

Standard Operating Procedure
Center for Neuroscience Machine Shop -1544 Newton Court Room 129

1. **Process:** Using the *Lathe*.
2. **Hazard:** Flying plastic, wood, or metal debris, rotating chuck.
3. **Personal Protective Equipment:**
 - a. safety glasses and face shield (ANSI Z87.1)
 - b. hearing protection (during extended periods of operation)
 - c. denim apron
 - d. closed-toed shoes
4. **Engineering Controls:** Make sure all guards are in place and kill switch is operational.
5. **Special Handling Procedures:**

Setting up the machine:

 - a. Make sure the item being worked on (stock) is tight in the chuck and adequately supported.
 - b. Only use materials approved for the lathe (no metal work).
 - c. Always remove the chuck key after tightening the chuck to avoid the chuck key from flying off during startup and causing serious injury or death.
 - d. Select the appropriate tool for the job (don't use chipped, broken, or gouged tools).
 - e. Set the tool bar (cutting bar) assembly at the proper height and angle, see owner's manual for details.
 - f. Fold back long sleeves up to the elbow.
 - g. No rings, wrist watches, bracelets, or other jewelry that could get caught in the equipment.

Using the equipment:

 - a. Make sure someone else knows you are using the lathe, in case of an emergency.
 - b. Prior to starting the machine, turn the chuck by hand to ensure nothing will bind or strike any part of the lathe. During operation, ensure that the toolbar does not touch the spinning chuck.
 - c. Keep hands and arms well clear of rotating chuck (if you have long hair, make sure it is tied back and will not touch the rotating chuck).
 - d. Make a small cut with the first turn to see if the work is setup correctly.

When done:

 - a. Perform these steps only after the equipment has been turned off, and the chuck has stopped turning.
 - b. Put away tool bar.
 - c. Clean up the shaving debris by using a brush or the shop vacuum to avoid potential splinters from the shavings.

If repairs are necessary (if odd noise, excessive vibration, or if an unsafe condition is observed):

 - a. Turn machine off.
 - b. Unplug machine and install "Plug Lockout" device (give key to Lisa) and install the "Tagout" label.
 - c. Do not repair it yourself.
 - d. Notify Lisa Laughlin at 757-8905 or Susan Sainz at 752-4484, giving a description of what happened and your contact information.
6. **Accident Procedures:**
 - a. Administer proper First Aid, a kit is available in the lobby near bottled water storage.
 - b. Call 911 or if using Cell Phone (530) 752-1230 for emergency assistance.
 - c. Seek medical help from Occupational Health Services (752-6051), or Cowell Student Health (752-2300), or Sutter Davis Hospital (no need to phone them before going).
7. **Equipment Use Authorization:**

You may only use this equipment after:

 - a. having the proper documented training and have received training from an experienced equipment operator
 - b. reading this SOP (signature and date)
 - c. reading the Injury Protocol (signature and date)
 - d. you are wearing the proper personal protective equipment

I have received a copy and have read the Standard Operating Procedures for Lathes. I understand the importance and my responsibilities in keeping myself safe while using this equipment. I will follow safety policies and procedures and will use good judgment and common sense to protect myself and others from injury. If I have any safety-related questions, I can speak with my supervisor or Safety Coordinator.

Name and signature of Trainee: _____ Date: _____

Name and signature of Trainer: _____ Date: _____