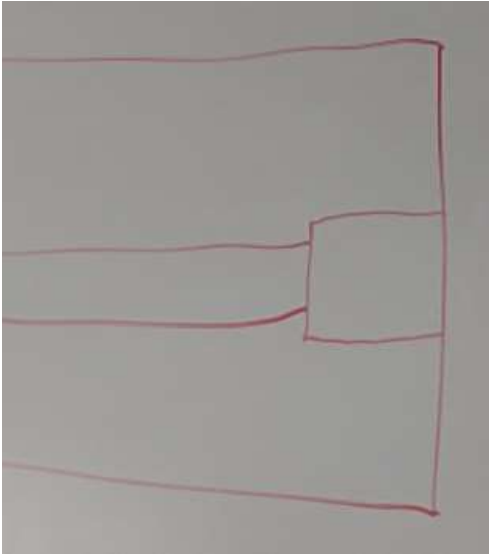


Turning a Rolling Pin

Demo by Bob Eberhardt

Bob's Rolling pin featured a steel axle shaft and some low friction plastic bearings to let it spin easily. This makes for a nice rolling pin for things like lefsa after adding grooves or beads to the surface and used with a rolling pin sleeve/cover.

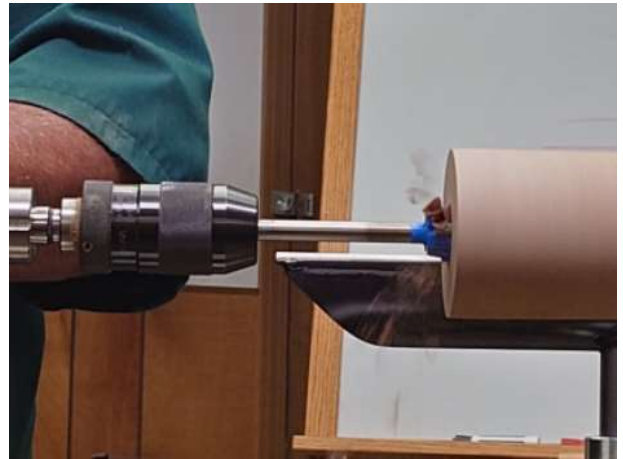


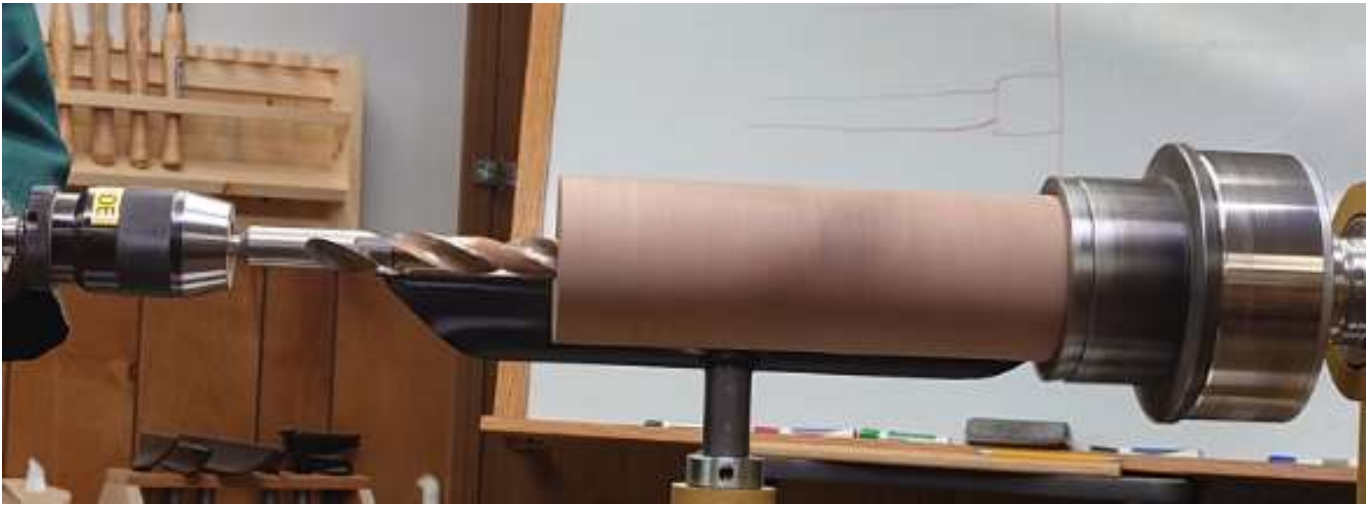
The steps to making it are straight forward, and the order of operations will help keep things axially aligned. Here is a diagram of a cross-section of the rolling pin body.

Acquire your shaft and bearings so you know what dimensions things need to be and what drill bits to use.

Rough out your spindle blank to a smooth round shape between centers. Finish it by planing with your skew. It will be touched up again later. Make the surface as axially flat as possible and the same diameter its entire length. Bob showed how you can check for high and low spots by using a straight board with sandpaper glued to it. The higher spots will show up as roughened.

Next, drill holes into each end for the bearings. Bob held the cylinder in some chuck jaws, being careful to keep the free end axially aligned with a live center cone before tightening securely. He then backed out the live center and drilled the bearing recess, about a $\frac{1}{16}$ " less than the bearing length so it would stand proud and prevent the handle from rubbing on the main cylinder. He repeated the step on the other end. During assembly, the bearings are glued into the recesses with E6000 type of glue.





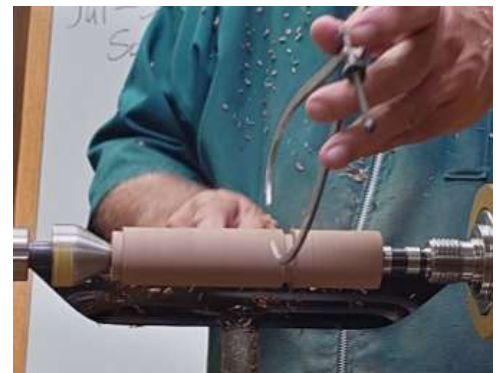
Following that, he drilled a through hole, $\frac{1}{2}$ way from each end. He used a $\frac{3}{4}$ " drill for this hole, considering the axle size he used. It is much larger than the steel axle, but you don't want anything rubbing inside and drilling from each end may have a slight misalignment.

With the holes drilled, he next used a jamb chuck and live center at the tailstock to remount the cylinder and refine its surface.



This guarantees that the surface of the pin is aligned with the bearings. Any beading or grooving is done at this point followed by any final sanding.

Once the pin's cylinder is done, he proceeded to make two wooden handles that the axle can be glued into. These were made just like the handles we made in the beginning classes. You want the handles to match, so make a template, and drill an appropriately sized hole deeper than necessary so there is a place for the excess glue. During assembly, the glue will seal the hole and forcing it may cause the entrapped compressed air to split your handle. He used a flexible E6000 type glue that works better with the seasonal changes in wood vs. the metal axle.



During assembly, have all pieces finished in final form. The bearings are glued into the ends of the rolling pin. Remove any excess glue so none can get on the axle later. It would make sense to set this aside to cure first. Next a handle can be glued on one end of the axle shaft. This is the easy one, as you can clean up any excess glue that squeezes out.

Insert the shaft into the bearings, and then glue on the other handle. Be careful with this one. You don't want any squeezed out excess glue to gunk up your bearing or your handle where it is near the bearing. Side play should be minimal, yet still allow the pin to spin freely. After set aside for curing, you will have a nice rolling pin to use or gift to someone.



Some older rolling pins use handles with a drilled through hole, and a wooden pin is turned and inserted through the handle and glued into a hole in the end of the rolling pin's main cylinder. This won't roll quite as freely, but if you were making some small rolling pins for kids or as toys, this would be an easy way to do it.

Steel Towne in Elk Mound is where Bob sourced the steel rods.

...write-up by Dan Brandner