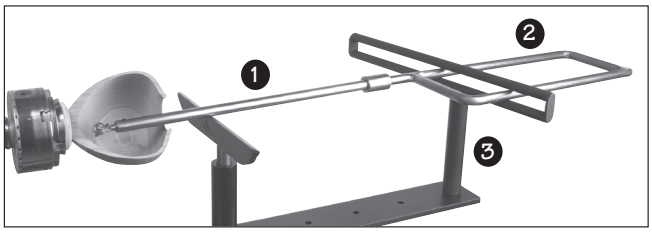
Using the Jamieson System

The System has Three Components

1. The boring bar and swivel tip holder.
2. The stabilizing handle.
3. The secondary tool rest.

Boring Bar

1. The boring bar is available in two different configurations, the Standard Boring Bar and the Jumbo Boring Bar.
2. The Standard Boring Bar has a dual function having a hole in both ends of the bar, one being straight for straight in hollowing and one at an angle to cut the side of the vessel.
3. The Jumbo Boring Bar is a hefty 1 1/8" diameter bar designed to let you work over the tool rest 15" to 18". The Jumbo Boring Bar has only a straight hole.



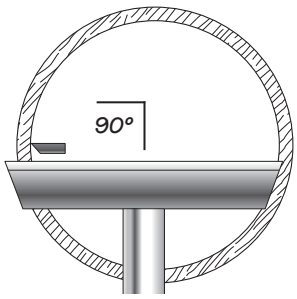
Cutter Setup

1. The 90 degree rule must be kept in mind when setting up the system. Never allow the cutting tip to cut at an angle of more than 90 degrees as the cutter will no longer be scraping and will catch.
2. To set the cutting edge angle to 90 degrees, place a straight edge on top of the swivel tip holder and sight back along the boring bar to the support handle.
3. Use the swivel tip holder to position the cutting tip so that it points in the direction you wish to cut, straight ahead for cutting into the bottom of the vessel or turned to the side to cut the side of the vessel.
4. When you have set the tool tip at the proper position, go back and grind a flat spot for all the set screws. First, for the 3/8" tip assembly rod, and second for the boring bar at the stabilizer handle coupling.
5. At the other end, grind flat spots for both tip assembly and handle set screws. The flat spots will help you set up the tip angle in the same place each time you move it and it is also a safety feature so the set screws don't slip with the twisting forces of the cutting action.

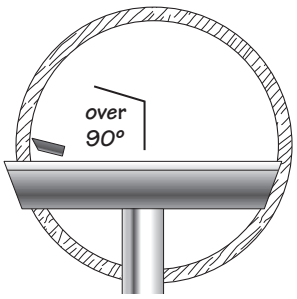
Centering the Cutter Tip

1. To make a cut set the cutting tip at the centerline of the hollow form. How do you find the centerline when you are peering into a vessel and your view is blocked by the boring bar? With the lathe off, score a line with the cutter tip from side to side on the inside bottom of the vessel. Take the boring bar out and look with a light at the line. Move the front tool rest up or down until the line is right on center. A pilot hole can be bored to the proper depth with a forstner bit prior to hollowing.

Correct Cutter Setup



Incorrect Cutter Setup



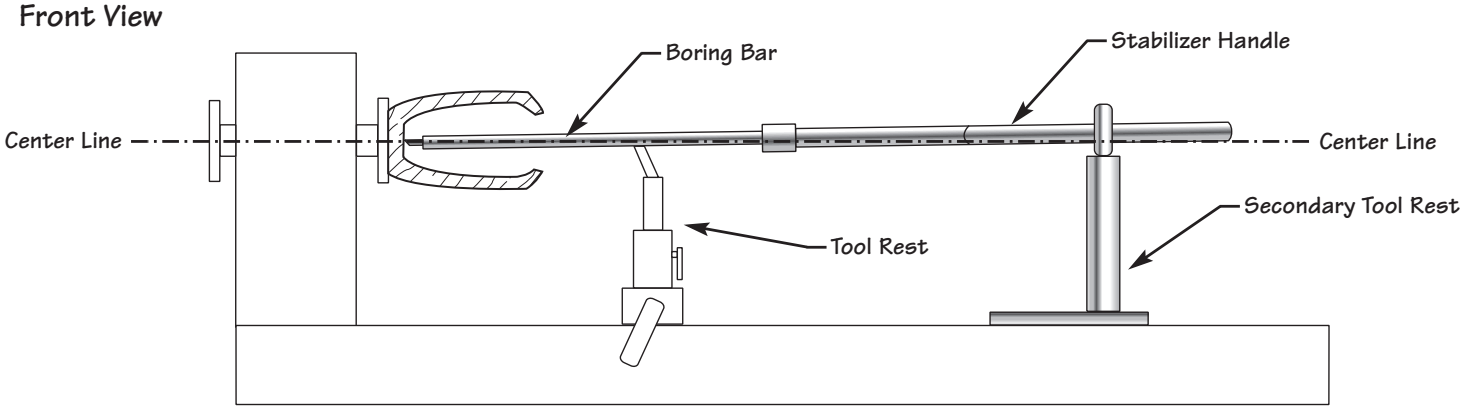
Stabilizer Handle

1. The second component, the Stabilizer Handle, holds the boring bar and stabilizes the position of the cutter tip. The rectangular support of the stabilizer handle removes the twisting forces common to hollowing. Again, this is set up to never violate the 90 degree rule by positioning the cutter to cut safely and easily.
2. Adjust the front tool rest up or down to until the cutter tip is on centerline. Slide the tool rest up as close to the vessel as you can. The stabilizer handle will prevent the cutter from twisting or jumping.

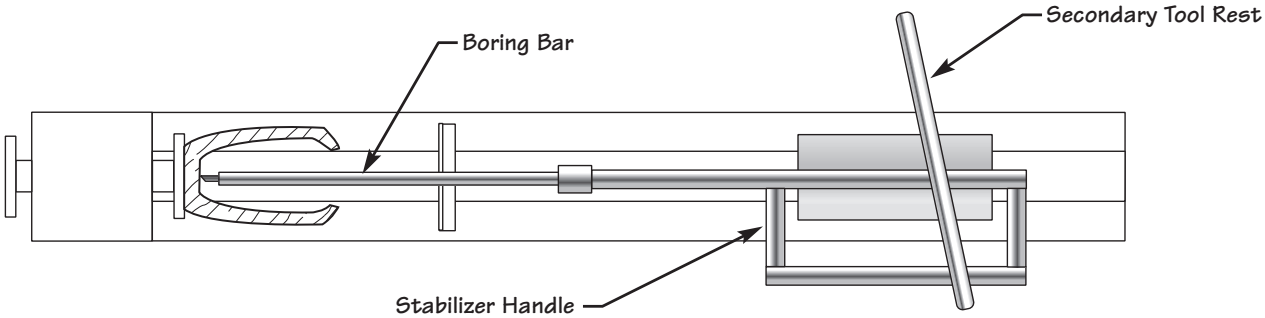
Secondary Tool Rest

1. The third component is the Secondary Tool Rest which is available for both shortbed and longbed lathes. The secondary tool rest features a slotted stabilizer handle support that allows the stabilizer handle to slide back and forth as required while cutting. By rotating the support assembly 180 degrees, it increases the working area for the stabilizer handle. The slotted tool rest support is made from round steel bar so the stabilizer handle can slide easily, yet is secure to prevent lifting or torquing while cutting. The secondary tool rest should be positioned at centerline height. When the boring bar handle is set on top of this new tool rest it will be positioned a slightly above centerline. This will set up a very slight downward slope to the cutting tip positioning the cutter tip at an angle of 90 degrees or less to prevent catches. The front tool rest will give you the critical height adjustments to put the cutting edge right on center. You'll find that this eliminates the nub or center cone-shaped protrusion in the bottom of your hollow form.

Front View



Top View



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