

ELLIPSE JIG

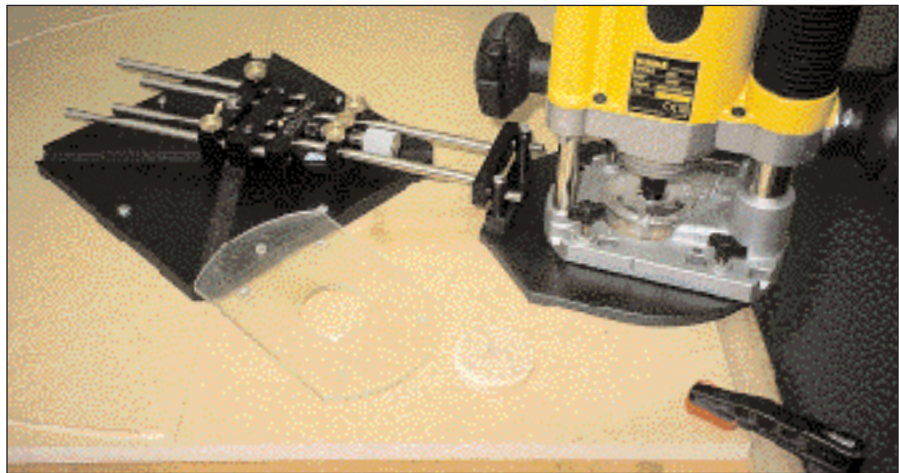
As a designer, I have never come to terms with the ellipse in the form of its aesthetic application to my work but deep in my design subconscious is a lack of understanding of the geometric principles and the problems in cutting this complex shape effectively. Having said that I feel as though I have come away from the psychologists couch with a load off my mind. I think this is all about to change now I have used the Micro Fence Ellipse Jig.

Not only is it a piece of brilliant engineering, it is presented in such a way as to dispel any misunderstanding of the geometric principles involved. This is essentially true of all the functions of the Micro Fence system. Rich Wedler sets out to explain as simply and as clearly as possible the problems that his jigs address and through the explanation how the tool works.

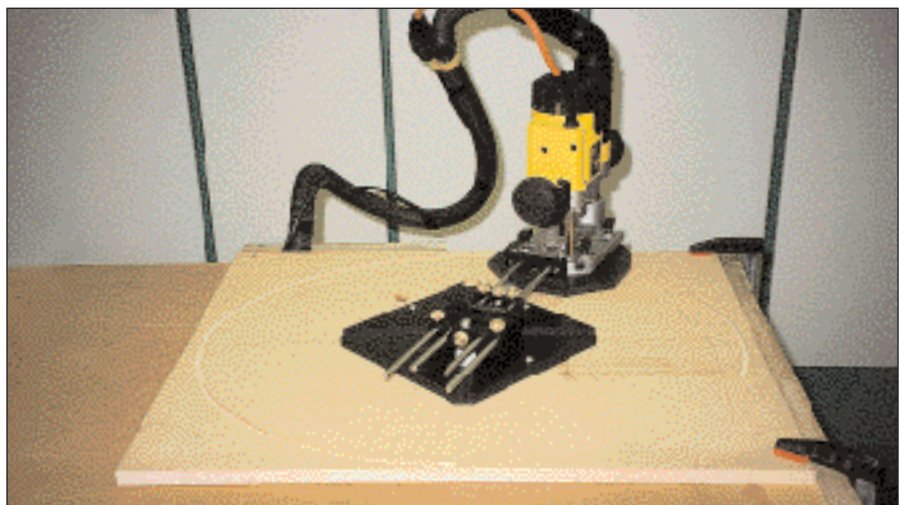
I assembled the components that comprise the jig with confidence and enjoyed the action of the movement as the router moved smoothly around the suggested shape. The central element is the Ellipse Axis Plate of which two sizes are available. For very large ellipses such as those big enough for a dining table, Dovetail Axis Tracks can be purchased which are screwed to a baseboard although the principle is the same. Dovetail profile tracks are machined across the diagonals of the plate into which sliding blocks run to provide the changing lengths between the major and minor axes. The standard circle jig is secured to the sliding blocks by a screw and a pin and the whole assembly is secured to the router with a Universal Router Base Plate from Trend.

As its name implies, the baseplate can be fitted to any router by transferring the hole positions of the baseplate screws supplied with your router to the one supplied with the Ellipse Jig. Care is required to centre the new baseplate onto the router. I fitted the plate to my DeWalt router for which I had already made a replacement – the hole in the supplied plate was too large for many of the processes I carried out. My replacement had a smaller centre hole and was made from thicker plastic. However the screw fixing holes, being drilled through thicker plastic made it easier to transfer their positions to the Ellipse Jig Universal Plate with the addition of a centring disc that I turned on my engineering lathe.

My approach might be seen to be rather over the top but I know that the baseplate and the router are perfectly aligned which gives me a great deal of satisfaction. If the screw fixing holes drift off centre and do not align with the corresponding holes in



My method of installing the universal baseplate for the Ellipse Jig. My own clear perspex baseplate for my router



The Micro Fence Ellipse Jig in use

the router base you could find yourself with a lot of fiddling to achieve a good fit!

The axis plate has to be fixed securely to the centre of the board from which the ellipse will be cut. It is necessary to mark two lines that represent the major and minor axes and then use the small reference indentations at the corners of the plate to centre it on the lines. The plate can then be held down securely with the screws supplied. I resisted the temptation to use double-sided tape to provide the hold down facility but this could be a possible alternative for small ellipses. The instruction booklet sensibly recommends fixing the baseplate on the underside of the component so that there is no problem with the screw holes damaging the show surface.

With everything in place and a final check on the tightness of all the locking screws, I switched on the router, plunged in the cutter and moved it in the direction of the oval perimeter of the ellipse. Smoothness personified – the action was a joy to experience. This jig is undoubtedly the most competent way of cutting ellipses and ovals with the certainty and control that it gives you.

ROUTER

CONTACT DETAILS

For more information on the Micro Fence system, contact BriMarc Associates, 8 Ladbrooke Park, Millers Road, Warwick CV34 5AE
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Example prices (ARP)
Micro Fence.....£155 (inc VAT)
Circle Jig.....£125 (inc VAT)
Ellipse Jig.....£195 (inc VAT)

NB: The Micro Fence system consists of many components, some of which we have already tested. In order to gain a full and comprehensive understanding of the system, full details should be obtained from BriMarc prior to purchasing.

