

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

1. **Process:** Using the *Drill Press*.
2. **Hazard:** Flying metal, plastic, or wood 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 vice or clamp and adequately supported.
 - b. 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.
 - c. Select the appropriate tool for the job.
 - d. Make sure the bit is tight in the chuck.
 - e. Tie back long hair.
 - 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 that you are using the drill press, and is available in case of an emergency.
 - b. 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).
 - c. Use the appropriate speed for the bit and the stock (shape of stock and the type of material – wood, plastic, etc.).
 - d. Tap a small dent into the stock where you will be drilling to help the bit drill in the right place.
 - e. Feed the bit into the work smoothly. If the hole being drilled is deep, withdraw the bit frequently to remove shaving on the bit (do this only when the bit has stopped rotating).

When done:

 - a. Perform these steps only after the equipment has been turned off, and the chuck has stopped turning.
 - b. Put away bit.
 - 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. **Prior Approval:** 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 a Drill Press. 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: _____

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