



Oscillating Spindle Sander Safety Rules

The Oscillating Spindle Sander is designed for sanding of **wood materials only**. Primarily designed for shaping and smoothing curved surfaces the Oscillating Spindle Sander can handle sanding tasks from rough shaping to final smoothing, though it is best to start with the bulk of the waste material removed by another machine such as a bandsaw, scroll saw, or jigsaw. The spindle sander excels at smoothing concave cutout areas and can do an outstanding job of sanding the edge of a workpiece 90° to a reference surface. These sanders can sand end grain as easily as any other surface of the workpiece.

These sanders are typically supplied with a number of different spindles and table inserts, and for machines with tilting spindles or tilting tables there are usually inserts provided to safely work while sanding at an angle other than 90°.

It is common practice that sanding sleeves in various abrasive grit sizes be provided with each spindle when the machine is new, and these sleeves are replacement items that can be purchased and replaced as they wear.

There are many brands, models and sizes of Oscillating Spindle Sanders from small table top machines to large floor standing models. The safety concepts presented are the same for any size machine though some aspects of proper maintenance will vary from model to model.

Start with a Risk Assessment to ensure a safe work area:

1. Follow all procedures in **CHARLOTTE WOODWORKERS' ASSOCIATION Shop Rules and Guidelines** and **Shop Safety Best Practices**.
2. If you have any questions about how to properly operate the Oscillating Spindle Sander you're

planning to use, contact the Shop Foreman so that they can help you find the assistance and answers you need to use the machine properly and safely.

3. Always wear safety glasses with side shields or safety goggles while operating this machine.
4. Always wear a well fitting dust mask designed to protect you from the dangers associated with breathing fine wood dust.
5. Keep the work area well lighted. Being able to clearly see what you're working on makes it easier to avoid accidents.
6. A sanding sleeve, especially one with course grit, can cut very quickly. Failure to anticipate this may cause injury to the fingers and hands.
7. Precautions should be taken for loose hair, clothing, jewelry and other items so that they are NOT caught in the machine.
8. Users should be aware that the spindle sander will sand away the gold in a wedding ring as quickly as it will sand a piece of maple. However, sanding such material tends to generate a lot of heat, and you could seriously burn yourself if you unknowingly sand away a piece of jewelry that you fail to remove.
9. Sanding on wood will cause heat buildup due to friction and may cause the wood to burn.
10. All power driven sanders can cause serious abrasive skin burns with incorrect use or from accidental contact with the abrasive edge of sanding sleeves.
11. The spindle sander creates a large amount of dust while in use. Much of this is the fine dust that is most dangerous to your respiratory health. For your safety, and the safety of others in the shop, a dust collector or a vacuum with adequate power and filtration capability must be connected to the spindle sander. For your own safety, a good, well fitting, filtering face mask is

also recommended. Do not attempt to operate this tool without first connecting it to an adequate dust collection system.

12. Check the integrity of the sanding sleeve as well as the integrity of the spindle that holds the sleeve. Any issues or damage should be reported to the shop foreman.
13. Do not wear gloves while operating the sander as they could get caught on the sanding sleeve and cause your fingers or hand to be pulled against the rotating abrasive.
14. **DON'T USE THE OSCILLATING SPINDLE SANDER IN A DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain.

Operational Safety Rules:

1. Approach your work in the CWA Shop and on the Combination Belt/Disc Sander or Edge Belt Sander with a safe attitude!
2. Visitors and bystanders should be kept a safe distance from the work area. Keeping an area of at least 4 feet in every direction for the operator should be considered a minimum for someone not involved in the operation.
3. **KEEP THE WORK AREA CLEAN.** Off cuts and pieces of scrap, as well as uncollected dust from sanding, can create trip / slip hazards. Don't fall, clean the floor regularly! Clutter invites accidents.
4. Always check the machine carefully for damage or missing parts. Check that the cord and plug are in good condition. If the machine has internal dust collection, make sure the dust bag is properly attached and undamaged. If the machine has a connection port for an external dust collector or vacuum, connect it to the appropriate dust extraction device to help minimize the buildup of sanding dust. If the machine has guards, be sure that they are all installed and working properly. If you discover any problems or issues that you're unable to correct, report them to the Shop Foreman so that they can be taken care of prior to starting the sander.
5. Some dust created by power sanding, contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.

• Arsenic and chromium from chemically treated lumber.

Avoid these risks by not sanding materials of these types on our sanders. If you need to sand such materials at home or in other situations, take the time to learn how to properly protect yourself and those around you from exposure.

6. **Don't overreach.** Keep proper footing and balance at all times.
7. **Avoid having the machine start unexpectedly.** Make sure the power switch is in the off position before plugging the power cord in
8. **NEVER use these sanders to sand metal.** If you have any questions about this, contact a Shop Foreman and ask about the dangers of the sparks generated causing a fire or explosion in the wood dust that the sander has previously been used for, or the issues that could arise if the sander was connected to a shop vacuum or dust collector used to collect wood dust while generating such sparks.
9. Never run the Oscillating Spindle Sander without the proper table insert correctly installed.
10. **NEVER STAND ON A MACHINE.** Serious injury could occur if the machine is tipped.
11. Oscillating Spindle Sanders always rotate in a fixed direction. AVOID kickback by sanding so that the work is being held against the directions of rotation. (Direction of rotation is often shown with directional arrows, but can be quickly determined by switching the machine on then off and watching the spindle direction as it rotates.)
12. Allow the spindle to reach full speed before feeding material (on most models this happens quickly). Remember, it takes time for the spindle to stop moving once power is turned off. There is no way to stop the machine on short notice.
13. The distance between your fingertips and the moving sanding sleeve shall be no closer than 3". Work pieces that are too small to hold by hand while maintaining this distance should be gripped with a clamp or jig while sanding.
14. Do not sand pieces of material that are too small to be safely supported.
15. **Properly support the workpiece at all times during operation; maintain control of the work at all times.**

16. **DO NOT SAND FREEHAND!!!** Do not sand with the work piece unsupported. Use the table or other supports to ensure that operation can be well controlled.
17. **Always hold the work firmly against such a support when sanding.** Remember, sanders remove material by “grabbing” the surface of the material and “tearing” small pieces of it away from the surface. If this gripping and tearing action isn’t restrained firmly against a support of some kind, the sandpaper will move the workpiece, or in some situations, throw the workpiece with considerable force.
18. Avoid awkward hand positions where a sudden slip could cause a hand to move into contact with the sanding sleeve.
19. Always remove scrap pieces and other objects from the table or any supporting jig being used to support the workpiece before turning the machine on.
20. Don’t force the work or push hard on the sanding media. The sander performs best and safest when it is allowed to remove material at the rate for which it was designed.
21. Never make adjustments to the machine while the sander is on. Wait for it to come to a complete stop!
22. Always turn the machine off and disconnect the power cord before installing or removing spindles, sanding sleeves, table inserts, or when making repairs.
23. Never leave the machine work area when the machine is running or before the machine has come to a complete stop.
24. Shut off power, clean the sander and work area before leaving the machine at the end of a sanding session.
3. When cleaning the Oscillating Spindle Sander DO NOT use lacquer thinner, paint thinner, or gasoline, aside from being very flammable, these materials will damage painted surfaces.
4. Periodically apply paste wax or other protectant to the table top to prevent rusting.
5. Clean the table inserts and store the unused table inserts in the storage location provided on most of these sanders. Store spindles in the proper storage location, also typically provided on most models of spindle sander.

Maintenance of Equipment

1. Equipment maintenance is the responsibility of the team assigned to maintain a particular piece of equipment. As the user, if you’re not a member of this team your role is to report issues to the Shop Foreman so that they can be addressed by the proper person(s).
2. Maintenance requirements differ between models of sander. Consult the manual for your particular oscillating spindle sander to determine what needs to be done to properly maintain the model you’re working with.