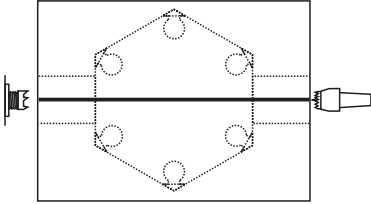
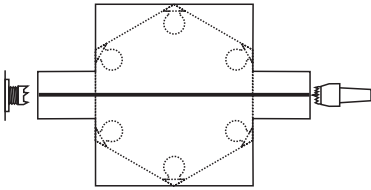


Marble-Run Streptohedron

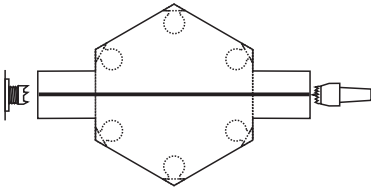
This plan replicates the Marble-Run Streptohedron project in David Springett's book *Woodturning Full Circle*. The turning process is shown here and a full-size plan for this streptohedron is on the next page. This is intended to take 9 mm marbles.



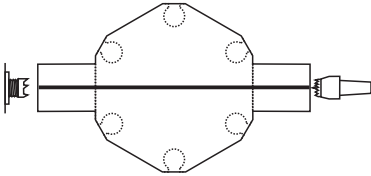
Start with a block that is 110 x 110 x 145 mm and then cut to two halves along the long axis, sand the sawn faces and rejoin them with a paper or double-sided tape joint. Mount this accurately between centres with the joint perfectly on centre and in line with the lathe drive.



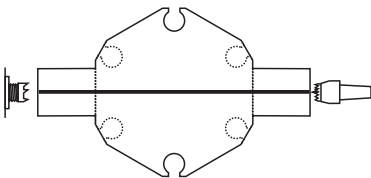
Turn the wood to be round and 96 mm diameter. Measure and mark a line at the exact centre of the length of the wood. Then mark lines at 41 mm each side of the centre line. On the outside of the 41 mm lines cut down at right angles to the previously cut surface towards the axis to leave a 25 mm thickness there.



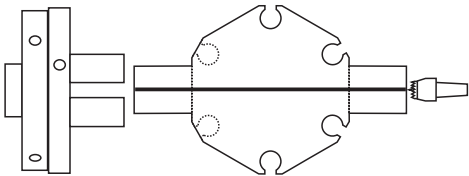
On each end of the central wood draw a circle that is 48 mm diameter. Cut to each side of the central line straight to the 48 mm diameter line on each end.



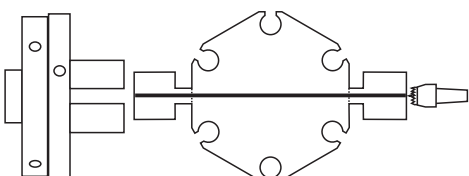
To each side of the three angles on the body of the work put lines 7 mm from the peak of the angle. Then cut the peak off each angle down to those 7 mm lines. This flat should now be 12 mm wide. Sand all surfaces on the central block of the wood.



On the centre of each 12 mm flat draw a line around the wood. These lines should be 41 mm apart. Then draw lines 3 mm each side of these central lines. First, on the central flat, cut a slot 6 mm wide between those 3 mm lines and up to 12 mm into the wood if the end of the cutter is rounded. Now use the recommended tools or a rotary carver to shape the inside of the slot.

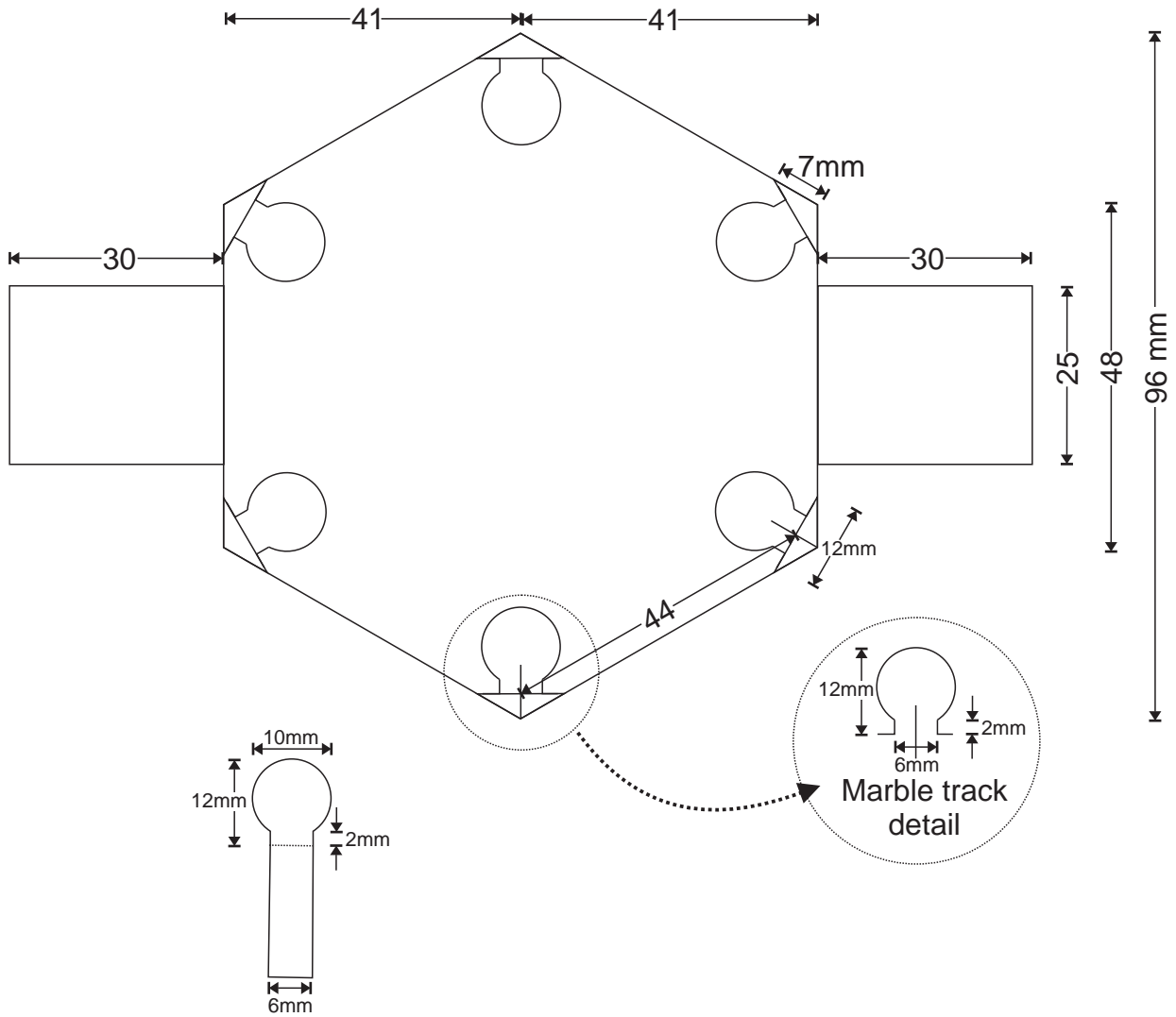


For the next two slots, remounting the wood in a pin chuck is recommended. Use the tailstock to ensure that this re-mount is accurate then remove it to make space for the cutting. For the slot towards the tailstock cut a slot 6 mm wide between the 3 mm lines and up to 12 mm into the wood if the end of the cutter is rounded. Now use the recommended tools or a rotary carver to shape the inside of the slot. Turn the wood end-for-end and repeat the cut.

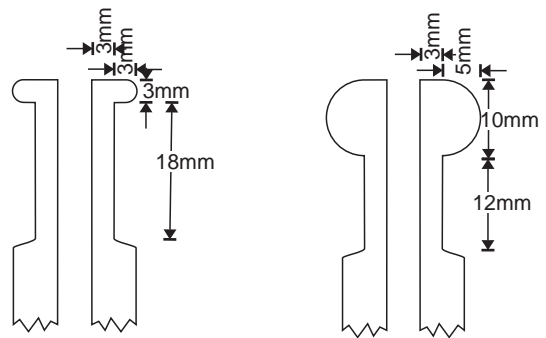


Part or saw the end of the wood off. Sand these ends. Split the wood along the paper joint and sand all remaining paper off. Check and repair the insides of each groove. Insert the marbles. Rotate one half of the wood by 60 degrees and glue them together.

Marble-Run Streptohedron P2



Size check tool



Two hollowing tools recommended by David Springett.