A spiral effect bowl

This was inspired by a demonstration to our club (Tudor-Rose) by Margaret Garrard, who used a router with a jig on the lathe and glued-in contrasting wood inserts to get a beautiful all-through pattern effect:-

Not having a suitable router jig I used a home-made wooden jig on a bandsaw to make angled (but obviously straight/planar) kerfs, which give gentle spiral shapes on intersection with the curved bowl surfaces. The resulting bowl (165mm diameter, 70mm deep and about 5mm thick) and technique looked to me interesting enough to share. The manufacturing stages are:-

Rough-turn the bowl outside, complete with foot/chucking point (the piece was mounted for this stage on a small faceplate) and then mount on a simple wooden jig (including a ply base that slides on the bandsaw table) and cut the kerfs to a controlled depth.

Note the pencil indexing marks on the piece's outer rim made on the lathe using its indexing system (there are 24 marks of which only 12 were used). The kerf indexing is done using these by rotating the piece on the jig. The piece is held in place in each position using a 25mm centring hole in it drilled using the lathe (& chucking point) and a corresponding 25mm peg on the jig - with a tightenable woodscrew through the peg centre to hold the piece in each place (you need an access hole in the plywood jig base for the screwdriver). See the disassembled piece and jig right below.

The exact jig angles in both directions are a matter of visual preference (set in this case by the jig wood components), though of course the top and bottom of the kerf should be near the base centre and rim. I might make them more angled to get a steeper spiral next time. The cut is very gently done to keep the bandsaw blade straight.

Double strips of veneer are then glued in to the kerfs, as left below. With my kit & veneer the kerfs are very tight for two layers of veneer as sawn - so I opened them up a little with folded strips of

120 grit stiff abrasive paper - simple but tedious. A new bandsaw blade or a different veneer might give the correct width as sawn. The kerf reaches in a maximum of 12mm or so (see picture above).

It is then quite simple to clean up and finish the bowl outer as right above, once the glue has set (this requires re-using the faceplate holes - accurate enough in my case). The foot/chucking point is then used to hold the piece whilst the interior is hollowed out. Even at 5mm thick (& deliberately slightly thicker near the edge) and sharp tools the finished bowl vibrates a little in the lathe when cutting near the edge - so the outer bit needs hollowing first (as with any thin bowl).

A few practical notes:-

- The bowl is sycamore and the veneer pre-dyed commercial tulipwood.
- I used the usual Titebond glue - but you can feel the veneer layers even after sanding - it is possible that Cascamite would be better (or perhaps the wood differential would do this anyway).
- Finish is hard wax oil followed by microcrystalline wax.
- I have left the splayed foot/chucking point because I think it looks better & more stable and only woodturners would recognise its dual purpose! It would be quite simple to remove if desired. It is carefully matched to the chuck dimensions, to avoid any marks.

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