

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

1. **Process:** Using the *Grinding Wheel*.
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
  - e. dust mask
4. **Engineering Controls:** Make sure all guards are in place and kill switch is operational.
5. **Special Handling Procedures:**

Setting up the machine:

  - a. Inspect the wheel to make sure it is not damaged (you can tap it lightly with a non-metallic object and listen for a brief ring – if there is a ring, the wheel is most likely OK, if it sounds dull/dead, do not use the wheel).
  - b. Inspect the mechanism to make sure nothing, aside from your stock, will touch it, bind, or get caught on the equipment.
  - c. Keep the tool rest as close to the wheel but not touching it (gap should be between 1/8” and 1/4”).
  - d. If the tool rest needs to be adjusted, unplug the machine first, and then adjust it.
  - e. Tie back long hair.
  - f. Fold back long sleeves up to the elbow.
  - g. No rings, wristwatches, 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, is available in case of an emergency.
  - b. Be alert and cautious when using the grinding wheel.
  - c. Keep hands and arms well clear of rotating wheel (if you have long hair, make sure it is tied back and will not touch the rotating wheel).
  - d. Gently feed the stock into the wheel, do not force it. Move it side-to-side to avoid a hot spot on the wheel
  - e. Maintain good balance (stand erect with both feet straight and slightly apart) while grinding your stock. Avoid leaning into the machine or stooping over the wheel.

When done:

  - a. Perform these steps only after the equipment has been turned off, and the wheel has stopped turning.
  - b. 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 Grinding Wheels. 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: \_\_\_\_\_