



# Backsaws

## TENON CHEEKS

### The all-purpose saw

It might be nice to have several backsaws—a small dovetail saw and a pair of larger saws (one rip, one crosscut) for tenons and other joinery. But it's not necessary, because you can easily cut every furniture joint with just one carcass saw. It's big enough to cut case dovetails, as well as apron and frame tenons, but nimble enough for drawer dovetails. It doesn't matter if the teeth are filed for a ripcut, crosscut, or somewhere between, as long as they are sharpened so that the saw cuts quickly and tracks straight.





# that Can Do It All

The versatile carcass saw will cut most joinery—our expert picks the best of a bumper crop

BY CHRIS GOCHNOUR

**D**ovetail saws are a popular choice for a first joinery saw, but because of the blade's length and shallow depth, they are only suitable for cutting dovetails in thin parts like drawer sides. To cut carcass dovetails, and tenons for door frame rails and table aprons, you need a carcass saw. With a 12-in.-long blade that has 2 in. or more of cutting depth, the saw is big enough for these joints yet small enough for drawer dovetails. Because it's so versatile, the carcass saw is what I recommend as a first saw to new woodworkers.

During the past 10 years, there has been an explosion of new saw makers and saws, and *Fine Woodworking* asked me to take a look at the carcass saws now available. A search turned up 18 saws. Except for one (the Lie-Nielsen tapered crosscut saw), they all have 12-in.-long saw plates, and between 11 and 15 points per inch (ppi). Although I prefer teeth filed for ripcuts, I tested saws filed for crosscuts, too. One saw, the Bad Axe hybrid, has teeth filed between rip and crosscut.

I tested how quickly they cut, and how easy they are to start. I used them to cut dovetails and tenons. I judged how well they track for ripcuts, but not crosscuts. With some ripcuts (such as the tail cuts for dovetails) a cut that goes awry can't be corrected, but a wonky crosscut often can



SHOULDERS, TOO



DOVETAILS BIG AND SMALL

## great saws

With the tests completed, it was clear that most of the 18 carcass saws tested are great, and the difference between them is very small. However, four saws were just a bit better than the rest because they were sharpened extremely well, so they started easily, cut fast, and tracked perfectly. They also performed well on both rip- and crosscuts. I noticed some difference in comfort among these four saws, but comfort is subjective and doesn't affect performance. Any of them would be a great do-it-all saw. The Veritas crosscut saw was a solid performer and costs just \$79. It's easily the Best Value.

—C.G.

be fixed with a handplane. After decades of using handsaws, I've learned that a saw's performance hinges on one thing: how well its teeth have been sharpened. Over all, these saws reinforced that lesson: The best performers had the best sharpening jobs. Although most hobbyist woodworkers won't need to resharpen a saw very often (every few years at most), we identified in the chart makers who offer sharpening services (see pp. 36-37).

After weeks of using all these saws every which way, I realized that there are a lot of very good saws on the market. However, four were a bit better than the rest, and one was an exceptional value. Keep in mind that several makers are individuals who make each saw every step of the way. The nature of this work means that if you buy a saw from one of them, you might wait weeks or months before it's in your hands. Their saws can often be customized, so for these makers, we've listed the saw's minimum price. It could be higher depending on the options.

*Chris Gochnour's backsaw is never far from reach in his Salt Lake City shop.*

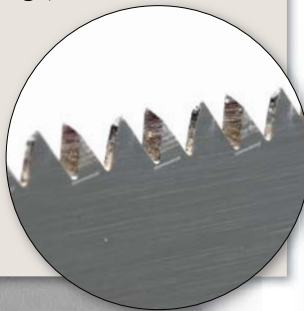


AUTHOR'S  
CHOICE  
**BEST OVERALL**

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### ADRIA CROSSCUT

This saw performed wonderfully. It was tied for the fastest crosscuts but was a bit slow for ripcuts. I'm OK with that tradeoff. Despite the saw's performance, the handle was uncomfortable (but my hand is a bit larger than average).



### BAD AXE HYBRID

This saw is like a combination tablesaw blade, with a tooth profile designed to rip and crosscut. It wasn't the fastest at either type of cut, but it did both equally well. Because of the hybrid file, the saw started smoothly in both rip- and crosscuts. Of all the saws tested, I liked the handle on this one the best.







**BEST OVERALL**

### LIE-NIELSEN TAPERED CROSSCUT

At 14 in. long, this saw is 2 in. longer than every other saw tested, and it also had the thinnest saw plate. Its kerf was tied for the narrowest. All of this makes a big difference in how fast the saw cuts. It took the top spot in the ripcut and tied for first in crosscut speed tests.



**BEST OVERALL**

### ROB COSMAN TENON

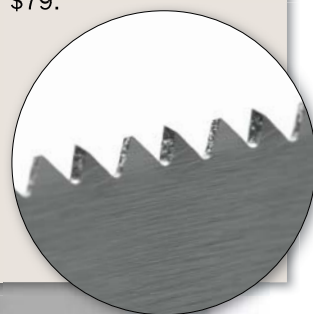
This saw was very easy to start, and cut smoothly. The teeth cut without binding despite having very little set. It has the heaviest spine, and a molded resin handle with individual finger grips. The handle comes in two sizes (standard, extralarge). The standard-size handle I tested was a bit small for my large hands.



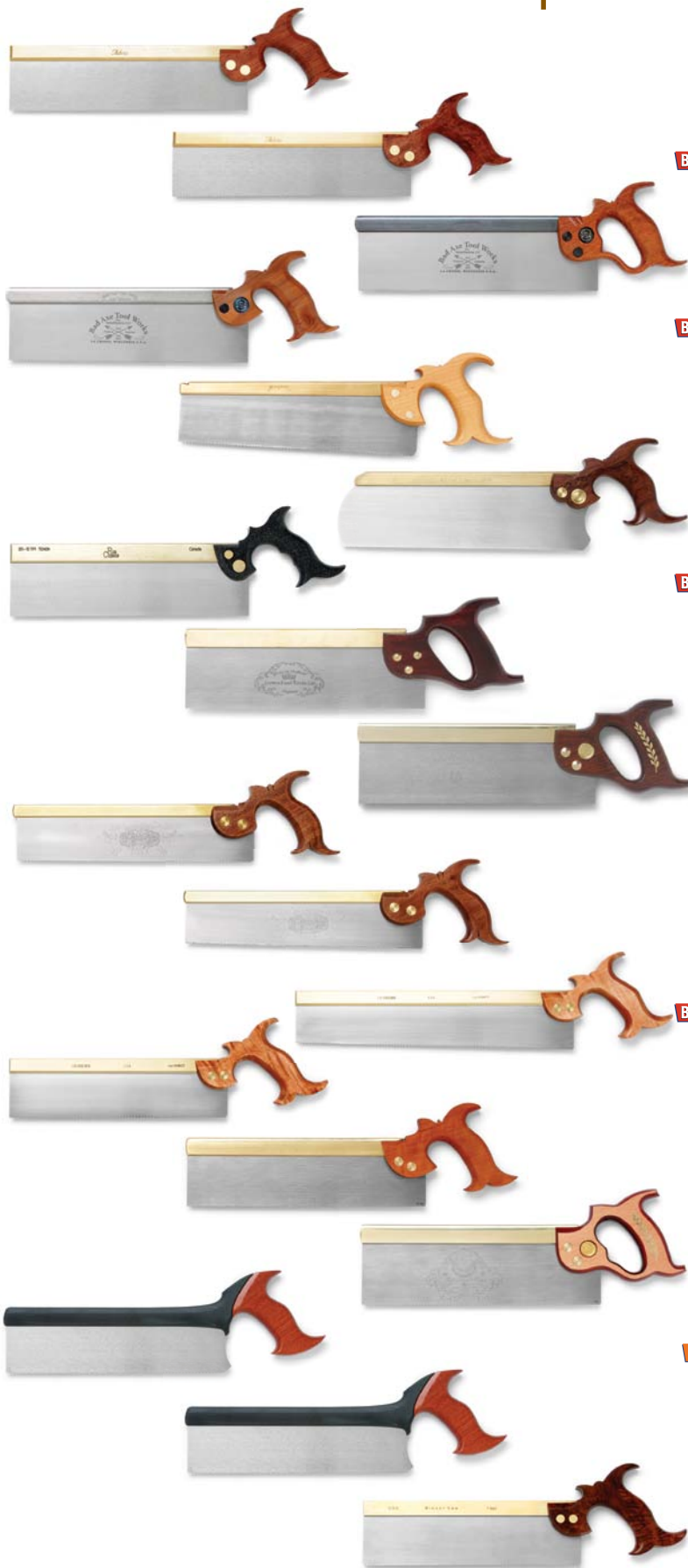
**BEST VALUE**

### VERITAS CROSSCUT

This saw did very well in all of the tests. It ripped extremely fast and tracked great during ripcuts. Crosscuts were very quick, too. It also started smoothly in both rip- and crosscuts. Overall, this is a very good saw and a fantastic value at just \$79.



# How the saws stacked up



BRAND/STREET PRICE	SPECS
<b>Adria Small Tenon Rip</b> \$170	14 ppi Plate: 0.020 in. Kerf: 0.028 in.
<b>Adria Small Tenon Crosscut</b> \$170	14 ppi Plate: 0.020 in. Kerf: 0.027 in.
<b>Bad Axe Rip*</b> \$255 and up	13 ppi Plate: 0.020 in. Kerf: 0.024 in.
<b>Bad Axe Hybrid*</b> \$255 and up	14 ppi Plate: 0.020 in. Kerf: 0.025 in.
<b>Blackburn Rip*</b> \$275 and up	13 ppi Plate: 0.025 in. Kerf: 0.033 in.
<b>Bontz Rip*</b> \$250 and up	14 ppi Plate: 0.020 in. Kerf: 0.026 in.
<b>Rob Cosman Tenon</b> \$300	12 ppi Plate: 0.020 in. Kerf: 0.024 in.
<b>Crown Tenon Rip</b> \$80	13 ppi Plate: 0.025 in. Kerf: 0.030 in.
<b>Lynx Tenon Crosscut</b> \$110	14 ppi Plate: 0.025 in. Kerf: 0.029 in.
<b>Gramercy Rip*</b> \$210	13 ppi Plate: 0.020 in. Kerf: 0.026 in.
<b>Gramercy Crosscut*</b> \$210	15 ppi Plate: 0.020 in. Kerf: 0.028 in.
<b>Lie-Nielsen Tapered Crosscut*</b> \$140	14 ppi Plate: 0.015 in. Kerf: 0.024 in.
<b>Lie-Nielsen Crosscut*</b> \$137	14 ppi Plate: 0.020 in. Kerf: 0.028 in.
<b>PAX 1776 Tenon Rip</b> \$165	13 ppi Plate: 0.025 in. Kerf: 0.027 in.
<b>PAX Tenon Rip</b> \$105	13 ppi Plate: 0.025 in. Kerf: 0.027 in.
<b>Veritas Crosscut</b> \$79	15 ppi Plate: 0.020 in. Kerf: 0.026 in.
<b>Veritas Rip</b> \$79	13 ppi Plate: 0.020 in. Kerf: 0.026 in.
<b>Winsor Rip*</b> \$169	13 ppi Plate: 0.020 in. Kerf: 0.027 in.

\*Offers resharpening service.

RIP START	RIP SPEED	RIP TRACKING	CROSSCUT START	CROSSCUT SPEED
Very good	Very good	Excellent	Very good	Very good
Excellent	Good	Excellent	Excellent	Excellent
Excellent	Very good	Very good	Excellent	Very good
Excellent	Very good	Excellent	Excellent	Very good
Very good	Very good	Excellent	Very good	Very good
Very good	Excellent	Very good	Good	Very good
Excellent	Excellent	Excellent	Excellent	Good
Very good	Fair	Very good	Very good	Fair
Very good	Very good	Very good	Very good	Fair
Very good	Very good	Excellent	Very good	Very good
Excellent	Fair	Very good	Excellent	Fair
Excellent	Excellent	Excellent	Very good	Excellent
Excellent	Good	Very good	Excellent	Fair
Very good	Very good	Very good	Very good	Fair
Very good	Very good	Very good	Very good	Fair
Very good	Excellent	Excellent	Very good	Very good
Very good	Very good	Excellent	Good	Excellent
Excellent	Excellent	Very good	Very good	Good