

DEPARTMENT OF MECHANICAL ENGINEERING

Name of The Lab	Manufacturing Process Lab
Purpose	The Aim of The Subject Is To Make Students Understand The Basic Manufacturing Operation

STANDARD OPERATING PROCEDURE

LATHE MACHINE

Control Plan:

- Read and become familiar with machine's operating procedures before operating
- Always know where the power off switch is located in case of emergency
- Always turn switch to off position when not operating machine
- Always disconnect the machine from the power source before servicing, repairing, or making any adjustments
- Wear safety glasses at all times while operating the lathe to protect eyes from any dust or debris
- Wear a dust or face mask to prevent the inhalation of dust from operating the machine
- Do not wear gloves, necktie, jewelry, or loose clothing, as they could get caught in the rotating elements of the machine
- Tie up long hair or wear protective hair covering to prevent hair from getting caught in the rotating elements of the machine
- Always clamp work piece. Never operate on loose work. Never secure the work piece with your hands.
- Always use guards in the appropriate position when operating the lathe.
- Always use recommended speed and specifications for lathe and accessories

Experimental Procedures:

- Put on all safety equipment and tie back loose hair or clothing before operating machine Check to make sure all parts of machine are working and functioning properly
- Double check all measurements for operating machine on work piece
- Adjust machine to correct speed for machining process
- Put work piece into chuck
- Use chuck key to loosen and tighten the chuck
- Remove chuck key from chuck and place out of chuck path of rotation
- Make sure all safety equipment is on correctly and put safety guards into position
- Start machine by turning black knob into on position
- During operation, keep hands a safe distance away and only use adjustment tools on lathe to maneuver work piece.
- When finished, turn off the lathe right away
- Wait until rotating chuck has completely stopped before handling work piece
- Clean machine after use and dispose of debris (see Waste Management Procedures)

HOD