

Trend DC400 dovetail centre



The dovetail centre may be attached to a workbench or, like here, clamped to a workmate. The Trend T5 router (not supplied) is an ideal partner to the jig

The dovetail joint seems to have become the signature of good craftsmanship. In some ways it is a little difficult to see why; for it mainly involves sawing, chopping and paring to a series of carefully marked lines. However, errors are difficult to mask and even the slightest mistake will stand out like a beacon drawing the observer's eyes to it.

Disappointingly, and maybe a tad unfairly, it doesn't matter that all the other dovetails have been worked meticulously well, as the finished project will be inevitably tarnished by that one dodgy tail and/or pin.

As a consequence, and the fact that dovetail joints are rather time consuming to produce, dovetail jigs are a popular alternative to traditional hand tool methods. Many jigs are capable of only producing equally spaced pins and tails.

These tend to be small and obviously manufactured with mechanical aid, but some jigs enable dovetail joints to be produced with differing sizes of tails and pins.

To the layman, the dovetail joints cut with the latter more elaborate types of jig may be much more difficult to differentiate from hand worked ones. And this new Trend

DC400 Dovetail Centre is one of these useful types of jigs.

Jig Unit

The DC400 is a neat and compact unit. That said, it is surprisingly heavy for its size and this is due to its robust almost all-metal construction. It is of Canadian design and has been manufactured superbly well.

In essence, the jig works on a system of interchangeable guide fingers that enable a router fitted with a guide bush and cutter arrangement to follow. These fingers are interchangeable to enable you to produce through and lapped dovetail joints.

Finger (comb/box) joints may also be cut and more advance techniques may be tackled (some requiring the appropriate accessories) such as, rebated drawer fronts, shadow through dovetails, housing joints, angled dovetails etc.

The jig houses clamping bars that can securely hold work horizontally (for when cutting lapped dovetail pins) and one of two vertical settings (for when cutting lapped dovetail tails and through dovetail pins and tails). A knob fits one of the two sockets for each bar that operates the rack and pinion clamping

mechanism. This system works wonderfully smoothly and promotes an even clamping action. Each of the bars has had an abrasive strip applied to help keep the work in position, and avoid slippage, whilst it is being clamped.

The excellent user manual illustrates plans for making a sub base from MDF or plywood.

Bolts are supplied for attaching the sub base to the jig and so enables it to be temporarily clamped to a workbench or work mate. Alternatively, the jig may be directly bench mounted and this may be a better solution for very frequent usage.

Clicking fingers

The jig is supplied with three types of plastic guide finger: 9 for cutting tails, 9 for cutting lapped pins and 9 for routing 7° pins for through dovetails. The top of the jig houses two aluminium guide rails. The fingers may be positioned along the rear rail and are spaced according to the desired tail/pin arrangement. The rail allows the fingers to be clicked in to place in 3mm increments.

Fitting each finger is fairly straightforward; they are presented to the rail at a slight angle and clicked into place. Although they are simple to remove, once the fingers are clicked home they prove to fit very securely indeed.

Each pin has a central indication mark that corresponds with reference marks that are pencilled onto the surface of the guide rail.

These marks enable the fingers to be swapped and positioned exactly rightly for the machining of the mating workpiece.

All traces of the pencil marks may be readily removed with a regular eraser when not required.

Each set of nine guide fingers enables a good number of pin/tail spacings along the guide rail. The jig can hold work of 6mm - 25mm in thickness and up to just shy of 410mm in width. This should accommodate a good range of work, but not large boxes, chests and carcasses.





The plastic follower fingers simply click to fit at 3mm intervals along the guide rail

Lapped dovetails

Due to the finger guide system, setting out the spacing of the pins/tails is simple. If it doesn't look visually right once the work is clamped in place, simply unclick the fingers a try again – it takes just a matter of seconds to do! Producing these joints is a little tricky at first.

The user manual wisely recommends a few trial joints to find the correct cutter depth setting. A router with a fine height adjuster is a real boon for this, but I managed pretty well without one.

That said, my first lapped dovetail joint wasn't quite satisfactory, but after adjusting the cutter height my second turned out to be just about perfect – not too tight and not too loose. Sure, the joint suffered from a little split out, but precautions can be taken to minimise this.

The router sits very stable on the guide rails and the guide bush template supplied moves fairly smoothly around the finger guides.

One notable drawback is that the base of the router almost entirely obscures the fingers they are sitting on, so obtaining a good view of the cutting action is difficult unless you bend down and squint through the front plastic window – which is a tad awkward.

However, once you become more conversant with the jig, your confidence grows and you can trust that the guide bush will correctly locate with the desired part of the finger guides each time.

A range of different sized accessory dovetail cutters is

available to accommodate different thickness of work. Only one dovetail cutter is supplied as standard with the jig, so you really will have to budget for an extra few if you envisage undertaking a variety of work.

Through dovetails

Compared with cutting lapped dovetails, producing through dovetails is very straightforward! My first through dovetail joint proved pleasing satisfactory and subsequent ones became better, and quicker to produce, the more I did.

One note of caution though, particularly when working hardwoods, is to gently 'nibble' away the waste wood and not charge around the finger guides in one go. Doing the latter appears to put too much load on the cutter and negates a smooth cutting action.

A straight cutter is used to produce the pins and a dovetail cutter routs the tails. A range of accessory dovetail cutters allows the cutter of most appropriate length and angle to match the thickness of work.

Accessory guide fingers are available of differing profiles that enable pins of varying angles to be produced and so complement the range of dovetail cutters.

Conclusion

Setting up and getting to know the DC400 takes a little time.

However, it is time well spent and after half a day you should be producing straight-



Securing the work in the jig is straightforward thanks to an excellent clamping mechanism

forward lapped and through dovetails pretty well. Trend offers a plethora of accessories, which are too numerous to mention here.

However, the dust collection set is well worth purchasing and working without it

isn't too pleasant or practical. The DC400 is a lovely item of routing kit, but is expensive.

Even though it is of sound design and construction its price renders it only a bargain for those who envisage cutting a lot of dovetails.



A good range of accessories are available

Verdict A good jig capable of producing good joints, but at a price

Price £352.44 inc VAT

Accessories (not full range) Accessory Kit: £223.19 (comprises: waste collector set, cable support, guide finger sets for 9°, 11°, 14° and 20° dovetails and seven piece cutter set and housing template)

Optional Cutters from £18.74

Set of seven cutters: £117.44

Contact Trend: 0800 487363 www.trendmachinery.co.uk