

PHOTOGRAPHS BY GMC/ANTHONY BAILEY

# ROUTER CUTTER choice

The Editor puts a new spin on an old topic – choosing cutters. Trust him to think different...

I often get asked what is the ideal set of cutters to own. The standard answer is any starter cutter set – minus the dovetail cutter – which is next to useless unless teamed correctly with the right dovetail jig. One manufacturer once told me that a dovetail cutter was expected to be in a starter set and therefore should be included – what utter bunkum!

So, let's be a bit more radical, shall we? Do you need an ovolo or a 'V' point cutter? Is a 19mm straight cutter as useful as it seems to be? Maybe or maybe not. This is my own short cutter selection and the good reasons why.

## 6.4mm diameter long straight

The 6.4mm is 1/4in diameter equivalent and appears everywhere – it is ubiquitous. I'll let this one through as it is genuinely useful, even though in a metric world it makes slightly less sense. You can buy a 6mm diameter cutter if you want an exact match for grooving sets, etc., but if you fit a veneered MDF panel in a groove, you'll be glad of the extra 0.4mm even if there is a slight panel rattle. A long

variant is of more use, but use plenty of passes to depth to avoid straining the shank.

## 8mm diameter straight

Not an obvious choice, but most routers come with a 16mm diameter guidebush. You need to measure to check it is truly 16mm as pressed steel versions can be slightly smaller by a few tenths of a millimetre. Plastic moulded guidebushes, such as the Trend type or their more expensive 'seamed' metal variants, are more accurate. The point is that if you do guidebush work, it doesn't half simplify matters if, when calculating the extra amount you need to allow on a jig or template, the guidebush is an exact round number. So for my money, an 8mm diameter straight cutter is definitely in my set.

## Hinge mortise

A 16mm diameter hinge mortise is excellent for shallow recesses, as it clears material without fuss or resistance, so it can be persuaded to do slightly deeper grooves that are usually the province of a 16mm or

19mm straight cutter. Since the centre is missing it can plunge satisfactorily, whereas the standard type must have a bottom cutting carbide insert to plunge without strain or burning.

## Tenoning

As far as I am aware, Wealden is the only company to make these at present. I own both the monster 1/2in shank version as well as the more dinky 1/4in shank model, which is 25mm in diameter. It isn't just for tenoning, as it also creates excellent smooth rebates. It does this by having four cutters, which alternate at forward and back shear angles, thus creating the perfect cutting action. For my money, this excellent tenoning and rebating cutter is in, especially as it can slot cut as well.

## Rebate

The previous listed cutters can create rebates that are possible only with a fence in position because they don't have any form of guidance. I often find a need to rebate shaped work so a multi-bearing cutter, i.e. one that

The 6.4mm diameter long straight is a ubiquitous cutter choice

comes with interchangeable bearings, is really useful as you can change the width of the rebate precisely and easily.

## Bevel cutter

So far, I have chosen straight cutters because they are often more use than fancy moulding profiles. You can make an argument for almost any router cutter type but I think next on the list would be a decent size bevel cutter. It has the ability to do a tiny bevel to 'break the edge' – in other words, remove a small amount from the arris or corner of the wood; this avoids ragged edges and splinters and makes it a lot neater looking. In addition, it can take off a large amount in a number of passes to create mitre joints, and lastly, it creates my favourite effect on oak (*Quercus robur*) furniture – the stopped bevel, which suits oak very well.

## 3.2mm roundover

This selection is not the usual group of cutters with roundovers, coves and ovolos, but I couldn't round it off, so to speak, without mentioning a tiny 3.2mm roundover. This can be used safely in a router trimmer as well as a larger machine. Whereas oak looks better with bevelled edges, something like maple (*Acer campestre*) for instance, needs a discreet rounded shape on the edges. I find it is perfect for using on kitchen worktops, dining tables and other solid wood or lipped furniture edges.

## 6.4mm roundover

Where you need more edge definition, this is a better cutter than the 3.2mm variant. It can be used with a smaller bearing to create an ovolo with its stepped profile. This is one cutter that does actually turn up in a standard set of cutters and is useful for creating a 'comfort curve', such as for the stool project I'm working on here. ■



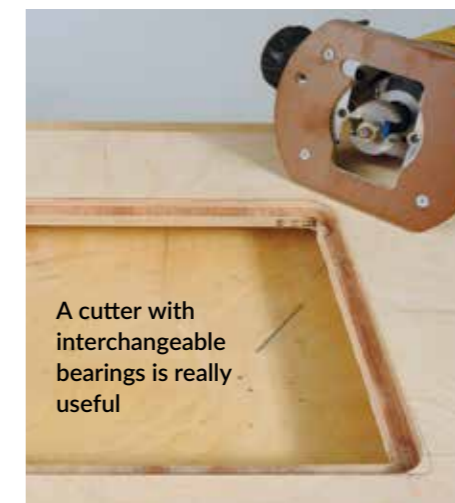
A 8mm diameter straight cutter is definitely in my set



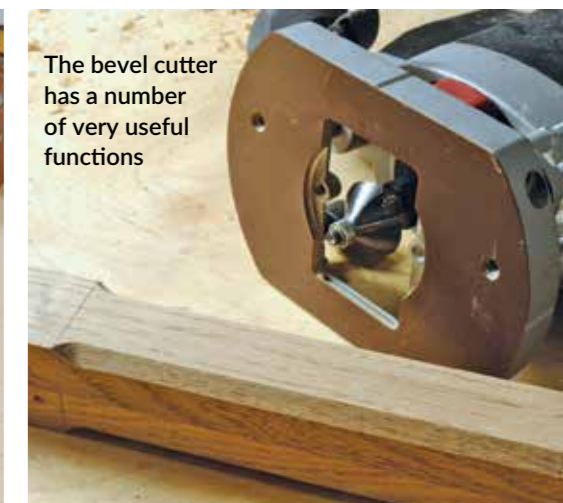
A hinge mortise is excellent for creating shallow recesses



The tenoning cutter is also great for creating excellent smooth rebates



A cutter with interchangeable bearings is really useful



The bevel cutter has a number of very useful functions



The 3.2mm roundover can be safely used in a router trimmer as well as a larger machine



The 6.4mm roundover is ideal when you need more edge definition