

Tips for Making a Chess Set

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Turning a chess set is not that difficult and can be a great skill builder for a novice turner.

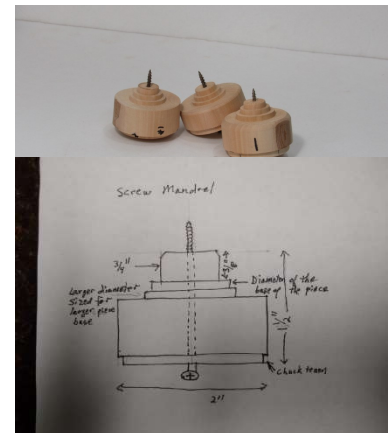
Pick a design: Go to Pinterest.com and type in “chess” to find lots of ideas. Some elegant designs can be fairly simple. Some bishops do not require a miter slot, some rooks do not require crenellations and some knights do not require carving!

Scale your design to match the chessboard. Tournament size would typically have 2 ¼” squares. The king's height should be 3.375 inches to 4.5 inches. The diameter of the king should be about 75% of the size of the square or about 1 11/16”. I like a smaller size about 75% of tournament size so my chessboard has 1.75” squares with chess pieces scaled to fit with the king about 3 ½” tall.

Wood: Use most any dry hardwood. Hard maple, persimmon, dogwood, Bradford Pear are all woods I have used. Dark pieces could be made from a dark wood like walnut or mesquite, but you can also dye or paint the dark pieces. Exotics are an option but can be quite expensive as you might need 4’ of blanks just for the dark pieces.



Chucking: I make a screw mandrel from a spindle scrap to fit a ¾” hole in the bottom of the blank with a forstner bit. I make it deep enough to hold 4 pennies and some epoxy. I follow up with a small hole sized for the screw in the mandrel. I prefer to do the drilling on the lathe but you could do it with a drill press. The little extra weight from the pennies gives the pieces a nice heft. Size the step to match the diameter of the piece you are making so you can easily get it round to your size by turning down to the step. You can add a secondary step for sizing a larger piece. Cutting all blanks to the exact size and add perhaps 1/16”.



Storyboard: After you select your design, make a drawing with the key dimensions.



I like to copy and paste the image of the pieces for the design I like into MS Word and scale it to fit. I print it out and stick each one on cardboard or thin plywood and write on it the dimensions.

Turning: Turn all of the pawns to get your techniques down pat. These are small pieces so crank your lathe up to 2000 RPM or higher. Your speed will pick up with each piece

you turn. Sometimes you may need some tailstock support for longer pieces. Use a soft touch on your live center so you do not leave a hole that will need to be removed on most pieces. For some knight designs, cut the outline of the knight using a coping saw or a scroll saw. Cut a



piece long enough for a knight head on each end to make it easier to hold for carving and then cut off each knight and drill a hole for the turned base with a turned peg to match the drill hole.

Do not worry about minor imperfections or variations on similar pieces. Those are signs of a custom, handmade set and distinguish your set from a boring set of identical pieces made in a factory!



Finishing: Traditionally the finish was just a hard wax like carnauba. I was not happy with how just the wax held up with use and prefer lacquer. Seal any dyed pieces with shellac and follow-up with a couple of coats of lacquer. I apply lacquer with a brush on the lathe while turning slowly.

Add weight: Add a stack of 4 pennies into the hole used for the screw mandrel. Seal with enough epoxy to fill the extra space on top of the pennies.

Felt: You can cut the felt bottoms on a lathe. Cut a strip of felt the width of the circle and fold up to about six pieces. Put this on a flat wood backer plate and bring up the live center against a small wooden disk the diameter of the felt disks. With the lathe on use a skew or a detail spindle gouge to cut up against the disk. I use carpenters glue for the felt. Do not use so much that it soaks through. You can more details from my article on turning a simple chess set “Your Turn” Feb 2020 *American Woodturner* is available for download on my website here <https://www.mikepeacewoodturning.com/wp-content/uploads/2020/01/Chess-Set-AW-Feb-2020-rev.pdf>

Additional Resources:

Pinterest.com – My Chess board <https://www.pinterest.com/mikepeace356/chessmen/>

My playlist of videos I did on making a chess set on my YouTube channel
https://www.youtube.com/playlist?list=PLG3S-gdoXeXW77ZjnXJwBPjvdJqD_Xdzz