



Peter
Dunsmore
puts Trend's
latest circle
cutting tool
to the test



Trend N-Compass

The ability to cut accurately formed circles has always been possible with a router fitted with a trammel bar, but unfortunately the size of the circle has always been dependent on how close the guide pin will get to the cutter and this in turn is limited by the size of the router base. In the past, when a much smaller diameter circle is required I have resorted to turning a circle from a piece of MDF on the lathe and using this as a template if necessary. But in the absence of such a machine it can be a hit or miss affair using a nail banged through a false base fitted to the router. Not only can circles be used as templates when moulding curves, but small discs are easily used as wheels when making such things as toy cars or small games. The router's otherwise versatile use has always been restricted by this inability to easily cut small circles.

The answer to this problem has been solved by Trend with its latest N-Compass jig. It is inexpensive, highly accurate, easy to use and can produce circles as

small as 15mm diameter. Used in conjunction with the separately available extension bars, much larger diameter circles, such as tabletops are easily made, although in such cases I would probably resort to the standard trammel bar.

Simple design

The jig is very simple in design and consists of a baseplate with a block on one end in which are drilled two 8mm holes through which are fitted the threaded router guide bars supplied with the kit. One of the drilled holes is slotted so that the jig can be used with different makes of router whose bar spacing may vary from the Trend (or EDT standard) router. The other rod is threaded into a knurled micro adjuster that is easily turned. One full rotation of this knob will move the cutter a distance of 1.25mm.

Although not normally required, plastic bridge shim pieces are also supplied to increase the distance between the guide rods and the base to cater for different makes of router. On

the underside of the base is a 6.35mm ($\frac{1}{4}$ in) pin held in place by a screw and this acts as the pivot point when the tool is in use. This can be easily removed and placed at the other end of the base to cut circles of a larger diameter.

Using the jig

The router is fitted onto the guide bars and locked in position at approximately the required distance



The size of circles easily cut with the N-Compass

from the pivot point on the guide bar that is threaded into the micro adjuster. The distance from the edge of the cutter to the centre of the pivot pin can be set accurately by adjusting the micro adjuster and when set, the router is locked in place by tightening the it onto the other guide rod.

To use the N-Compass a 6.35mm ($\frac{1}{4}$ in) hole is drilled in the work surface for the pivot pin to fit into and the router rotated around this point.



A very versatile jig

Obviously this hole must be accurately cut and I found using the router with a correct size cutter was far easier than using a drill bit. If cutting right through the material to produce either a hole or a disc I found it necessary to secure the workpiece down with some double-sided tape otherwise, as the cut is completed, the slight shudder as the two parts separate will mar an otherwise perfect circle. If cutting larger circles, or even arcs, extension rods are available separately and these are screwed into the ends of the rods supplied with the kit. The size of circle that can be cut is only limited by the number of extension rods purchased.

There are occasions when drilling a pivot hole in the workpiece will spoil the work. In the same way as when the trammel bar is used this problem is overcome by drilling the pivot hole in a scrap piece of 6mm MDF and using some double-sided tape to hold this in place. It will be necessary to raise the jig by a corresponding amount by taping some MDF on the underside of the base.

MORE INFORMATION

Specifications

Diameter min: 15mm (although the guide says 25mm I have cut 15mm easily).

Diameter max: 200mm (without the extension bars).

Cost

£29.95 plus VAT

Separately available threaded extension rods allow an increase of 280mm. These are £9.95 per pair.

Contact

Trend

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VERDICT

One of the simplest and most useful jigs I have used. **It is accurate and saves a lot of time** messing around using other methods to cut small circles and discs.