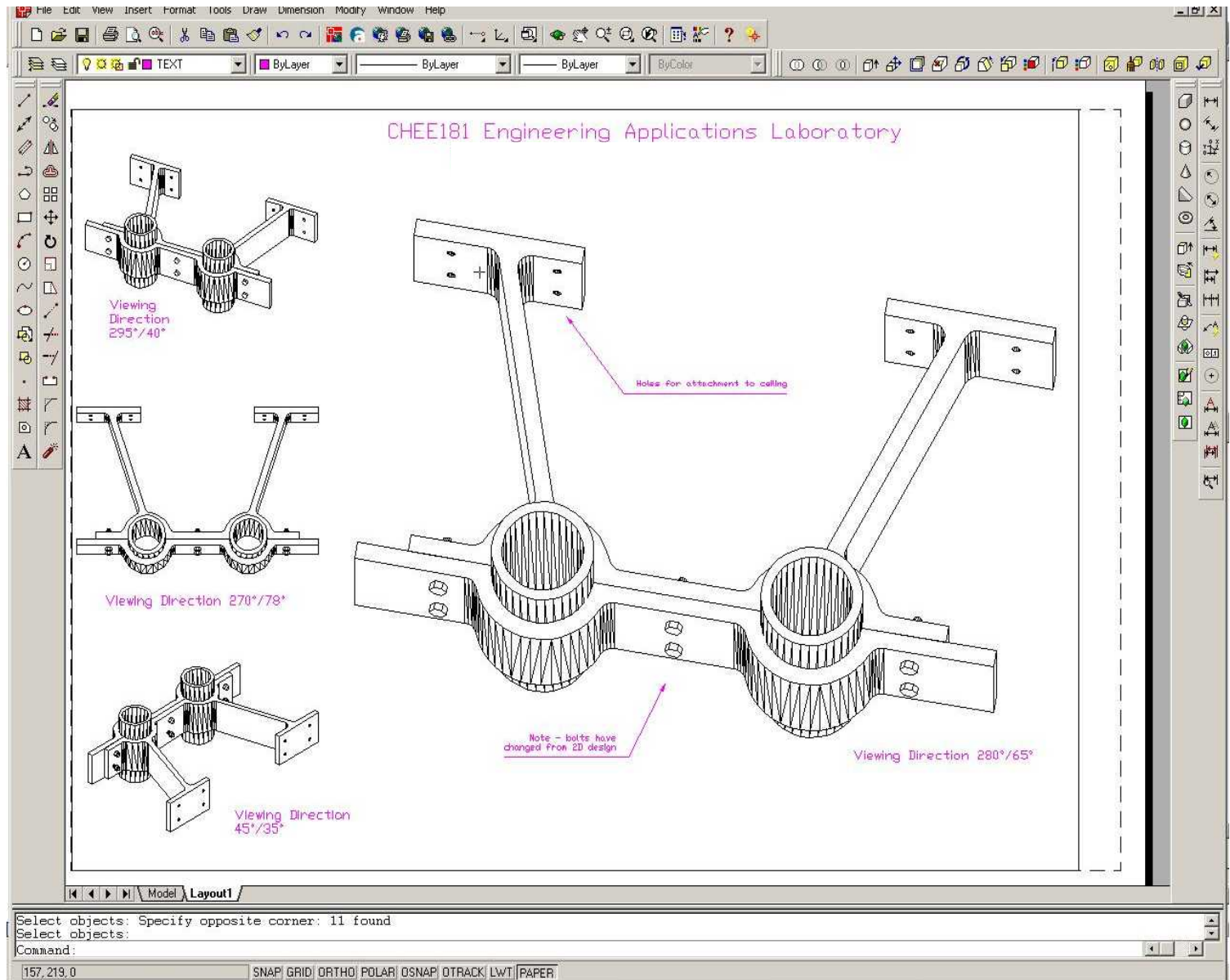
- CAD

- Sketching

- Industry processes

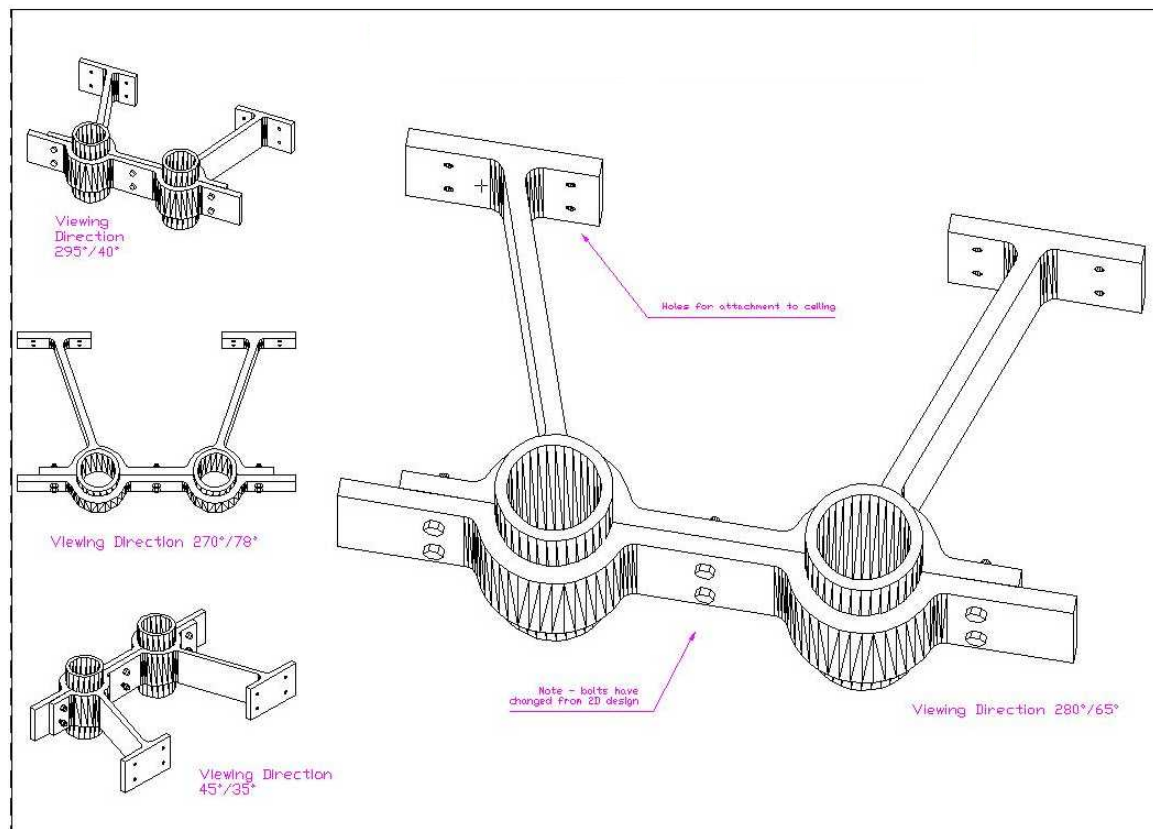


CAD



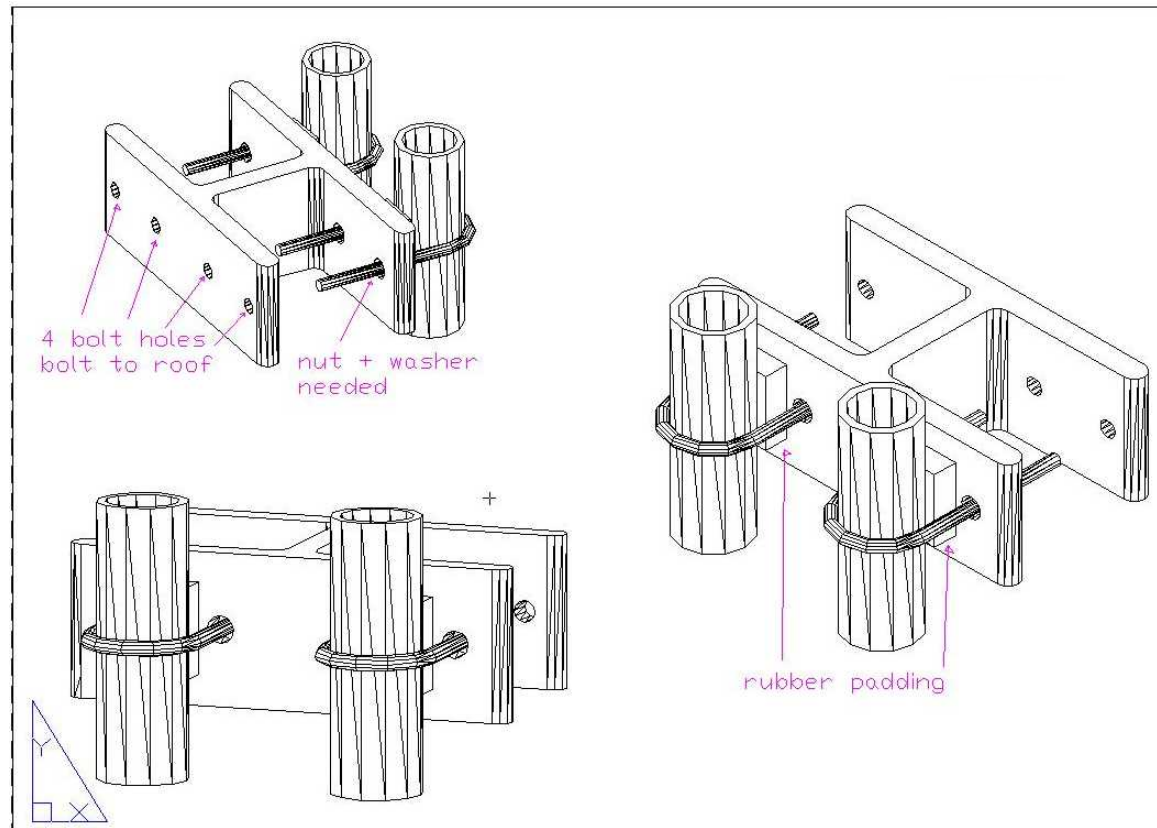


JPEG Format after Cropping



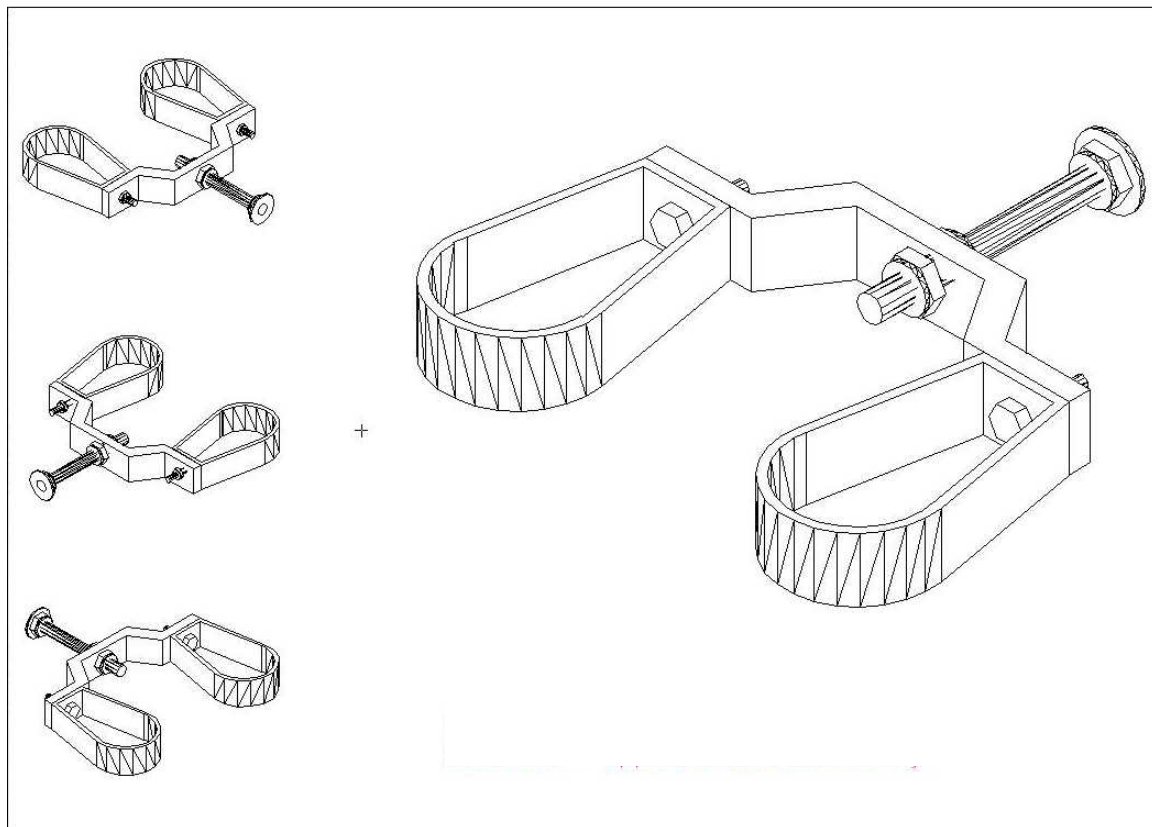


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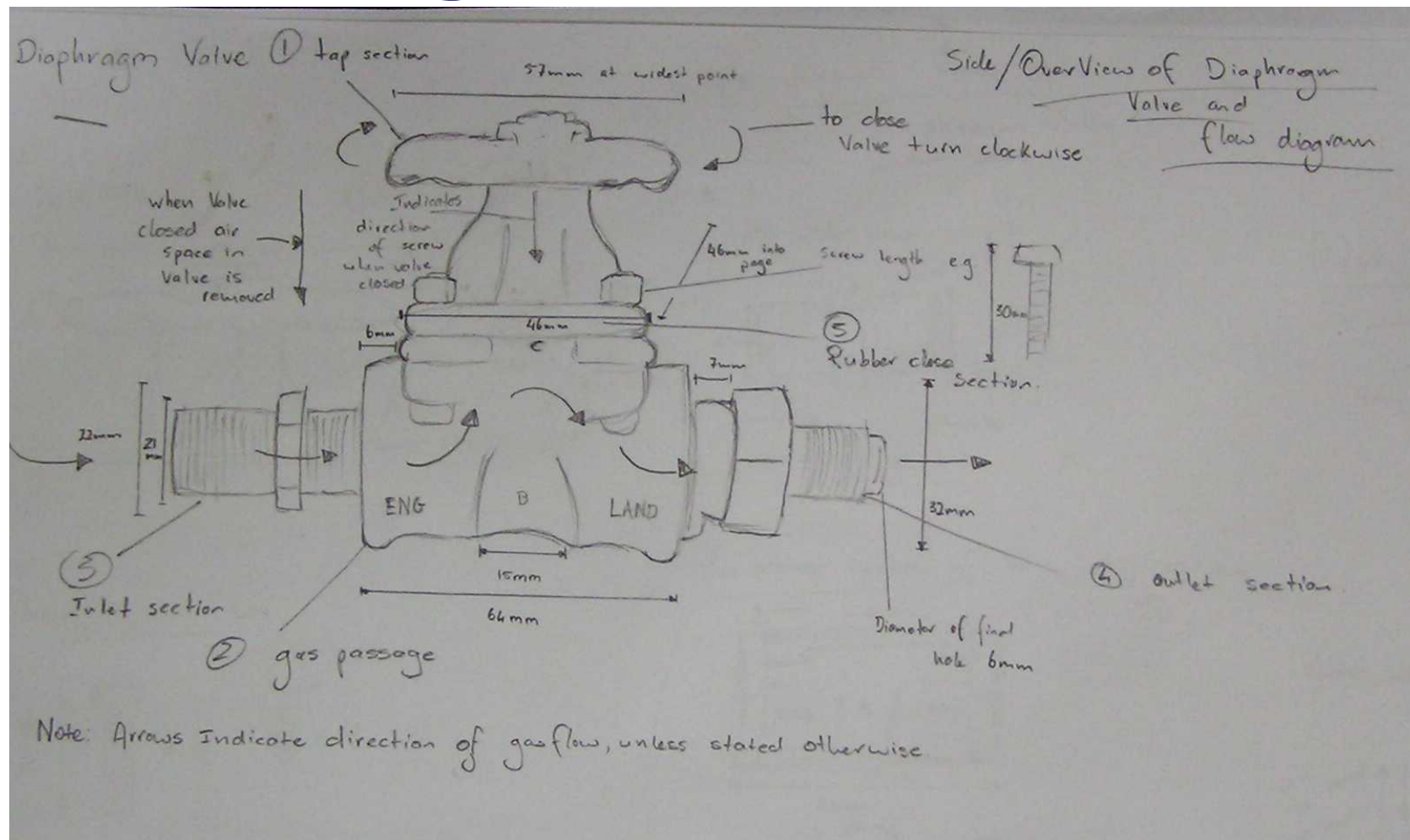


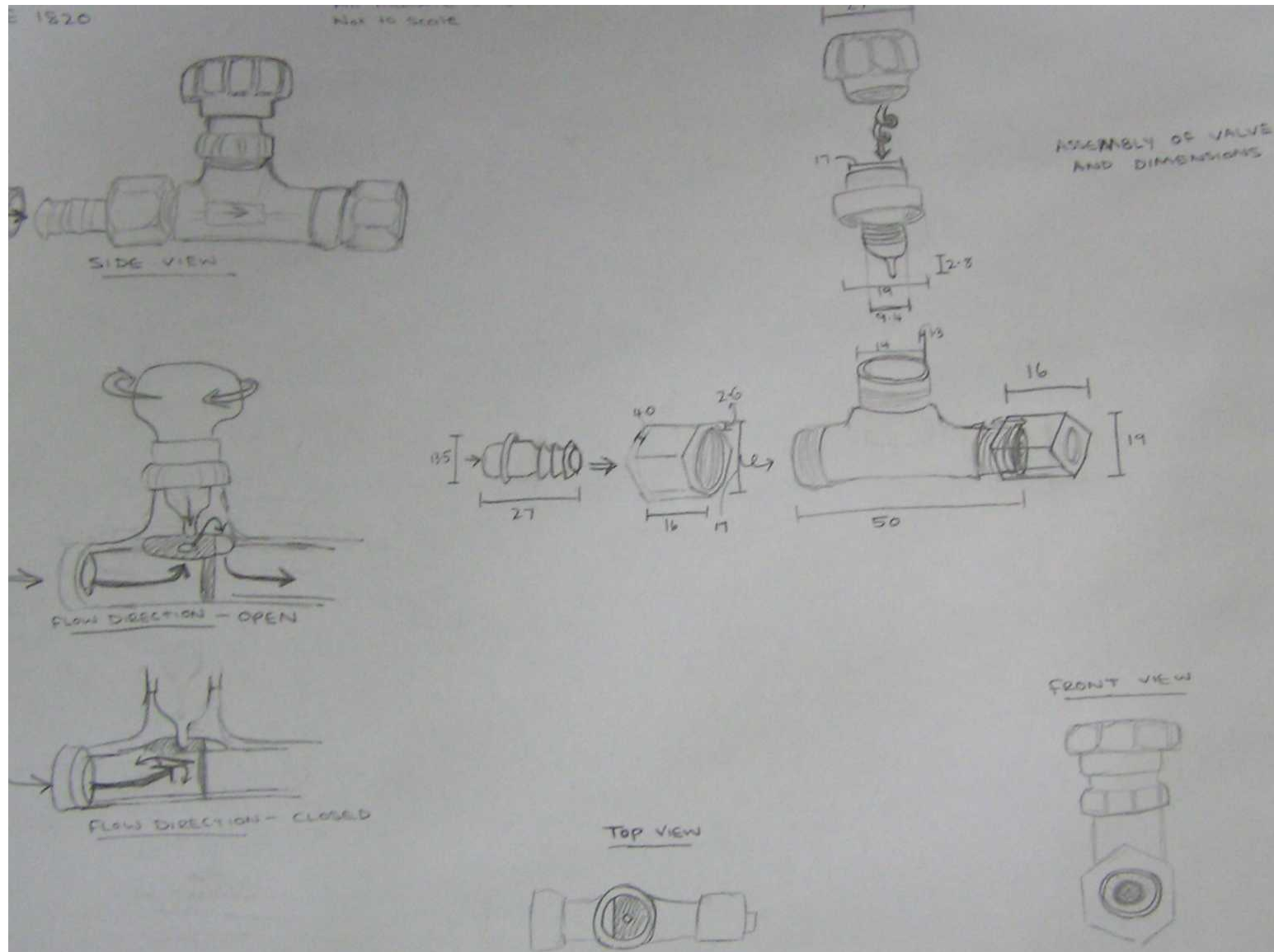
Work from Another Student

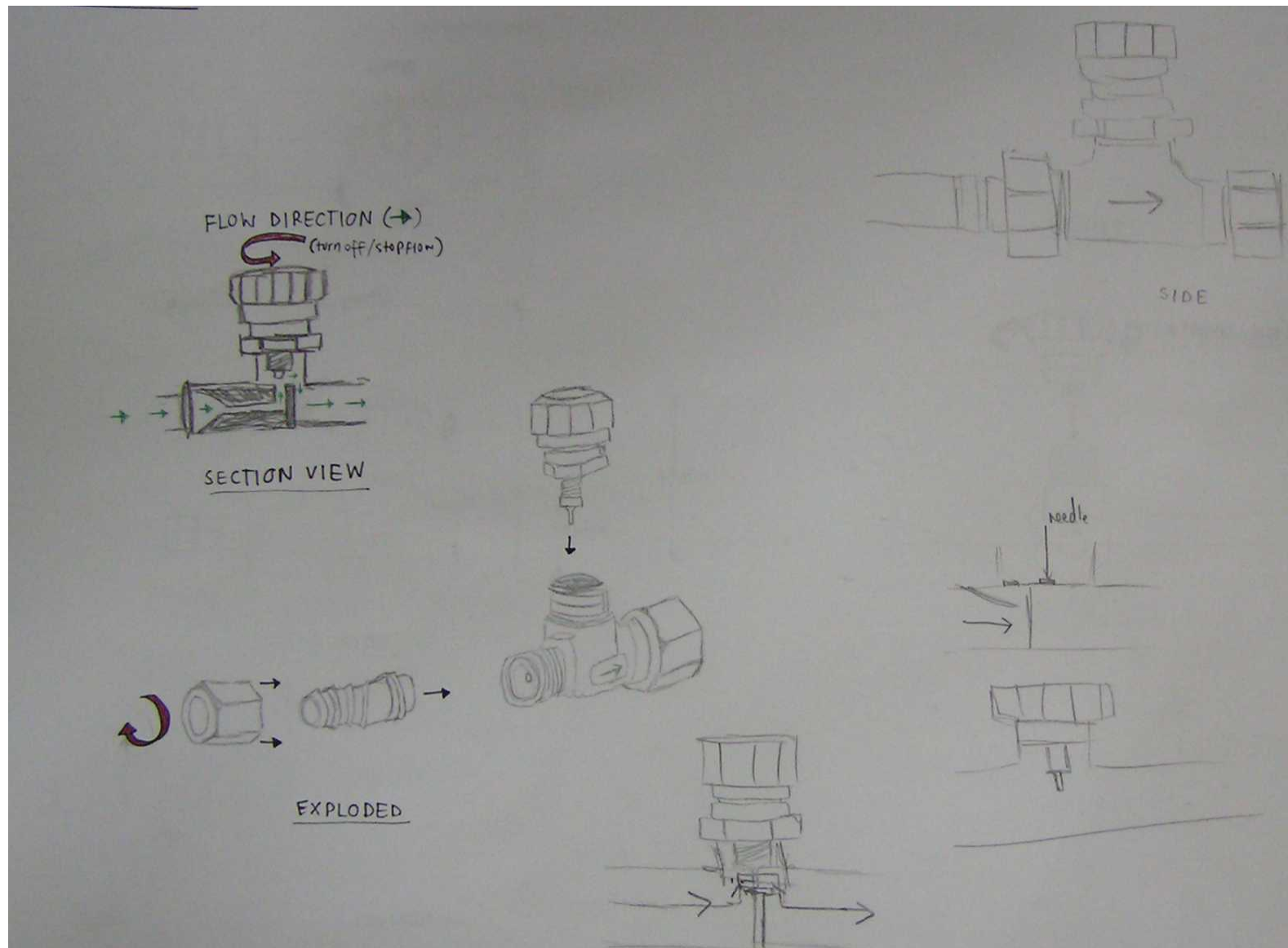




Sketching

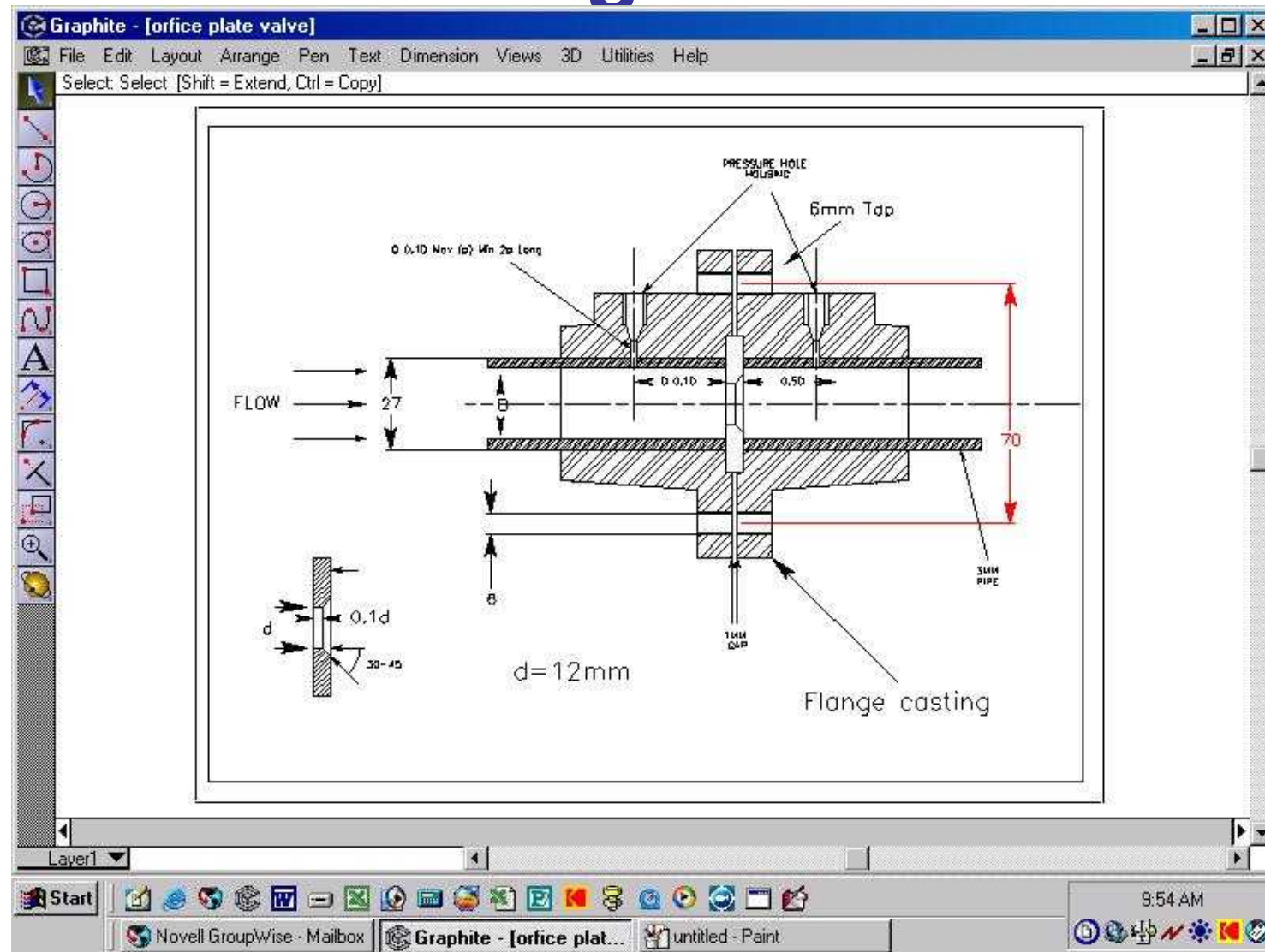


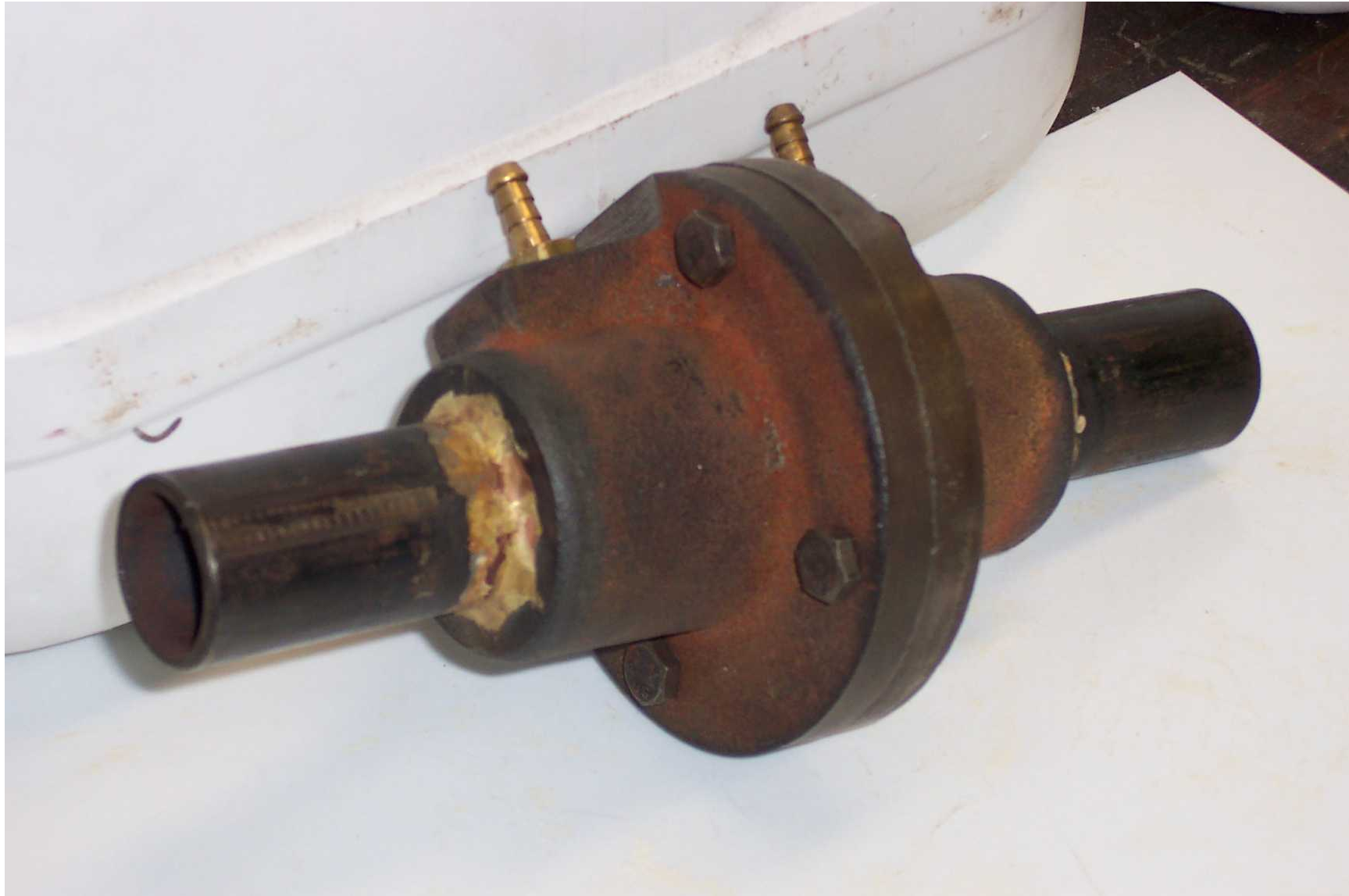






Manufacturing Processes







Success of Course

- ✱ Integration
- ✱ Student Attitudes
- ✱ Competency levels

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Questions/Thank you etc.



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