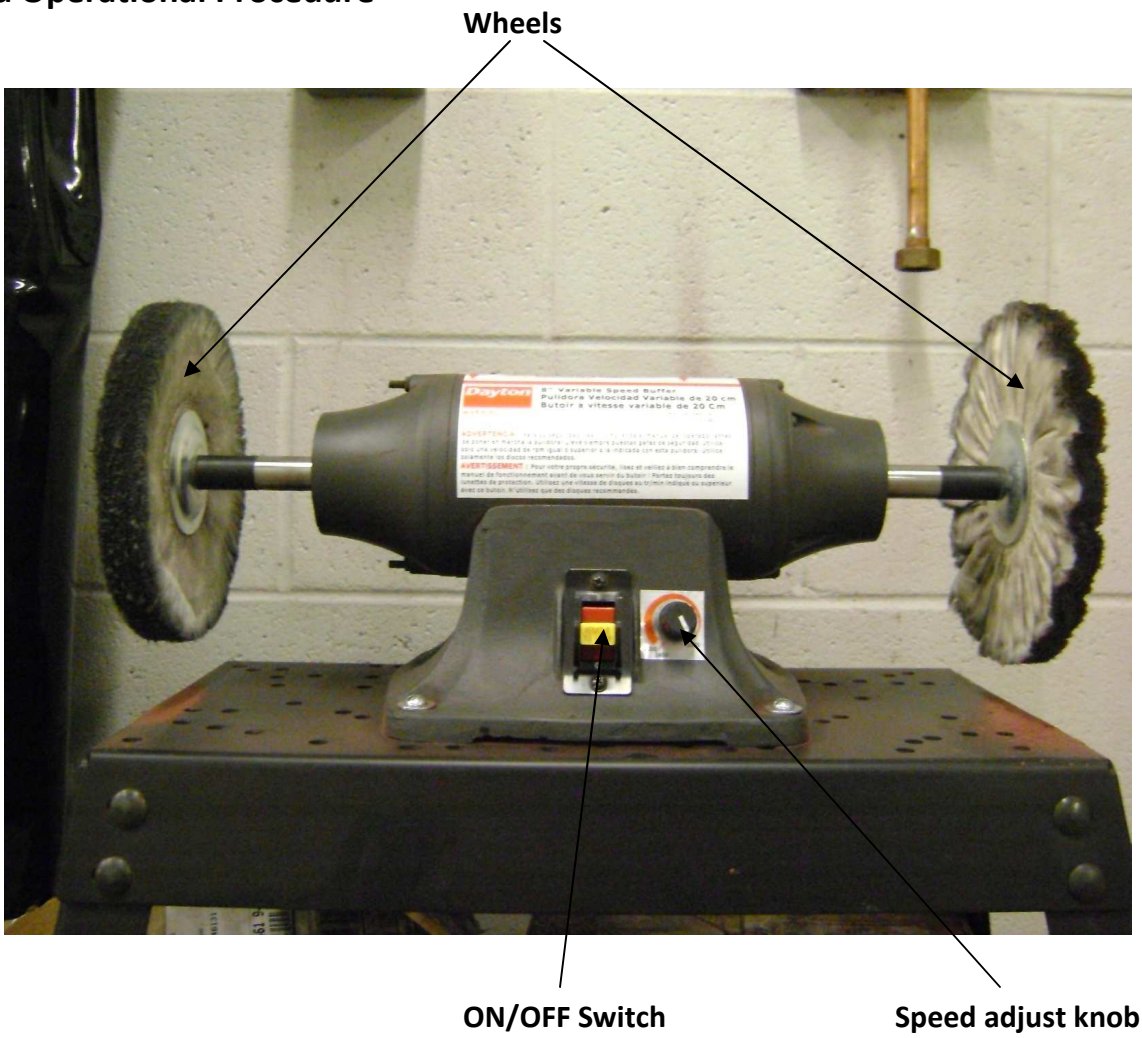
Armstrong Hall of Engineering
Artisan and Fabrication Laboratories (AFL)
Safety and Operational Procedure

DAYTON BUFFER



PPE Required: **Safety Glasses, Face Shield**

Prohibited Clothing: gloves, loose clothing, neckties, jewelry

Machine Access Level: **Supervised Only**

Materials Allowed: **Metals only**

Note: no wood or plastics can be ground on this machine!!

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Operating Procedure

1. Machine Safety Inspection and Work Area Check-Out

A. **PPE:** make sure you are wearing the proper PPE and not wearing any equipment listed on the first page that could get caught in the buffing wheels.
B. **Machine Warning Signs:** make sure you read and follow the machine warning signs that are attached to the machine. If you have any questions, ASK!!
C. **Work Area:** make sure the area is clean and the area around the machine is free and clear of debris and personnel.

2. Work Supervision

A. This machine requires supervision by an AFL employee. A Supervisor or TA will assist you in the set-up and operation of the machine. **You may not operate this machine without supervision.**

3. Machine Adjustment

A. **Note:** The machine adjustment is to be done with the machine **OFF!**
B. **Identify controls:** Identify the on/off switch. This switch is used to start/stop the machine.
C. **Check condition of buffing wheels:** Inspect the buffing wheels for imperfections. Inform the TA if any problems are found.
D. **Determine how part will be held:** Depending on the application and size of the parts being buffed, vice grips or other fixturing may be needed. The TA will help you determine the best way to hold and fixture the part.
E. **Determine which wheel to use:** There are two types of wheels that can be used. One is scotch brite wheel, and other is cloth buffing wheel. A TA will help you determine which is better for your specific application. Ask the TA for help.

4. Machine Operation

A. **Turn the machine on:** Stand to one side when starting the machine. Check with the TA that it is safe to turn on the machine, and turn the switch ON when instructed to do so.
B. **Allow for machine to come to full speed:** The machine will take a few seconds to come up to full speed. Listen and visually inspect for interferences with the buffing wheel. If any interferences are found, immediately turn the machine off and inform the TA.
C. **Adjust the speed:** Use the speed adjust knob to adjust the speed of the buffer for your material.
D. **Safely Buff or finish the part:** Go slow! Always keep hands and fingers away from the buffing wheels. Using the proper fixturing when possible; slowly move the part against the buffing wheel. A TA will instruct you on proper methods and techniques to use the buffer.
E. **Turn the machine off:** When finished buffing, turn the switch OFF to shut the machine off. Let the wheels come to a stop by itself, not leaving the machine until the wheel comes to a stop. **Never touch the moving buffing wheels.**

5. Clean Up

A. **Disassemble work set-up:** disassemble any fixturing used in the buffing operation. Return all parts to their proper location and the appearance of the buffer to how it looked when you started.
B. **Clean up the area:** clean up all messes (for example: use a shop vacuum to clean up any additional metal dust), return all tools, etc. The TA will check that the area is clean before you can sign-out of the AFL.