## **USING THE GIFKINS VARIABLE JOINT SPACERS [VJS]**

The variable joint spacers, used on the Gifkins jig, enable the expansion of dovetail joints. In the instructions, the process of expanding joints in the upper sector of a box frame will then form evenly spaced joints when the lid section is cut off. It creates an aesthetically pleasing result in the completed box.

The box maker can also use the spacers to expand a joint in any position, or multiple positions, on the timber, to create a customised layout [see below].

Reference markings on the work pieces is essential for success with the VJS. That is, face-side marks depicting top edge, bottom edge and outside face.

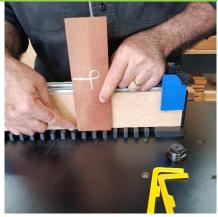


## **CUTTING EXPANDED JOINTS**

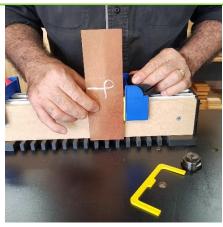
The evenly spaced joints on this beautiful box were cut using the Gifkins jig and 2 x 2mm green variable joint spacers [VJS]. One joint per side was expanded by 4mm.



4mm is the thickness of the spiral cutter used to separate the lid from the box carcass. In the following example, Col Hosie used 2 x 3mm yellow spacers for visual effect. Here's how to do it...



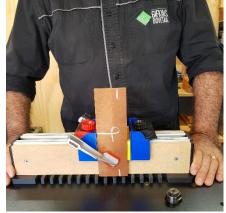
[1] The first part of the process sets up the spacers to ensure even pin spacing at the top and bottom of your box [see sample joints]. To begin, position the first dovetail piece evenly on the jig.



[2] On the 'black' stop end of the jig, place one yellow spacer against the timber, then slide up the stop and lock.



[3] Now, move the timber away from the first spacer to insert the second yellow spacer.



[4] Move the 'red' stop to lock in the timber and spacers and attach clamp. Next, mark with chalk where the expanded joint will be cut. Also, make an outside face mark and a bottom edge mark on each piece.



[5] Now adjust the height of the timber for the dovetail sides.



[6] CUTTING THE DOVETAIL SIDE Working from the spacers and 'black' stop, cut to the chalk mark only, then stop.



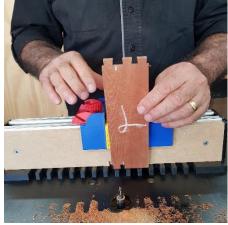
[7] Move the spacers across to the 'red' stop. This will cause an overlap of the last cut joint.



[8] Cut off the overlap to create the expanded joint. Finish cutting the remaining dovetails.



[9] Without moving the jig or the spacers—turn the piece end-on-end. Ensure that the face-side mark is facing out.



[10] Working from the 'red' stop, cut the half dovetail and expanded dovetail to the chalk mark, then stop.



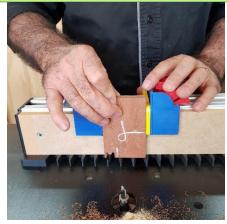
[11] Move the yellow spacers to the 'black' stop.



[12] Finish cutting the expanded joint and the remaining dovetails. Repeat this process for the second dovetail side.



[13] CUTTING THE PIN SIDE
Turn the jig around to the pin side,
change to the straight cutter, and
measure for timber height if necessary.
With the spacers still at the 'black'
stop, insert the pin-side timber. Cut the
pin to the chalk mark, then stop.



[14] Move the yellow spacers to the 'red' stop and insert the timber. <u>Do not</u> cut off the overlapped joint.



[15] Finish cutting the pins.



[16] Without moving the jig or the spacers—turn the piece end-on-end. Ensure that the face-side mark is facing out.



[17] From the 'red' stop, cut the first pin, then stop.



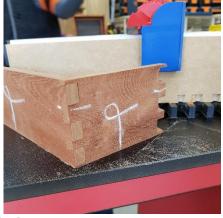
[18] Now change the spacers to the 'black' stop. <u>Do not</u> cut off the overlap.



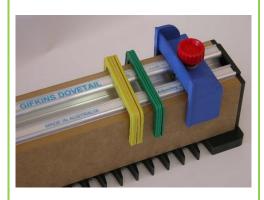
[19] Continue cutting the pins to the end. Repeat this process for the second pin side.



[20] Fit the joint together...



[21] The test joint with a 6mm expanded joint.



Each set of variable joint spacers has 4 x 2mm green spacers, and 4 x 3mm yellow spacers.