CNSI Innovation Workshop Combination Belt/Disk Sander User Outline

This guide may be found online through the Innovation Workshop and Microfluidics wiki.

Location

The combination belt/disk sander is located in 2448 Elings Hall on the bench next to Fume Hood #3.

Safety

- Follow the basic machine tool safety protocol: safety glasses, long pants, closed toe shoes, no loose clothing, jewelry or hair that may get caught in the moving machine
- Workpiece must be supported on the machine table so that it is not pulled out of your hand.
- Only sand on the downward-moving half of the disk sander where friction pushes the workpiece into the table.
- Connect a vacuum to the sander if you will be generating a lot of dust.
- Friction may heat workpiece to high temperatures be careful not to touch hot surfaces.
- Keep body parts clear of sandpaper. Use a tool to hold small parts.
- Don't wear bracelets, dangling articles of clothing, gloves or long sleeves while using the sander.

Training

Training is required before using the sander.

Training Outline

- 1. Explain parts of the tool
- 2. Review safety concerns
- 3. Demonstrate safe use of the tool
- 4. Show location of supplies
- 5. Demonstrate how to change belts/disks
- 6. Cleanup

Overview

The grinder is a benchtop sander with a 1" wide x 42" long sanding belt, and an 8" disk sander driven by a common motor. Each of these sanders has a separate vacuum port connection.

User Guide

Last update: 2022/07/14 19:49

Sequence of operation:

- 1. Wear proper PPE (safety glasses), face shield if needed
- 2. Turn on sander.
- 3. With workpiece resting on the table bring work into contact with the grinding wheel slowly and smoothly.
- 4. Move the work back and forth across the face of the sanding belt/disk to wear the abrasive evenly.
- 5. Use gentle pressure. Replace worn pads, or use a coarser sandpaper if more aggressive sanding is required.
- 6. Turn off the sander.
- 7. Use the shop vacuum to clean dust from work area.

Frequently Asked Questions

- What materials can I sand?
 - Aluminum
 - Wood
 - Plastics (be careful not to melt the plastic.
 - Very light sanding of steel is possible.

Accident Response

• In the event of injury, contact lab staff and emergency services if necessary (?)

Maintenance

- Change sandpaper as necessary
- Clean dust off of machine and work area

Supplies (In drawer labeled "Grinder Accessories")

- 1" x 42" sanding belts
- 8" adhesive-backed sanding disks

Notes

• Please refer to the manual for instructions on changing belts and sanding disks.

From:

https://microfluidics.cnsi.ucsb.edu/wiki/ - Innovation Workshop Wiki

Permanent link:

https://microfluidics.cnsi.ucsb.edu/wiki/doku.php?id=sandersop&rev=1657828175

Last update: 2022/07/14 19:49

