



Leigh jig just gets cleverer



When Andy heard that Leigh had come up with a new dovetail jig he went hotfoot to Axminster to give it a go

At 6ft 6 and built like a rugby player, Leigh Industries president Matt Grisley somehow personifies his innovative jointing machines. I had been invited to meet him at Axminster's Devon HQ. In fact I had met him more than ten years ago in the company of Brimarc MD Martin Brown and Phil Davy, and I was gratified that he remembered me.

This time around it was to show me a piece of kit that is so new it was still warm from the CNC machine. But before I move onto that I'll relate the chat I had with Matt about how Leigh came into being.

Martin Brown had filled me in with a detail or two prior to this meeting, but having known Martin for some 15 years, I thought he was winding me up as he said the name was down to Leigh on Sea!

Along with this, he said, the innovator and founder of the company, Matt's father and current chief executive, Ken Grisley, ran a car business there.

Turns out it's all true! Ken had decided it was time for pastures new and upped sticks to Canada with his wife and young family back in the 80s,

doing various jobs around the Vancouver area while still continuing with his passion for woodwork.

It was the struggle to cut dovetails in a timely and consistent manner along with the difference from the standard halfblind dovetail jigs around that led Ken to thinking about a system to speed up the process while allowing a more elegant and adjustable style to the joints. From this Leigh Industries was born.

Despite its world renown, it's still a pretty close-knit company with only 15 people employed, including Matt's brother Steve who is the production & purchasing manager, and it seems to work well as the product is still hitting the same high standards and each is as unique as it is ingenious.

If you've seen a Leigh jig, you'll know it's all about diversity as well as simplicity, with basic through and half-blind dovetails a core process, with the more intriguing Isoloc joints such as the ubiquitous Bear's Ears allowing you to make your own mark on your projects.

So now it's time to see what new tricks are up the Leigh sleeves, and that brings me on to my exclusive first look at the RTJ400...

...So what's new?

Leigh has long been at the forefront of high-end jigs for dovetailing, and aside from these unlimited options, their innovative possibilities have been put to much decorative work using

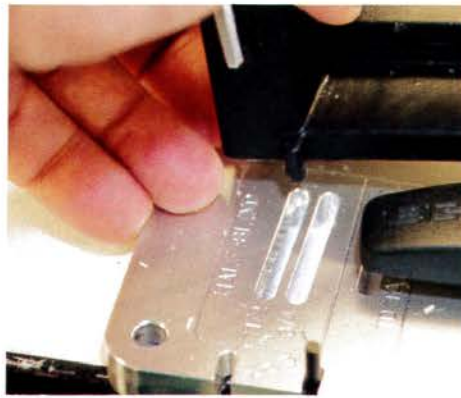


▲ These slide-in guides make it easy to cut any joint

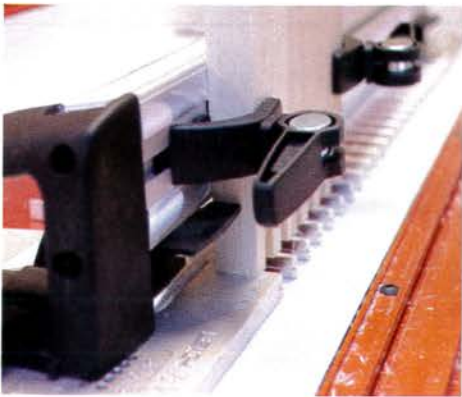
Leigh RTJ400 jig



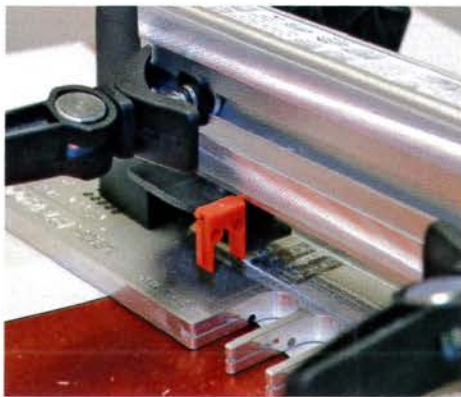
▲ The top frame locks to the comb with these latches



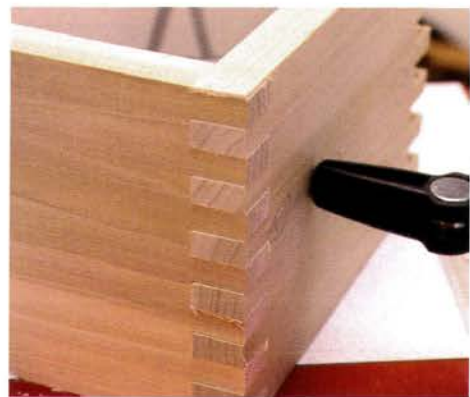
▲ Indexing shoes and slots along with etched lettering make it easy to set positions



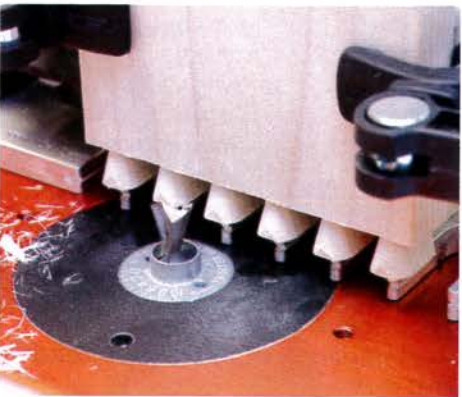
▲ Work locates against a side stop



▲ This small red peg sets the correct offset for comb joints



▲ The resulting joint is very clean and accurate



▲ Half-blind dovetails show the usual rounded profile when routed



▲ The red pegs slide into the comb for setting different tail spacings



▲ The pegs prevent the guide bush from making a cut

some of the more elaborate Isoloc jig templates.

My first impression was that I'd seen it before as it is used on the router table in an inverted fashion, much the same as the Gifkins, Keller and other variants of the fixed template that uses a matched set of dovetail and straight cutters to form the joint. But although a somewhat souped-up version compared to others, a closer look soon dispelled the similarities as there's a lot more than meets the eye. At its base level it does indeed make the standard through dovetails of the other systems, but unlike other fixed comb jigs out there, the Leigh allows you to move away from the equally spaced tails and pins that confine them, so you have the capability to introduce variety and different, almost hand-cut, features to your projects.

If you know the Leigh system, this one follows similar traits: easily adjusted cam clamps for securing the work, high-quality aluminium extrusions, and importantly on any jig, this one is very easy to get to grips with and, once mastered, pretty easy to go back to and pick up where you left off – well worth considering for that alone.

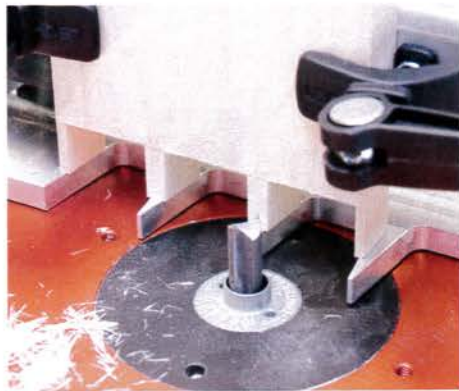
A neat channel in the top of the jig houses all the relevant info for each type of joint on slide-in strips, showing cutters, positions to cut the joint and so forth, acting as an idiot's guide to walk you through each step.

2-part system

So aside from the on-board guide, the jig's simplicity is built around the use of indexing pins and corresponding holes to attain repeat settings for joints with precision fit every time.

The jig is a 2-part system; the lower jig comb is connected to an upper frame with quick-release locking connectors.

By making one part of the joint with the jig in one set of indexing positions and then, according to the joint being cut, simply unlocking the top frame from the lower comb and either shunting it over to the next position or spinning the comb around and repositioning the top frame to the comb in the corresponding indexing position that marries up to the first part of the joint, the second part of the joint is cut using the appropriate cutters. And it really is a simple method as the positions are so clearly marked with etched lettering alongside the holes. It makes the initial setting and cutting of each particular joint a breeze, whether a through dovetail, half blind or fingerjoint.



▲ It makes a finer pin profile on through dovetails



▲ This black rod slides into a channel on the jig



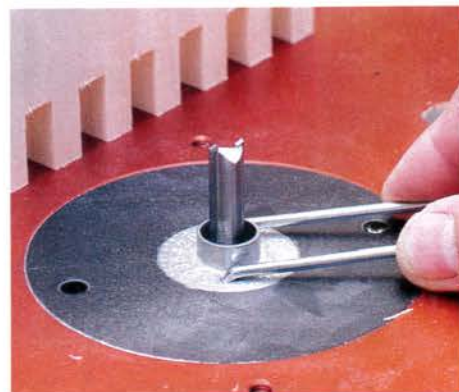
▲ It acts as a stop to limit the depth of cut on joints using thinner stock



▲ Each style of joint has a set of indexing marks



▲ The jig comes with the 2-part eBush



▲ By moving the guide bush in small increments the fit of the joint can be adjusted



▲ There are various cutters available to give more scope to your jointing

slide into the comb spacings to prevent the router from cutting that particular area of the work and in doing so, giving your work a more traditional wider tail fine pin style or variations on the spacings to suit your own designs.

Conclusion

While I've only scratched the surface of what can be done with this jig, I'm very impressed by it; it really is the fastest and easiest jig to set up and has a lot of options within it without becoming complex and confusing no matter what you try.

Take heed of the tables that show the optimum stock dimensions to suit the joint spacings and it will be a jig that will make your jointing very fast and accurate while still allowing design parameters to be included for a traditional style as required. In a nutshell then, the jig delivers fast, easy and accurate jointing with diversity.

Good The Woodworking Verdict

+ Fast setup for any joint; plenty of jointing options

- Stock has to be specific widths

Rating ★★★★★

Typical price: £285

Max stock width: 406mm

Minimum thickness: 3mm

Max thickness: 26mm

Web: www.brimarc.com

In the kit is a pair of cutters to make a set of these standard joints, but there's also a further accessory kit with additional cutters to gain further jointing styles and options.

The jig also comes with the Leigh eBush, the guide bush that matches the comb. While a standard guide bush will do a decent job on the joint, it's well worth acquiring a table insert plate that takes this particular bush as it has a very fine adjustment within its design to achieve the optimum fit on any joint.

It works by having a very marginal oval profile that can be repositioned so that when the work is addressed to it, any joint can be tweaked by a tad, either to make it slightly looser or tighter and the setting recorded to the slide-in strips for a spot-on setup each time you make that particular joint.

Optimum stock widths

However, despite its diversity, unlike the sliding pin and tail combs of the bigger Leigh jigs, the RT400 with its fixed template comb still has to work to stock of certain width tolerances to ensure the subsequent joints are machined correctly with pins and tails, or fingers in the case of box joints, in a balanced manner.

The maximum stock width is 406mm (16in) with tables showing the optimum stock widths for each joint and alongside this you can work stock as thin as 3mm up to 26mm depending on the particular joint you are looking to make.

With the jig set up to the correct indexing for any of the joints it can make it's still based around a uniform equally spaced tail and pin ratio but this is where the additional diversity of the RT400 comes into its own.

It comes with a nifty set of blocks that you