

Southern Turners Project Sheet

PIPE FITTINGS

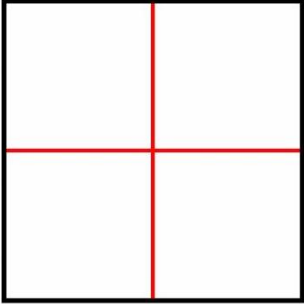
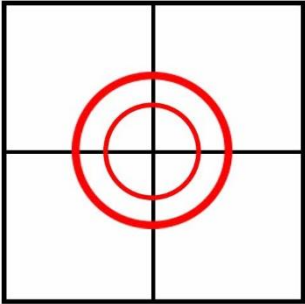
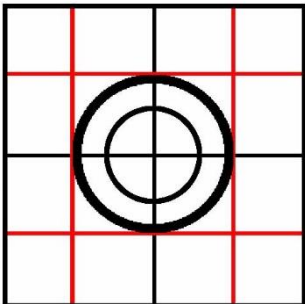


This project sheet describes a method in producing a pipe fitting looking object. Detailed below is the process in producing a basic 6-sided fitting from a cube shaped blank. Consider this as the basic fitting, once you understand the processes involved it is quite easy to modify and produce very different designs with more or fewer 'pipes' and in different configurations.

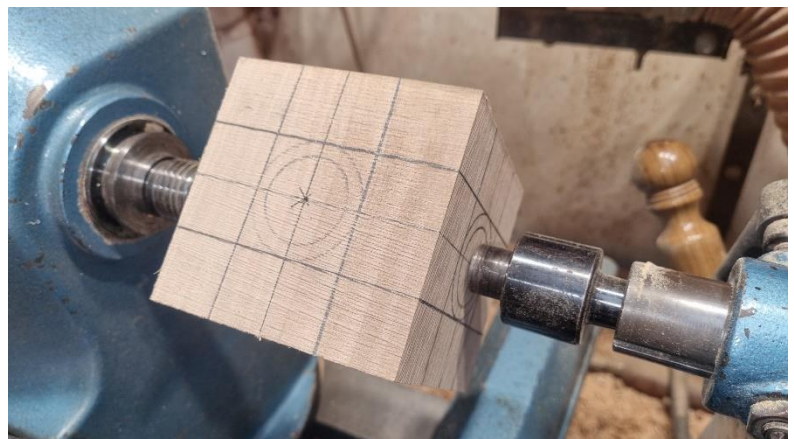
These pipe fittings can be of any size and design, however you should select a blank free of knots and cracks. The blank used here is a cube approx. 110mm square and the holes drilled are 30mm diameter, with a 5mm initial wall thickness

1. Marking out.

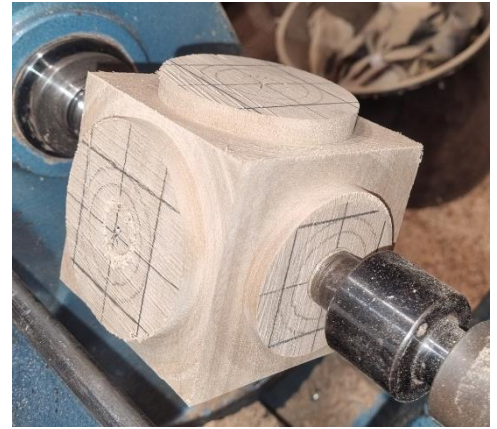
No matter what design you intend to produce, it is critical to be as accurate as possible, otherwise you run the risk of having sections misaligned. The basic process is described below.

 <p>Begin by marking the centre of each face of your blank. Using an awl or similar, mark the centre point as accurately as possible</p>	 <p>Using a compass, draw a circle to define the size of the hole you will be drilling, and a second circle to define the wall thickness of your 'pipe'. Repeat on all 6 faces.</p>	 <p>Measuring with a ruler or using a carpenter's square, draw lines parallel to the edges of your blank and to the edge of your larger circle. These lines are the most important, so ensure they are quite dark. Repeat on all 6 faces.</p>
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2. Once the marking has been completed, mount your blank between centres



3. Turn a tenon on each face, leaving it larger than the bigger marked circles



4. Mount your blank in a chuck, ensuring that it is mounted centrally. Using the point of a drill or a tail centre before tightening your chuck is a good way of achieving this.



5. Drill out each face of your blank, however only drill to the centre and not all of the way through. A forstner style drill bit is preferred as it will produce the best results. Sand inside each hole as you go.

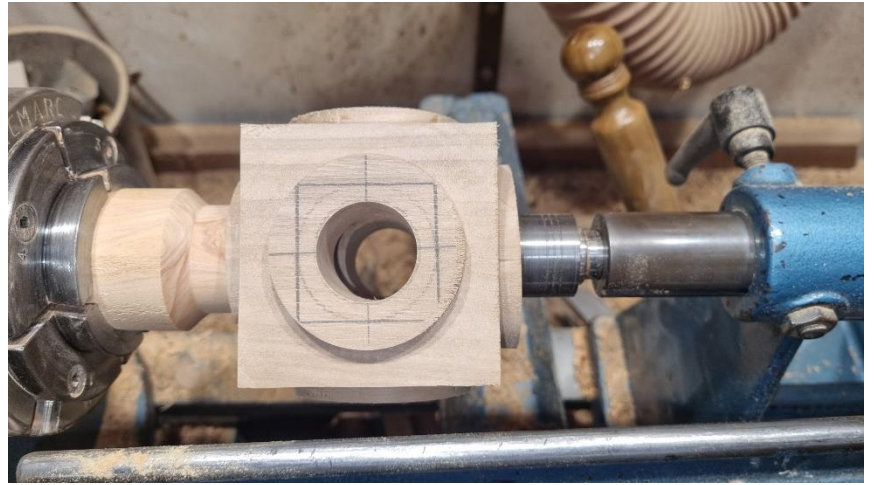


6. Using a scrap of wood, make a jamb chuck similar to what is pictured. With the section indicated number 1 sized to fit (not tight, just snug) into your drilled holes and section 2 sized for your pipe wall thickness – the same as your larger marked circle.

Also, having a slightly longer than 'normal' jamb chuck allows the blank to be moved away from the chuck, which allows more room to work.



7. Mount your blank between your jamb chuck and a cone live centre, the cone will self-centre into the holes, ensuring everything will run true.



8. Using the 'important' lines marked earlier as a guide, turn down the side of your blank to the jamb chuck. Work slowly as cutting past these lines will remove timber from your 'pipe wall'. Repeat on all 6 sides.



9. Once all 6 sides have been completed, you should have something like this. If you are happy with this, sand and skip the next step.



10. To add some more detail, turn down sections to give the illusion of a more realistic pipe fitting taking care not to go too thin. Sand as desired.



11. Using carving tools (hand or powered), files or rasps remove the square centre sections and sand to complete.



12. Apply your favourite finish, or get creative with some fancy paint effects.



Variations

By using different shaped blanks and altering the location of the drill holes it is easy to create different designs and shapes. Below is a small example. Be creative and have fun!

