

DOVETAIL JIGS COMPARED

Whether hidden in a drawer or visible on the edges of a cabinet, dovetails say craftsmanship. Many woodworkers like to cut them by hand, but for speed we often look to dovetail jigs. Every few years it seems another dovetail jig comes onto the market—most will cut good joints, but some are easier to set up and use. In this review we take an in-depth look at seven jigs.

The Test

The dovetail jigs I tested can be divided into two groups: jigs that cut only half blind dovetails and jigs that cut both through dovetails and half blind dovetails (*see sidebar*

over page). Some manufacturers also offer template accessories for finger joints, sliding dovetails, and mortise and tenons. With all the jigs I tested the router is moved over the work, except the *Gifkins* where the work is clamped to the jig and moved over a router table.

Having seven dovetail jigs arrive for review is somewhat daunting, so I divided the task into three parts. Firstly I read all the instruction manuals to familiarise myself with each jig. Secondly I set up each jig according to the instructions. And thirdly I cut test joints with each jig.

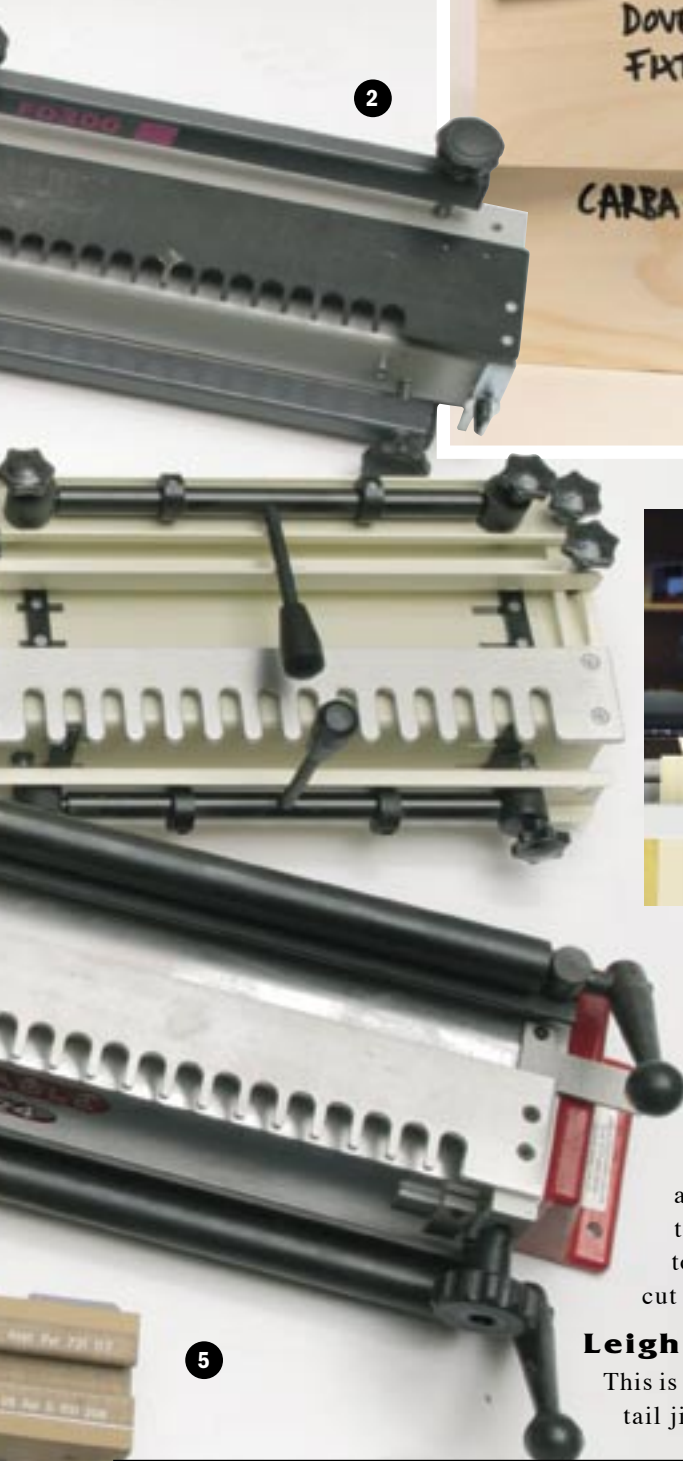
For the testing I used

standard 90 x 19mm radiata pine as I knew this would rout well. I also tried each jig on some harder timbers.

I tested each jig with my *Hitachi M 12V* router, except for the *Carba-Tec Euro Jig* that was sent to me with a *Porter Cable* router and the *Festool* jig that came with a *Festool* router. Each jig came with a different set of bits and template guides. When buying a jig make sure the bits and template guides suit your



Anton Gerner saw through the daunting task of setting up and testing seven dovetail jigs for this comparison test.



1. Leigh, 2. Euro jig, 3. Carba-Tec WDV-IN, 4. Porter Cable, 5. Gifkins, 6. Sherwood Dovetail Fixture, 7. Festool.

the few dovetail jigs that can produce variable spaced through dovetails, allowing you to create any width of dovetail, which can add a decorative feature to your project.

I had heard that this jig was complicated and time consuming to set up, so I put it to the test. The *Leigh D4* jig came very well packaged and only took about 20 minutes to assemble. Leigh offers a multitude of templates and optional accessories for *Isoloc* joints, finger joints and mortise and tenons, but I decided to follow the instruction manual for setting up to cut through dovetails. Having reviewed this jig once before I was somewhat familiar with this procedure. After following the manual exactly I was cutting accurate through dovetails in around one hour. Time consuming yes, but complicated no, as long as you follow the manual.

router as these may need to be bought separately. The *Gifkins* jig can use any table mounted router that takes 1/2" bits.

Most jigs are designed to be screwed or bolted to a bench. If you bolt your jig to a board you can clamp this to your bench whenever you cut dovetails.

Leigh D4 Dovetail Jig

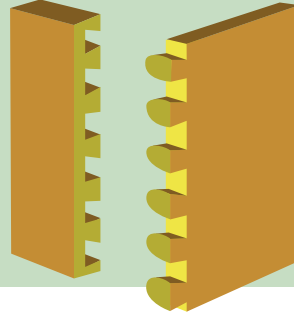
This is perhaps the best known dovetail jig on the market. It is one of

I found the jig to be very sturdy and

Dovetail Types

Half-blind Dovetails

Half-blind dovetails are seen from one side only, as in dovetailed drawers. With half-blind dovetail jigs, the pins and tails are cut together, with the two boards to be jointed clamped together in the jig. Spacing is usually not variable. The joint is cut in both pieces with a dovetail bit, with the router using a template guide that follows the jig. By changing the router bit depth you can adjust the fit of the joint—cutting deeper tightens the joint and cutting shallower loosens it.

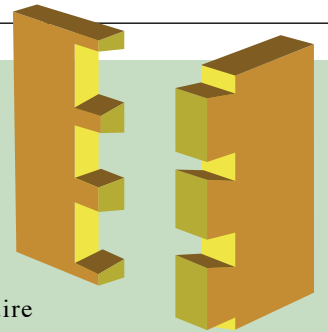


Through Dovetails

Through dovetails are seen from both sides and are most often used in carcasses. The jigs used to cut these are more

complex and usually require each side of the joint

to be clamped separately. One piece is routed with a dovetail bit and the other with a straight router bit. These jigs take more time to set up to work well.



strong and to hold the work tightly. The router sat on the jig well and the joints were cut easily. In fact the *Leigh D4* was the easiest jig to set up as it had the most accurate scales and was simple to adjust.

Overall the jig performed very well indeed. The instruction book is very long (168 pages), but exceptionally clear and easy to follow. This was one of the best of the jigs I tested and sells for around \$799.

Carba-Tec WDV-1N Jig

This jig only cuts half-blind dovetails and is similar to many lower priced

jigs on the market, but better made and finished. It will dovetail timber up to 300mm wide and from 12–32mm thick, using a single dovetail bit with a template-following bearing. A mini dovetail accessory kit is available and produces 6mm wide dovetails in timber 8–10 mm thick.

The instructions gave enough information for set up and use. It took some time to get good tight fitting joints, but once set the results were consistent. I found this jig to be quite solid but probably better suited to a router smaller than mine.

The timber must be placed carefully in all jigs of this type, as it's easy to slightly misalign the wood resulting in a slight gap in the joints. The jig I tested was supplied with good quality *CMT* bits. It costs \$159 without bits.

Festool VS 600

Being a big fan of *Festool* I was really looking forward to trying this jig out. I tested their *VS 600* jig with the *SZ 14* template for half-blind dovetails in wood 15–20mm thick. I was a little disappointed with the results.

Despite the 600mm capacity it can only be used with a *Festool* router.

Some of the various guide bushes and router cutters used with the jigs reviewed.



The router supplied seemed under-powered for harder timbers (possibly due to the router bit), and difficult to use as I couldn't see the workpiece. I had to get down to bench level and look up while holding the router from above—not easy.

Set up was a bit fiddly and difficult to get precise. Once set up I could only get perfect joints about 80% of the time. The high speed steel bit that came with the jig very quickly became blunt cutting pine, resulting in every joint having some chip-out.

The instructions were not as clear as those for the other jigs, but the operations for each template were covered.

If I spent more time with the jig I might get better results, and a higher quality router bit would be a big improvement. For \$605 and with templates for through dovetails, finger joints and dowel holes, this jig is possibly a good addition to your *Festool* collection.

Sherwood Dovetail Fixture

This is a simple jig used for cutting 1/2" half-blind dovetails. The jig uses one dovetail bit that follows the template with a bearing, cutting the pins and tails in the two boards in one cut. It is supplied by Timbecon and is one of many similar Chinese made jigs on the market.

This jig was lighter than the others, with the finger template easily deflected by the weight of the router. There were too many lock knobs located too close together, making operation awkward.

The instructions were minimal. I did however find better set up instructions on the Timbecon website.

No matter what I did I couldn't get this jig to produce consistent and accurate results. For \$79 though, if you



Using the Porter Cable jig.

Model	Leigh D4	Festool VS 600	Porter Cable Omnijig	Carba-Tec Euro Jig	Gifkins	Carba-Tec WDV-1N	Sherwood Dovetail Fixture
Origin	Canada	Germany	Taiwan	European Union	Australia	Taiwan	China
Cost	\$799	\$605	\$599	\$189/\$295	\$299/\$599	\$159	\$79
Max width	600mm	600mm	600mm	300/600mm	310mm	300mm	300mm
Dovetail type	Through and half blind with variable spacing	Half blind, template available for through dovetails also	Half blind, template available for through dovetails also	Through and half blind	Through dovetails only	Half blind only	Half blind only
Ease of set up	Quite complex initially, but once understood, straightforward	Fiddly, but not complex	Easy to set up and use	Straightforward if instructions are followed	Very easy to setup and use straight from the box	Takes some time for accurate set up	Hard to accurately set up
Instructions	Very detailed, the best of all the jigs tested	Good illustrations, but not straightforward to follow	Very clear, precise and easy to follow	Basic, but clear	Good, very clear. Covers set up, use and making a router table	Okay, enough information to set up the jig correctly	No detail on set up
Accessories	Many templates available. Also for finger joints and dowelling	Various size dovetails, finger joints, dowels	Templates for adjustable through dovetails, finger joints, sliding dovetails	Finger joints and various dovetail sizes	Various templates for different sizes. Variable spacer upgrade	Mini dovetail accessory	Not known
Comments	Very well made jig. Great range of options. Variable spacing is a great option	Limited by requirement to use a Festool router	Very solid jig that would suit the professional	Good mid-priced jig for a range of applications	Very nice to use. Accurate jig that uses a table router. Excellent value for money	Solid jig for the serious amateur	Inexpensive jig, with one use pays for itself



can get it to work for one job it will pay for itself.

Gifkins Jig

I have been using the *Gifkins* jig for some years so I was already familiar with it. The jig comes ready to use straight from the box, with very clear and detailed instructions. It is simple to set up, adjust and use.

With this jig the work is clamped and moved over the router table, allowing the router bit and bearing to follow the template. It's easy and accurate. The fit of the joint is adjustable with paper shims, a bit basic but a system that I have found to be accurate and reliable.

For this review I used the *B10* template for larger through dovetails with a maximum width of 310mm. Other templates available include the very fine handcut *H* series. A variable spacer upgrade lets you make variable spaced dovetails, rather than adjusting your stock to suit the jig.

Below (l-r): Attention to detail with the Leigh jig is impressive. Detail of the Gifkins jig. Close-up operation with the Porter Cable jig.



This jig suits the professional or serious amateur who wants to cut through dovetails. Its only limitation is dovetailing longer lengths. I have used it for lengths up to 1000mm long, but any longer could unbalance the jig. It comes with quality *Carb-I-Tool* router bits that I know from experience last well. The *Masters Package* was supplied for this review and sells for \$599. The standard jig costs \$299.

Porter Cable 24" Omnijig

This was the heaviest and most solid of all the jigs. Made from machined cast aluminium, it is very well made and offers many options. Different templates enable the cutting of through dovetails, half-blind dovetails, sliding dovetails and finger joints. The jig handles timber up to 600mm wide and from 12–25mm thick.

It was quite easy to set up and use and came with clear instructions. The standard 1/2" half-blind dovetail template that I used worked very well. I also liked the eccentric cam-type clamps which held the work securely.

I had to make a 3mm MDF baseplate for my router to hold the template guide

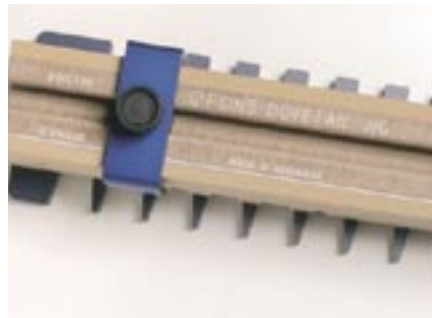
that came with the jig, as this did not fit my router. This modification was not in the instructions but it did work.

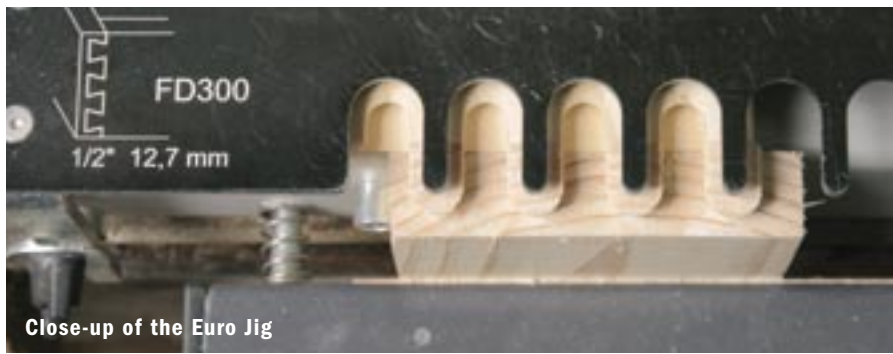
The adjustable through dovetail template was a quality system that matched the rest of the jig. I would recommend this as a heavy duty jig that is up to any duties required. It sells for \$599.

Carba-Tec Euro Jig

The serious woodworker would find this just-released jig suitable for a wide range of tasks. I tested a 300mm model (a 600mm version is also available) which was sent to me along with a *Porter Cable* router fitted with an accessory *S-Base*. This *S-Base* fits most routers and allows you to use all of the *Euro Jig* accessories by fitting different template guides.

I tested the jig on half-blind and through dovetails. I was happy with the results produced and, once set up, found it easy to use. Templates are also available for finger joints and dowels. This is a solid unit that fits well into the middle of the dovetail jig price range. The jig came with a basic but clear manual that was easy to follow. The 300mm jig is \$189 and the 600mm is \$295.





Conclusion

These seven jigs are priced to suit a range of buyers. Was there one best dovetail jig? The *Gifkins* was the simplest to use, with very little set up time. If you plan to only make drawers or boxes I would highly recommend it, even though it only cuts through dovetails. It is beautiful to use and it produced the most accurate, tightest and cleanest joints of all the jigs I tested. But as no jig will meet everyone's needs you may prefer a different unit.

For the professional furniture maker there is no doubt that the *Leigh* and *Porter Cable* jigs offer the most flex-

ibility. I would recommend the *Porter Cable* jig if you do a lot of larger carcass work or large drawers. I liked the very solid nature of the jig and the heavy duty clamping bar. If you want flexibility for a range of tasks the *Leigh* jig has to be looked at seriously—no other jig has so many options.

For the serious part-time woodworker I would go for the *Carba-Tec Euro Jig* or the *Gifkins* jig. I feel the *Euro* offers a range of options at a good price and the *Gifkins* produces high quality through dovetail joints.

Less serious woodworkers should consider the *Carba-Tec WDV-1N* jig.

Although limited to half-blind joints, once set up this jig gets the job done and produces good results.

The truth is that most of the popular dovetail jigs on the market will produce good fitting joints if you set them up correctly. Base your decision on the features you're looking for and how much you want to spend. Consider what you will use your jig for and the capacity and type of joints you want to cut.

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Photos: Steven Pam

Leigh, Porter Cable and Carba-Tec jigs supplied by Carba-Tec for review. Festool jig supplied by Festool Tooltechnic, Sherwood Dovetail Fixture supplied by Timbecon, Gifkins jig supplied by Gifkins Dovetail.

Dovetail jigs suppliers:

Carba-Tec Qld (07) 3397 2577, NSW (02) 9649 5077, ACT (02) 6280 0620, Vic (03) 9427 8444, WA (08) 9345 4522, NZ 0800 444 329

Festool Tooltechnic 1800 063 900

Gifkins Dovetail (02) 6567 4313

MIK International (08) 8363 4666

Timbecon 1800 000 601

The Woodcraft Shoppe Qld (07) 4635 3018

The Woodworks Book & Tool Co (02) 9807 7244