## 5 Branch Streptohedron

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 60 mm diameter. Dress the tailstock end of the wood to be perfectly flat. Put a line at 26 mm diameter on the end of the wood. Draw lines around the wood at 12, 32 and 57 mm from the tailstock end.

Make a tringular template which is 26 mm wide and extends 18 mm from the base line and with a handle attached.

Cut the wood to a flat surface between the 26 mm diameter on the end and the 12 mm line on the side. Mark a circle on this cut surface that is 10 mm beyond the 26 mm diameter line. Make a "V" cut to exactly fit the template into the end of the wood.

Cut the wood to a flat surface between the 32 mm line and the new 10 mm line on the sloping face. Make "V" cut to exactly fit the template between these two lines. Sand all these surfaces. Refresh the original 57 mm line.

Turn the wood round and mount it in a jam chuck. Cut the tailstock end of the wood at the new 57 mm mark to be perfectly flat. Put lines at 10 and 44 mm diameter on the end of the wood. Cut the wood to a flat surface between the 32 mm line on the side and the 44 mm diameter on the end.
Mark a circle on this cut surface that is 10 mm towards the tailstock from the 32 mm line. Make a " V " cut to exactly fit the template into the end of the wood between the 10 mm diameter and the new 10 mm line on the sloping surface. 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 72 degrees and glue the wood together. Sand and finish.


