CAED Support Shop

**Sanders**

**Students should all have the band saw demo pieces**

**•Review dress code**

-Remind students that long hair must be tied back, loose clothing and/or jewelry must be removed

Wood shop sanders are for wood and plastics ONLY

No concrete, rockite, plaster, or metal

**•Intro/Strengths**

-Spindle Sander

-For inside radii

-Oscillating Edge Sander

-For long edges

-Disk/Belt Sander

-For straight and outside radii

-Do not force material into the sanders, let the machines do the sanding, forcing the material into the abrasive only wears it out, it does not sand the part faster

-The sanders are not meant for material removal, saws should remove the bulk or all of the material then the sanders finish to the line

**•Spindle Sander**

-Show on/off switch

-Show direction of rotation and emphasize sanding **against** the rotation

­-Demonstrate how to change the spindle and table insert (**Unplug** the machine)

-Keep material **FLAT** to the table

-Show how to tilt the table and how to return to square

-Explain that the angle changes as you move the work-piece around the table

-Explain/Demonstrate that a “hole” in a piece must be inserted over the spindle **ONLY** while the machine is **stopped**

-Do not sand small pieces without a clamp or attaching them to a larger piece

-Demonstrate sanding inside radius

-Field questions then have students sand their material

**•Oscillating Edge Sander**

-Show on/off switch

-Show direction of rotation

-Emphasize keeping the material against the miter gage and FLAT to the table

-The sander is very powerful and can grab the material and pull it out of your hands if it is not supported by the miter gage

-Show how you can sand inside radii using the table on the side

-Demonstrate how to raise and lower the table and how to tilt the sander

-**Never sand the face of the material or small parts**

-Only one person on the machine at a time

-Demonstrate how to sand a piece of material

-Field questions then have students sand their material

**•Disk/Belt Sander**

-Show on/off switch

-Show direction of rotation

-ONLY sand on the **DOWNWARD** moving side of the disk

-Work-piece should ALWAYS be **FLAT** on table

**-Do not sand the face of the material, your fingers will be too close to the belt/disk, use the drum sander**

-Attach small pieces to a larger piece or hold in a WOOD clamp, do not get fingers close to the sander

-Show how to tilt the table, ONLY tilt table down, and how to return to square

-Emphasize only one person can use the disk/belt sander at a time

-Demonstrate sanding on both the belt and disk, remind students to only sand on the downward side of the disk

-Show how to move the material back and forth, staying in one spot will wear the abrasives

- Field questions then have students sand their material

**•Remind students to clean-up after themselves after using a tool or area.**

-Show them where the brooms, vacuum, etc. are located and what our expectations for clean-up are.

-Remind them particle board, OSB, MDF, Melamine, and finished material goes in the **TRASH**. Wood and Plywood can be recycled.

-Have the students clean up

Ask students the following questions:

-What portion of the disk on a Disk Sander should be used for sanding material?

**From the center to the downward spinning side**

-When using the Disk/Belt sander, the workpiece should be in contact with the table:

**Always**

-When sanding small or irregular shaped pieces on the Disk/Belt Sander they should be held with?

**A wooden clamp**

-When is it ok to sand the thickness dimension of a piece of ¾ inch plywood or similar material on the Disk/Belt Sander?

**Never**

-What materials can be sanded on the Disk/Belt Sander in the woodshop?

**Wood and some plastics**

-The Spindle Sander is used to:

**Sand irregular curves and interior radii**

**REMEMBER-We are here to help. If you have any questions, ask!**