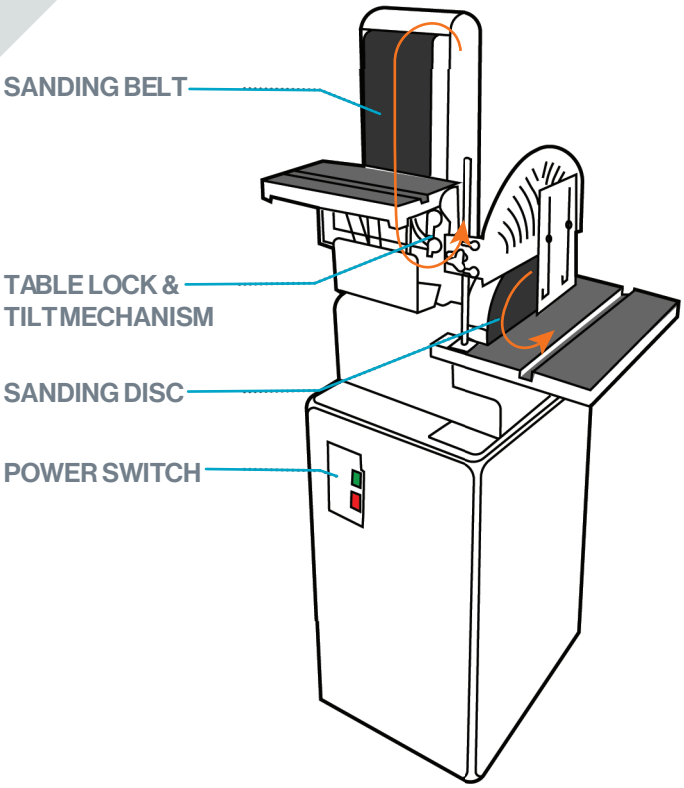
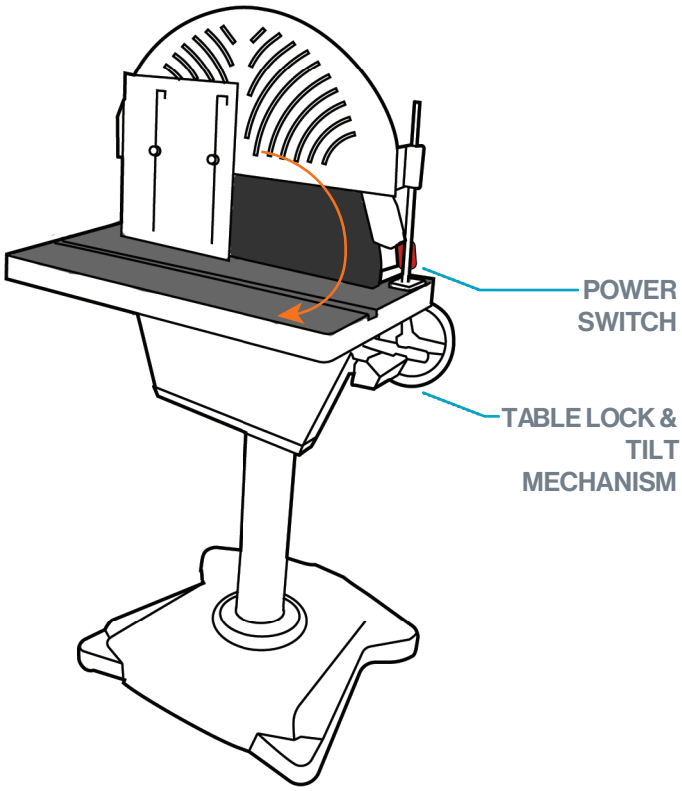
DISK, SPINDLE, & BELT WOOD SANDERS

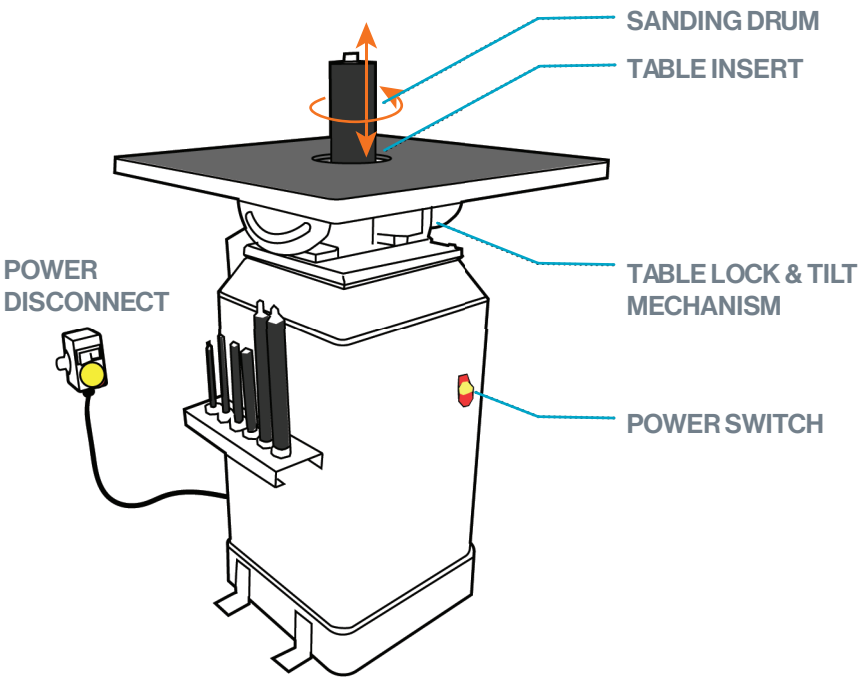
RIT | The Student Hall for Exploration and Development

DISK, SPINDLE, & BELT WOOD SANDERS

THE WOOD SANDERS SHAPE AND SMOOTH YOUR MATERIAL







MATERIALS

ALLOWED MATERIALS

+ Wood
+Most plastics

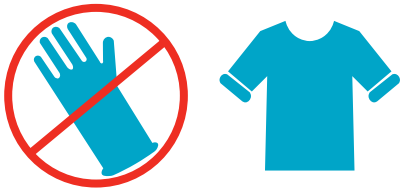
BANNED MATERIALS

- Metal
- PVC
- Pressure treated wood
- Carbon fiber and composites

CONSULT MAKERSPACE STAFF FIRST

+ All other materials

- Safety glasses required
- Hearing protection recommended (ear plugs or ear muffs)



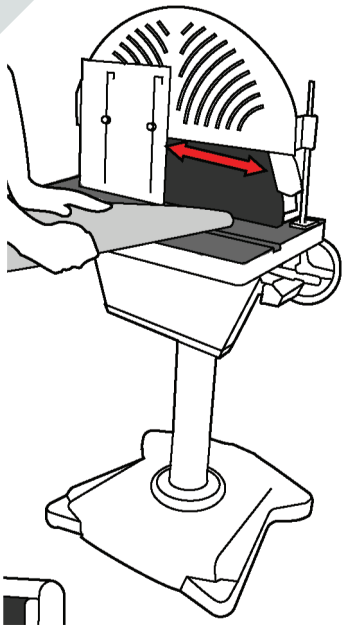
- Wear short sleeves or roll up long sleeves
- Secure any loose clothing (zip up jackets, tuck in strings, etc.)
- Tie up and tuck in long hair
- Remove jewelry and lanyards, etc.
- Do not wear gloves

- Mask or respirator is highly encouraged

MATERIALS

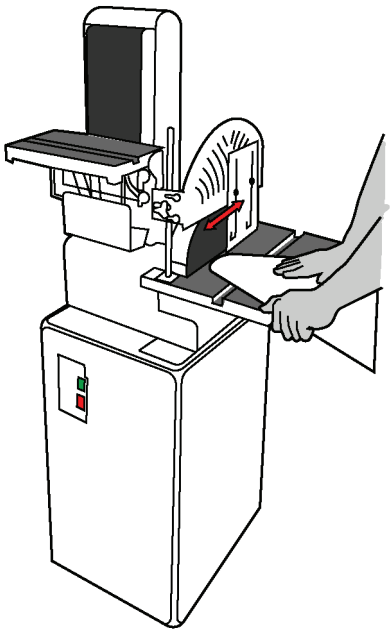
- What we offer
  - 1/8” Plywood
- Common places to buy these materials:
  - SHED Makerspace Materials Shop
  - ID Shop
  - Foundations 3D Design Shop
  - Lowe’s
  - Home Depot
  - Any wood/lumber store

If bringing your own material, you must provide a receipt or MSDS as proof of what it is



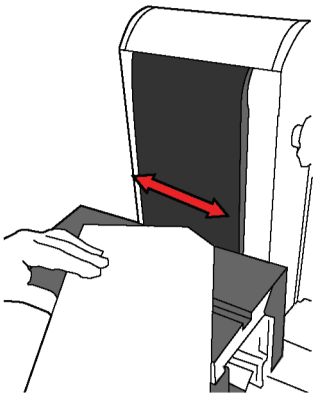
DISC SANDER

- A disk of sandpaper is spun at high speeds to remove material from corners and edges.
- There are two forms of disc sanders, disc only and belt/ disc combination sanders.
- Only use the side where the disc is coming down towards the table.
- The table can be tilted to sand at non-right angles.
- To tilt: loosen knob on right-hand side of table and tilt. Return to neutral position when finished.



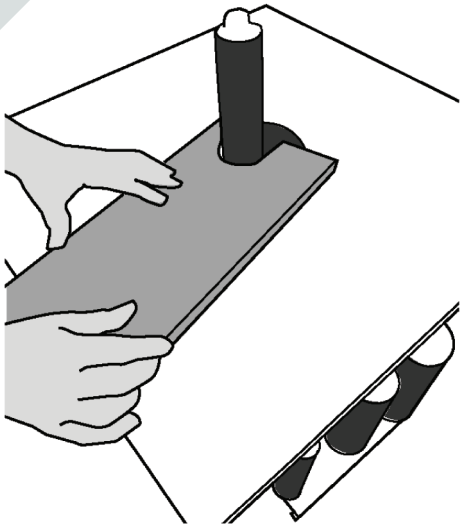
BELT SANDER

- A belt strip of sandpaper is spun at high speeds to remove material from corners and edges.
- There are two forms of belt sanders, belt only and belt/ disc combination sanders.
- The table can be tilted to sand at non-right angles.
- To tilt: loosen knob on right-hand side of table and tilt. Return to neutral position when finished.



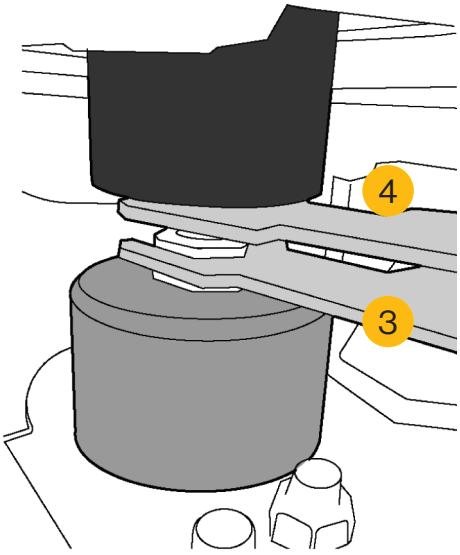
USAGE TIPS

- Your material should only be getting moved side to side
- Keep the material resting on the table
- The disc and belt sanders will pull your material down towards the table



SPINDLE SANDER

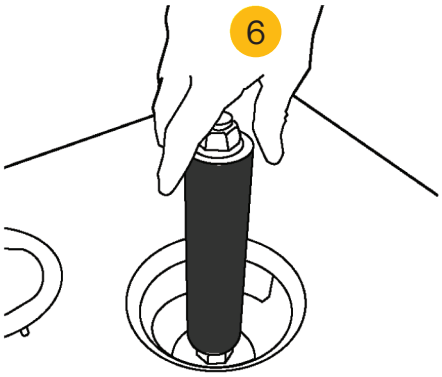
- A cylinder covered in sand paper is spun at high speeds while moving up and down to sand curves.
- Use the sanding drum size closest to your curve's diameter.
- The table can be tilted to sand at non-right angles.
- To tilt: loose knob on front of machine and spin handle to preferred angle.



CHANGING THE DRUMS

(MAKERSPACE STAFF ONLY)

1. Make sure the sander is turned off.
2. Take the neck plate off.
3. Place one wrench on top of the spindle sander to keep it from rotating.
4. Place the second wrench below the sanding drum.
    - Rotate the two wrenches apart from each other to loosen the nuts?drums?.
5. Unscrew the current sanding drum and place it back on the rack.
6. Place the new sanding drum on the sanding spindle, turning it by hand to tighten it.
    - Do not use a wrench for this.
    - Do ot over tighten the spindle sander.
7. Place the size appropriate neck plate on.
    - The opening should be only slightly larger than the diameter of your sanding drum of choice.

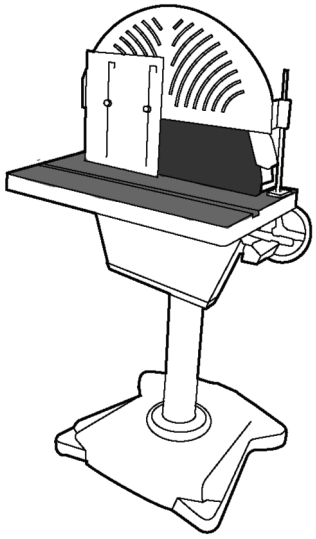


USAGE TIPS

- Keep your material resting on the table when working.
    - This will prevent the material from being slammed down.
- Keep a firm grip on your material.
- Stop the machine before sanding the inside of a hole.

KEY DO'S AND DON'TS

KEEP YOUR MATERIAL FIRMLY AGAINST THE TABLE



KEY DO'S AND DON'TS

QUICK CHECK BEFORE STARTING

1. Mark your material with your planned stopping point.
2. Check that the sander's table is clear.
    - **SPINDLE SANDER:** Make sure the sanding drum is your needed size.
3. Adjust the table if needed.
4. Make sure your material is thicker than the gap between the sandpaper and table.
5. Turn the dust collection on.

DURING THE JOB

1. Turn the sander on and wait for it to come to a constant speed before starting on your sanding.
2. Hold your material firmly with both hands at all times.
3. Slowly move your material side to side as you work.
    - Do not lift your material off the table, it will be slammed down on to the table.
    - The material should always have least one point of contact with the table.
4. Turn the sander off when finished and stay near it until lit has come to a complete stop.

CLEANUP

1. Clean off any dust with the brush and dust pan.
2. Reset the table to 90 degrees if you had tilted it.

COMMON PROBLEM 1
- How to fix
- When to call for help

COMMON PROBLEM 2
- How to fix
- When to call for help

COMMON PROBLEM 3
- How to fix
- When to call for help

DEMO IMAGES

WHEN IN DOUBT ASK A MAKERSPACE STAFF

ADDITIONAL MACHINE INFO CAN BE FOUND HERE:
(Qr code or link to official machine manual/guide)

OSHA® QUICK CARD™

Hazard Communication Standard Pictogram

The Hazard Communication Standard (HCS) requires pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

HCS Pictograms and Hazards

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** (Non-Mandatory)  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)

For more information:

U.S. Department of Labor

OSHA® Occupational Safety and Health Administration

www.osha.gov (800) 321-OSHA (6742)

OSHA 3491-01R 2016

RIT Brand Elements collected

These a re some of the elements that we use fr equently . Last updated 092721

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Primary

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Secondar y

20% 8 % 4% 3

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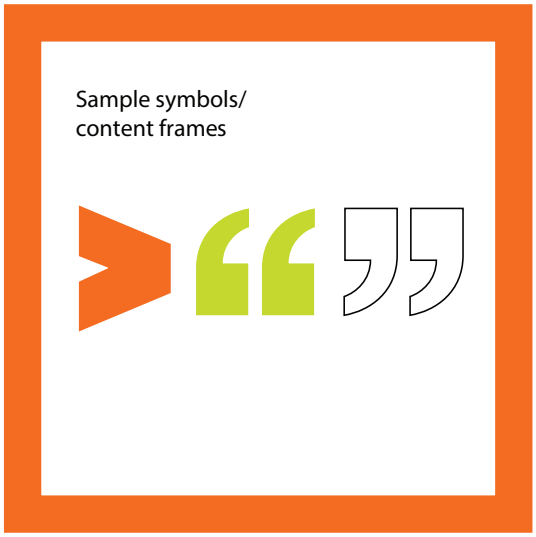
Moving frame edges

Prisms

Closed content frame



Typical frame line thickness is 14 pt. on a 8.5″ x 11″ page

Moving content frame

Content brackets

Orange corner cut style

Shape the Future and Improve the World

The Right Fit

Sample usage of an orange line separator and an open content frame with text