## 6 Branch Streptohedron (Branch)

From David Springett in his books Woodturning Wizardry and Woodturning Full Circle.


Start with a block that is two halves of a 70 mm cube cut and rejoined with a paper or doublesided tape joint at the centre. 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 cut a spigot for mounting the wood in a 50 mm chuck on one end.

Mount the wood in a chuck and turn it to be exactly 57 mm diameter. Dress the tailstock end of the wood to be perfectly flat. Put a lines at 10 and 35 mm diameter on the end of the wood. Draw lines around the wood at 20 and 41 mm from the tailstock end.

Make a template which is an equilateral triangle 21 mm long on all sides and with a handle attached.

Cut the wood to a flat surface between the 20 mm line on the side of the wood and 35 mm diameter on the end. Mark a circle on this cut surface that is 10 mm towards the tailstock from the 20 mm line. Make a " $V$ " cut to exactly fit the template into the wood between that new 10 mm line and the 10 mm diameter on the end of the wood.

Make a "V" cut to exactly fit the template between the 41 mm line and the 20 mm line. Sand all these surfaces. Mark a new line on the wood 20 mm towards the headstock from the 41 mm line.

Turn the wood round and mount it in a jam chuck. Cut the tailstock end of the wood at the new 20 mm mark to be perfectly flat. Put a lines at 10 and 35 mm diameter on the end of the wood. Cut the wood to a flat surface between the 41 mm line on the side of the wood and the 35 mm diameter line on the end. Mark a circle on this cut surface that is 10 mm towards the tailstock from the 20 mm line. Make $a$ " $V$ " cut to exactly fit the template into the wood between that new 10 mm line and the 10 mm diameter on the end of the wood. Sand all this area.

Remove the wood from the lathe. Split the joint and ensure the two faces of the wood are clean and smooth. Rotate one of the two parts through 60 degrees and glue the wood together. Sand and finish.


