

Bowl Sander with 2" Mandrel

BASIC USE INSTRUCTIONS

Version 1.0

Safety First



Disconnect saw from power source before fitting or removing insert.



Always wear proper ear protection when working with machinery.



Use caution when handling sharp objects (saw blades, router bits, drill bits and so on). Use protective gloves whenever possible.



Always wear proper eye protection when working with machinery and tools.



Always wear proper respiratory protection when working near airborne dust particles.

Please read and fully understand any and all safety materials that came with your power tools or machinery before operation. Always follow all safety guidelines set in place by the power tool or machine manufacturer.



Bowl/Curved Surface Sanders with Wooden Handle

Designed to be used on curved surfaces like wood lathe turned bowls, this bowl sander is a fast and efficient way to achieve great looking finishes on your wooden bowls or platters. The best part of this sander is that it won't leave those unsightly radial sanding lines left behind by traditional sanding methods. Since this sander has two bearings to ensure that the mandrel spins freely with the rotation of your project on the lathe, this helps produce much less friction which in turn prolongs the life of your sand paper disc. The dual bearing head on the sander is unique to this sander as most bowl sanders only have one or even none. Depending on the speed that your project is rotating, the pad of the bowl sander can get warm. The faster the project is turning, the hotter it will become. We recommend running the lathe at lower speeds and let the sander do the work. See RPM chart on last page.

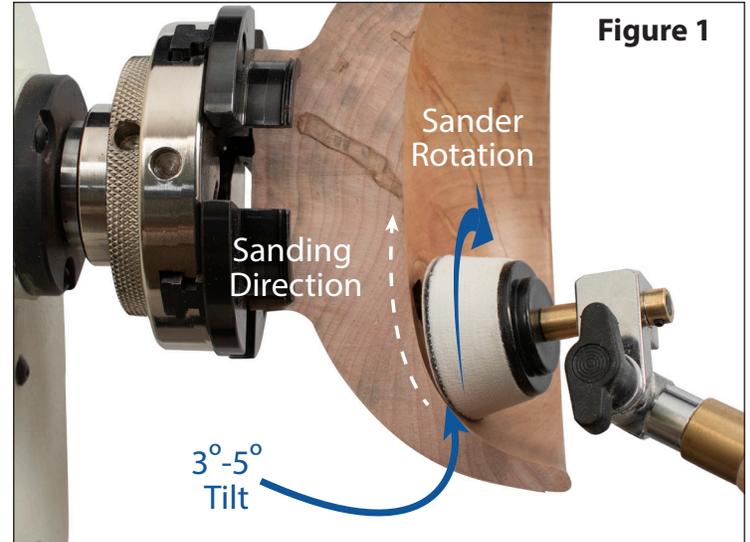


The Basics

Proper way to contact the work surface

CAUTION

At no time should the entire sanding pad engage the work surface. If this happens the sandpaper will over grip the wood and will vibrate wildly. Use the sanding action shown below to avoid this.



General Maintenance

Keep it Clean

It is very important to keep the bowl sander head assembly clean. After every use, you should remove the mandrel and clean the head assembly with a cloth or blow it out with compressed air.



Lube the Bearings

Every so often, check the bearings to make sure they are spinning freely. If needed, place a drop of oil on both the top and bottom bearings of the head assembly.



When the project is rotating on the lathe, it is important to keep in mind that the sander should only be in partial contact with the work surface. Typically the sander will only be touching the work surface as shown above with a slight tilt of the sander handle. You can adjust the head of the sander to the angle that best fits your grip by loosening the t-knob and adjusting accordingly.

Four zones of a bowl or platter

Think of your bowl or curved surface with 4 distinctive zones as shown in figure 2. You have two end grain sections and two side grain sections. At no point sure the entire sanding pad engage the entire work surface. Keep the pad in contact with the surface at a 3-5 degree tilt as shown in figure 1 working with the direction of the grain.

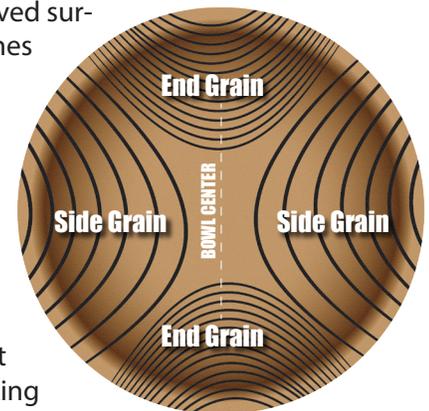
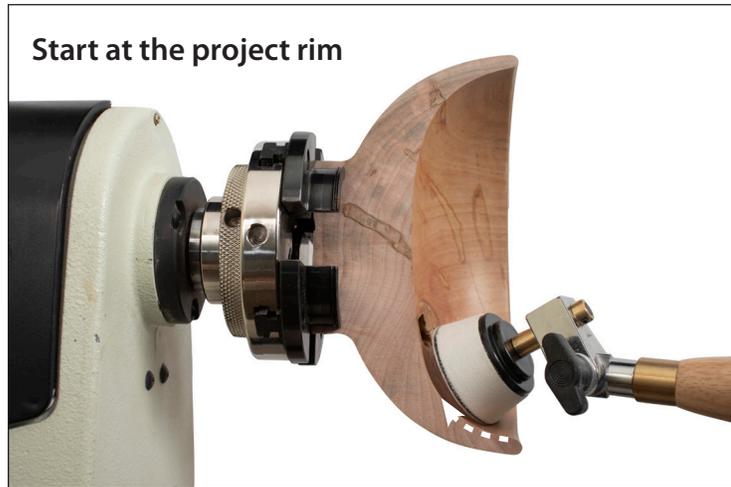


Figure 2

Light Pressure for Best Results

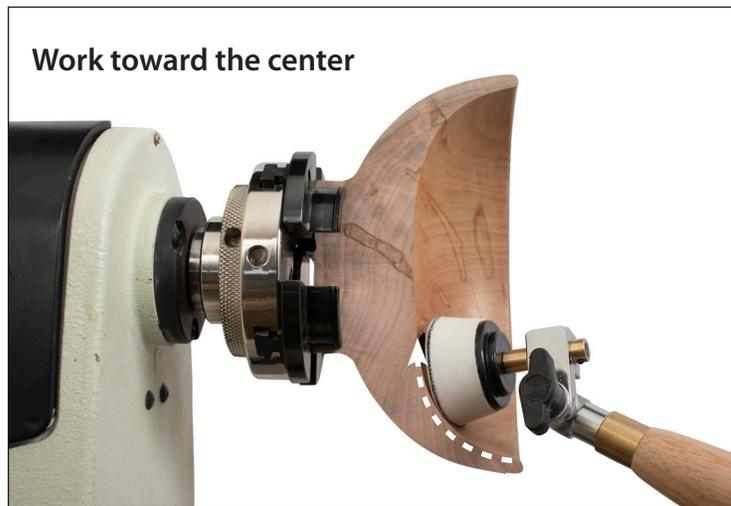
Keep in mind to let the sander do the work. There is no need to apply heavy pressure when using these sanders. Applying too much pressure may over heat the pads and damage the pads. Always remember, heat is your enemy when sanding any project.

Using the Sander



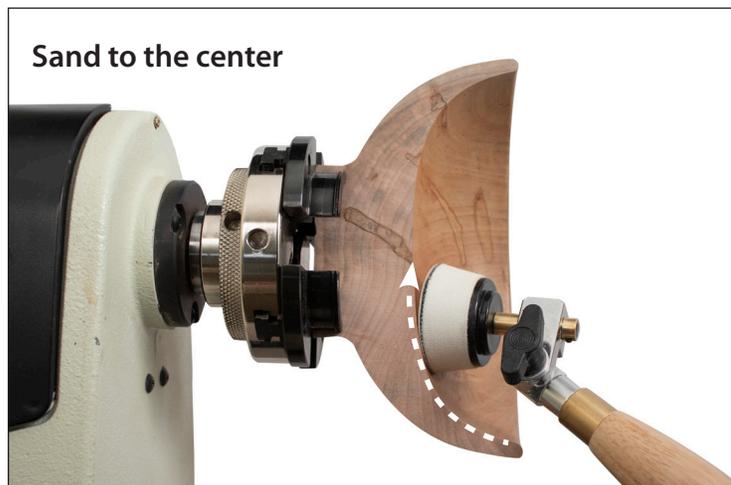
Start at the project rim

With your project mounted to your lathe and rotating at a slow speed and with light pressure, start working the sander from the rim. Remember to keep the sander moving.



Work toward the center

Keeping the edge of the bowl sander in contact with the work surface, work the sander toward the center of your project.

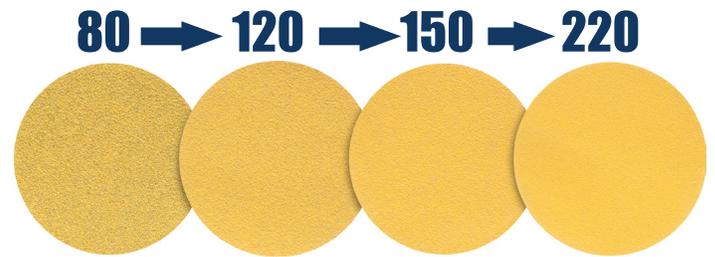


Sand to the center

Once you reach the center of the rotating project, lift the sander off the work surface and start sanding again at the rim of your project. Do not sand past the center of your project.

Abrasive Grit Progression

What is Grit Progression?



The basic concept of grit progression is relatively simple. When sanding most any project, your wood is full of uneven marks, scratches and blemishes. After using a lower grit abrasive like 80 grit to remove larger marks and blemishes you will have noticeable scratches and marks left behind. Even when sanding with the grain these markings are usually visible. From the 80 grit we typically step up or progress up to 120 grit. This will remove a great deal of the marks and scratches left behind by the previous grit. We typically repeat this process and step up to the next grit and continue doing so until we achieve satisfactory results.

80 grit - 220 grit abrasive discs...

The grits in this sander package typically range from 80 grit to 220 grit. This is the most commonly used grit range used for turning wooden bowls. These grits are subject to change depending on availability

Versatile Head Assembly Attachment



Loosen brass sleeve set screw with hex key wrench to remove the sanding mandrel.

Secondary/Short bushing



While we have included our own mandrel sanding pad, our sander also accepts many other brands and styles of bowl sander or disc sanding mandrels. In addition to the short bushing on the head assembly, we have also included a second short bushing to accommodate the various after market mandrels that may be shorter or longer. This sander will accept a shank size that is approximately 1/4" in diameter.

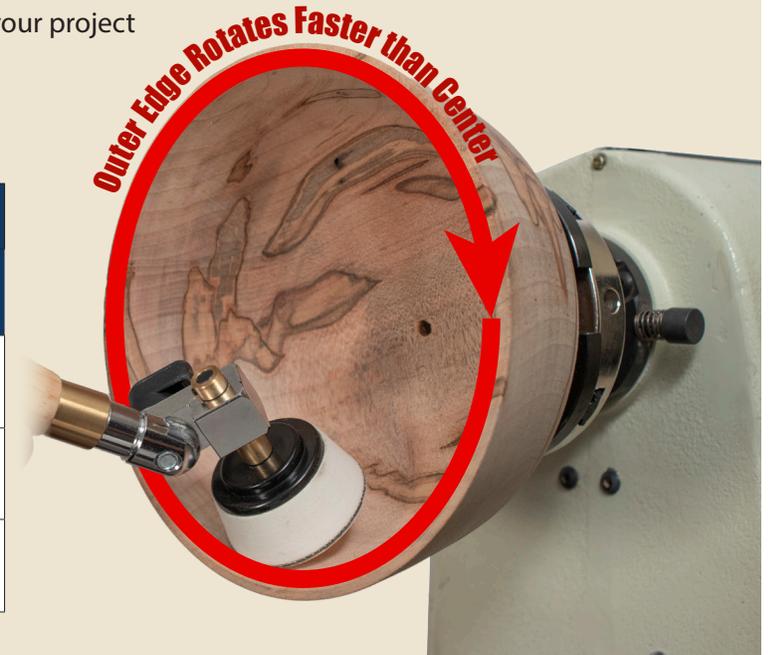
Keep the sander under control...

Remember, **Heat is the enemy** of any sanding project. The faster the bowl sander spins, the higher the likelihood the pad will heat up and melt the hooks on the pad or burn the wood. Controlling the sander at a safe and workable speed is the key to positive, great looking results. Also keep in mind that the **larger the item** you are turning, the faster the speed is turning at the outer edge of the project.

Do NOT exceed the maximum RPM as shown below.

Coarse grits and the smaller diameter bowl sanders tend to heat up more quickly than fine grits and larger bowl sanders. Running the bowl sander at a rate of speed that is too high will heat up the pad and damage the hooks. The hooks are made from plastic and may melt which will cause the hooks to lose grip with the abrasive disc causing undesirable results to your project and may damage the sanding pad.

MAXIMUM ROTATIONS PER MINUTE	
Mandrel Size (Mandrels Sold Separately)	Maximum RPM (Lathe RPM)
1"	300-500
2"	400-500
3"	500-600



Can You Sand Green Wood?

The simple and direct answer is yes you can sand green wood. To what level of success depends on how "Green or wet" the wood actually is. The wetter the wood, the more the sandpaper can acquire build up. This can render the sandpaper useless.

To best prepare your stock for sanding after turning, is to use the driest wood possible. If this is not possible and you must turn and sand a piece that is still wet, we recommend letting the workpiece spin on your lathe at a slow speed for about fifteen minutes or so and then wait another 10 minutes or so after that to begin sanding. This can help evaporate enough of the surface wetness or dampness to make the sanding process a more manageable.

