

WoodRat Corner No.7

Microsurgery on your Finger Joints

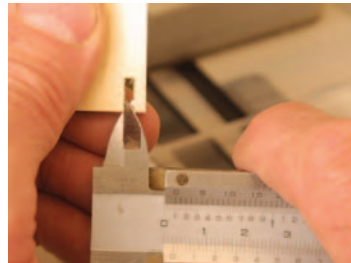
When making really small boxes, the box or finger joint is a viable alternative to the dovetail. Fast and strong, it has a charm of its own, especially when cut with a fine cutter.

Previous WoodRat corners show finger joints using the *Block and Stop* method. This is impractical and slow when working really small (I have tried). Instead it's out with the heavy reading specs and draughting dividers to try a bit of microsurgery:

Blu-tak a strip of stiff paper, or thin card, onto the guiderail. I selected a 2.4mm straight bit from our CL- range, using a Sleeve to give it good depth of cut. Depth it a little more than the intended thickness of the box sides.

Instead of making up lots of tiny pieces that have to be kept in a stack, it's best to keep them as a solid block, slicing them into boards only after jointing them, so that any movement is restrained by the joints.

Now make two test sticks, about the thickness of the final box sides, but not so wide. Place one in the camlock, vertical and at right angles to the machine face and cut a socket in it.



Measure the socket carefully with vernier (or digital) calipers. Double the measurement, and reset the calipers. Make it about 0.2mm less, as you will need room for glue in the joint and use this measurement to set your divider points.

Now walk down the paper on the guiderail with the dividers, pricking clean but visible holes in a straight line down the paper.



Now make a fine scratch with the sharpened needle point of your marking gauge down the length of the acrylic strip.

Place both the test pieces in the camlock, and bring the cutter to the back of one of them, with the blade facing south (it's a single flute cutter).



Locate the scratched line over the first pin-prick. Fix the acrylic down with *Blu-tak*.

Track the work away and bring the cutter forward until the scratch covers the second pin-prick. Fix the routerplate.



Switch on and track the work from right to left through the cutter. The bit disappears into the wood; it always amazes me that it doesn't get jammed up in its track but I've not known it happen.

Bring the router forward to the next pin-point, and cut again, tracking back left to right. Bring it forward again, and so on, till done.

When the test sticks are jointed, test them for fit. If the joint is too tight, tweak the dividers 'in' a fraction, and remake the line of pin-pricks. Retry the fit.



When you're happy with the fit in the test sticks you can attack your workpieces in the same way.



Band-saw each piece and plane the block before stripping off the next one.

Happy 'Ratting
Martin Godfrey