

Tips and Techniques for Using a Detail Gouge

Roughing with a Spindle Gouge

I prefer to rough out my spindles with a 1 1/4" roughing gouge or a 3/4" roughing gouge. Roughing out can be accomplished with a detail gouge but it takes a bit longer and the finished cuts are not as smooth. Used properly a 1 1/4" roughing gouge can leave nearly the same finish as a skew.



For roughing cuts: the cut is started approximately 2" in from the tail stock end and proceeds in multiple 2" increments cutting toward the tail stock until approximately 3" from the head stock end of the blank at which point the direction of cut is reversed toward the head stock these cuts are accomplished with the tool handle perpendicular to the blank and the end of the handle down at approximately a 45 degree angle to insure that when the cutting edge makes contact with the wood that the bevel is rubbing and the tool is not cutting until the handle is raised up to start the cut. Hold the tool firmly but not tight as in all turning the tool needs to be easily manipulated and this can not be done with a tight grip on the tool. The feet should be spread apart and the body should be free to move with the cut. To achieve the most control, the flute of the tool is sandwiched between the thumb and fingers of the left hand. The thumb is exerting pressure down toward the tool rest and is gripping the flute against the fingers. With this grip it is very easy to rotate the flute a small amount to improve the angle of the flute in the cut, by moving it between the fingers. The right hand is holding the end of the handle and raises and lowers the handle to control the depth of the cut and the amount of pressure exerted on the bevel. The arms are tight against the body so that any movement of the body is reflected in the movement of the handle through the cut.

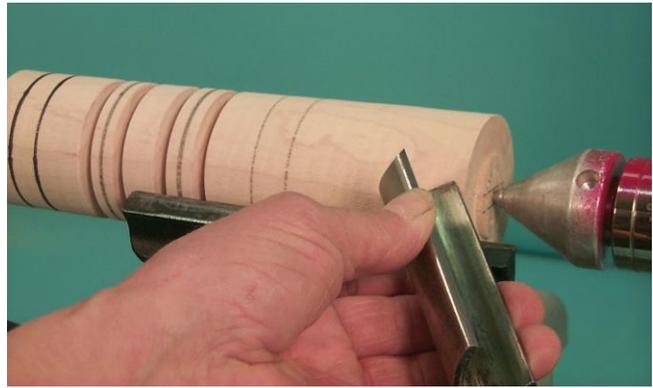


Thus the woodturners dance begins. The flute is in the fully opened position with the back of the tool making solid contact with the tool rest. The tool should always maintain contact with the tool rest. Once the bevel has made contact with the wood and is rubbing, slowly lift the handle up to begin the cut. As the cut proceeds, point the tool in the direction of the cut and roll the flute slightly in the direction of the cut. The reason the blank is roughed out in this manner is to minimize the length of any long splinters that may be chipped out as a result of checking or other defects in the wood. This is known as the under hand method and is my preferred method, as the overhand method is more aggressive and does not allow for the free flow of chips. Once the

Detail Gouge 1

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initial roughing out is completed, raise the handle to the horizontal position parallel with the ways of the lathe at approximately 45 degrees to the work piece so that it is rubbing the bevel with the flute partially open at approximately 45 degrees and the slowly shift your weight so that tool handle moves toward you and away from the work while tweaking the angle of the flute until it begins to cut. Once a fine cut is established, move the tool across the work rubbing the bevel and pointing the tool in the direction of the cut. This cut produces a finish cut that is similar to that achieved when doing a planing cut with a skew.



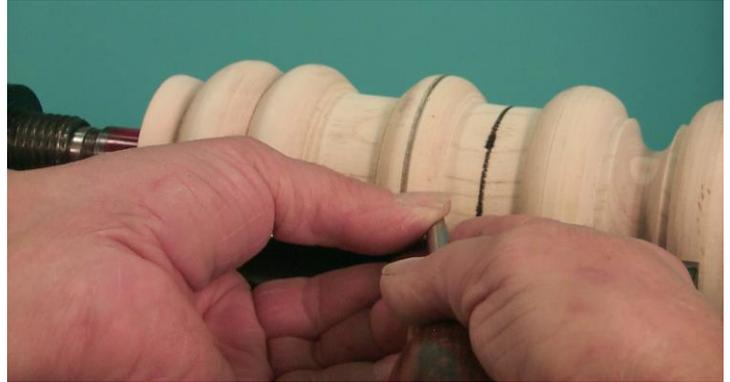
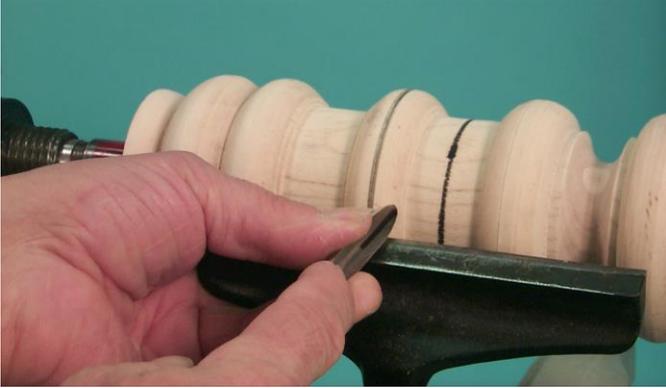
Another method I use to get a smooth finished cut is to roll the flute of the 1 ¼” gouge on the left side of the flute, with the handle pointing down at a 45 degree angle and pointing in the direction of the cut. Once again rub the bevel and then lift the handle until it begins to take a very fine shaving. Shift your weight from your right foot to your left foot as you move the tool across the work toward the headstock.

Turning Beads:

The best gouge for turning beads is a 3/8” spindle detail gouge. To begin turning a bead, mark the outer edges of the bead using a story stick and a pencil or a tape measure. The next step is to make V cuts on the pencil lines and then mark the center line of the top of the bead. With the back of the flute resting on the tool rest and open at approximately a 45 degree angle pointing in the direction of the cut and the handle lowered at a 45 degree angle begin the cut by first rubbing the bevel and then raising the handle into the cut. The flute is held between the thumb and forefinger with the thumb exerting force down onto the tool rest and against the fingers. This is a firm relaxed grip to enable rotating the angle of the flute through the cut. Do not over grip the tool, as too tight a grip limits the freedom of tool movement and produces a rougher cut. The tool handle is raised and the angle of the flute is adjusted so that the cut is occurring on the lower side of the flute just off center. The cut is started at the outer edge of the bead and is a small cut at first. Just easing the edge and beginning to round it over. Each successive cut is longer and requires more rotation of the flute, the handle and the body in order to create a round bead as opposed to an angular bead. With the last cut the flute will start in the open position and then proceed through an arc to the closed position with the handle in the horizontal position perpendicular to the blank and the ways of the lathe. All of these movements can be visualized as parts of an arch or curve. The flute is rolling in an arch from 45 degrees to 90 degrees. The handle is rotating in an arc from 45 degrees to 90 degrees. Your body is also rotating in an arc in order to roll the tool handle through its’ own arc.



Detail Gouge 2



Turning Covs:

The turning of covs is the exact opposite of turning beads. For most covs the cuts are started at the center of the cove and move out toward the out side and down toward the bottom of the cove. Cut one side of the cove then the other side while avoiding crossing the center at the bottom of the cove. Repeat this process until the cove is complete. To turn a cove, start with a 3/8" detail gouge with the flute in the closed position facing the direction of the cut, the handle in the horizontal position and at 90 degrees to the work. Your thumb is stationary and applying force down onto the tool rest to prevent the tool from skidding across the work before it has a chance to cut a place for the bevel to rub. Push the cutting edge into the work until a place is established to ride the bevel. With the bevel rubbing rotate the flute to the open position as it rides down the cove and then roll the handle through the cut and up and over the bottom of the cove, just as you would, if you were scooping ice cream. Repeat this procedure on both sides of the cove. The final cut should be made with the handle just off 90 degrees toward the inside of the cove and rolled through the cove as was done with all the other cuts.

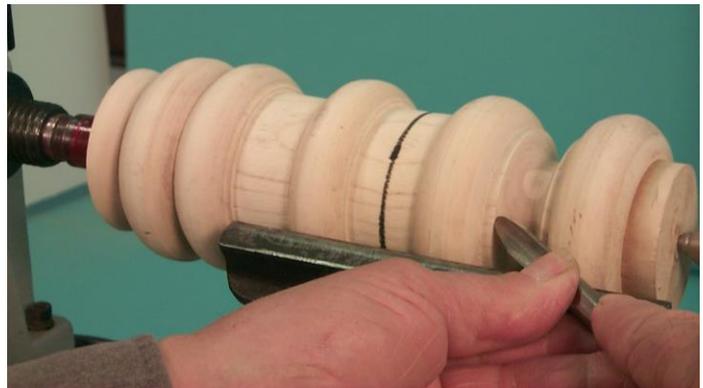


Detail Gouge 3



Turning Flats or Fillets:

Fillets help define the transition point between coves and beads. To cut a fillet with a 3/8" detail gouge, start with the bevel parallel with the ways of the lathe. Ride the bevel on the edge of the top of the cove and slowly bring the handle toward you until it begins to cut. Once it has cut in the side of the cove enough to provide a place on which to ride the bevel move the tool parallel to the work to the bottom end of the bead. Clean up the cut by touching up the bottom of the bead and then toughing up the inner edge of the fillet.



End Grain Turning:

The use of a detail gouge for end grain turning is a skill that has many benefits. Lidded boxes and goblets are among two of the things can be hollowed with a detail gouge very quickly and efficiently. One need only attend the egg cup races at the Utah Woodturning Symposium to see how quickly a detail gouge can turn out an egg cup.



The blank is mounted to a faceplate or in a chuck with the grain running parallel to the ways of the lathe as in spindle turning or between centers turning. It is then rough turned to a cylinder and the tail stock is removed. Shape the outside of the cup section of the goblet, flower or egg cup to final shape. Then face off the top of the cup before hollowing. To face off the top the tool rest is parallel to the lathe bed and the height is adjusted so that the tip of the spindle gouge with the tool handle in the horizontal position will be even with the center of the cup. With the flute in the closed position ride the bevel and adjust the flute to find the cut, then ease off the cut pull back beyond the shadow line and then assume the cutting position. Now gradually begin the cut until there is a place to ride the bevel and then lean forward while aiming the tip of the gouge to the center of the cup.



The next step is to set up the tool rest so that it is perpendicular to the ways of the lathe and adjusted so that when the detail gouge is in contact with the rest and the handle is in a horizontal position parallel to the ways of the lathe the center of the gouge lines up with the center of the blank. With the tool in the horizontal position and the flute in the fully open position, place your index finger along the top of the flute with the handle of the tool covered by your forearm. By having your forearm on top of the tool handle when hollowing with a gouge or a scraper it helps to protect your face in the event of a catch as your arm will prevent the tool handle from making contact with your face. Slowly push the tool straight into the work, approximately $\frac{1}{2}$ " keeping the handle level and horizontal.



Next rotate the flute to about 45 degrees drop the handle a little bit and push it a slight bit away from you and pull the tool out. The motion is push it straight in with the flute open, drop the handle and rotate the handle away from you and roll the tool out of the cut. Repeat this cut until you have reached the finished depth of the goblet, box or long stemmed flower. Once again this is a rotating motion moving the tip upward through an arc on the inside of the piece. A round nose scraper is used for the final shaping and finish cuts. The round nose scraper has been ground along the inside edge to aid in cutting the side of end grain hollowed forms.



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