III B. Tech II Semester

15AME38 - MACHINE TOOLS LABORATORY

L T P C 0 0 3 2

Course objectives

This Lab focuses on using mechanical machines to meet the following targets:

- To improve the students' in practical knowledge on various machines Further, they
 would be required to do the projects relevantly and coherently in industries.
- To provide hands on training on various machine tools (Like Lathe, Drilling machine, Milling machine, Shaper, Planning machine, Slotting machine).
- Demonstration of construction & operations of general purpose machines: Lathe, Drilling machine, Milling machine, Shaper, Planning machine, Slotting machine, Cylindrical Grinder, Surface grinder and Tool & cutter grinder.
- 2. Job on Step turning and taper turning on lathe machine.
- 3. Job on Thread cutting and knurling on -lathe machine.
- 4. Job on Drilling and Tapping.
- 5. Job on Shaping and Planning.
- 6. Job on Slotting.
- 7. Job on Milling (groove cutting/ gear cutting).
- 8. Job on Cylindrical and Surface Grinding.
- 9. Job on Grinding of Tool angles.

Course outcomes

After completion of this course the student may be able

- To explain the concept of machining with various machine tools.
- To get hands on experience on various machine tools.

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