



The Bandsaw Is a Ripping

Strategies for safe, straight cuts in solid stock

BY TONY O'MALLEY

Bandsaws come with a fence for a reason: They aren't just for curves and rough cuts. Indeed, they can make quality, accurate rips as well. Provided you have a good saw that's set up and equipped with the right blade, you can stick with this safe, efficient machine from stock breakdown to near finish cuts. The only limit is your bandsaw's rip capacity. Because bandsaw tables are small, infeed and outfeed supports are helpful.

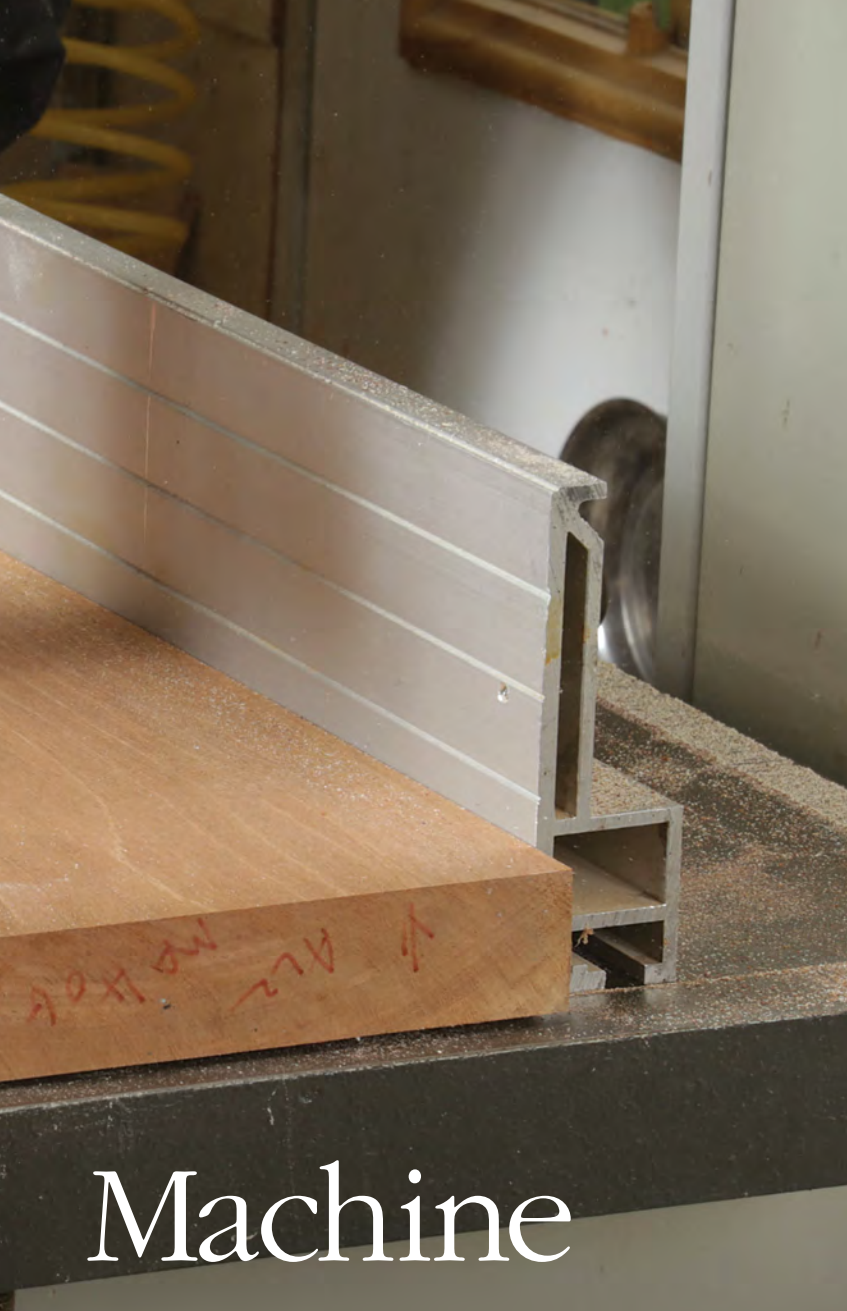
While I'd never give up my tablesaw, the bandsaw is the better way to go for ripping solid wood in my shop. For one, it is

quieter and much safer. You will never experience kickback on one. It also wastes less wood because its kerf is about half that of a tablesaw's. And last, I find that working at a bandsaw is just more comfortable.

Rip wide to give the wood room to move

I work with kiln-dried, roughsawn lumber from one of several trusted local mills. Even though the wood has been dried well, I still anticipate some movement when I rip boards into narrower pieces. This is where the bandsaw's safety advantage shines the most, because there's no possibility of kickback when tension in the wood is relieved and the wood binds against the blade. You can always just keep pushing the workpiece through the cut.

To begin, I joint one edge of a rough board, then set the fence on the bandsaw and rip my pieces $\frac{1}{8}$ in. to $\frac{1}{4}$ in. over their final width. If the edge is very irregular, like a natural edge, I first mark a straight line and bandsaw to the line before jointing that edge.



Machine

The longer the part, the more extra width I leave in case the part develops crook—a curve along the edge—which is common. There's no need to joint between rips at this stage.

I then give the rough-ripped parts a day to settle before continuing to mill them. I stack the pieces on edge with space between to allow air to circulate.

Once the wood has acclimated, I continue milling it to final size. I start by jointing a face. If there is any bow, I joint the concave face for safety and practicality, then plane to final thickness. Next, I joint one edge, again choosing any concave edge. With both faces planed, I can edge-joint with either face against the jointer's fence.

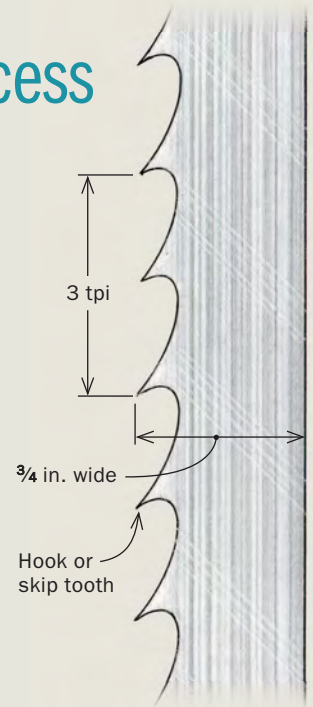
Second rip is just shy of final width

At this stage, people often turn to the tablesaw and rip the board to width. I stick with the bandsaw, but with an assist from the planer—or if need be, the jointer—in the next step. The bandsaw's benefits still stand for this end-stage ripping, but the bandsaw

Set up for success

Blade

A $\frac{3}{4}$ -in.-wide blade is perfect for ripping lumber to width. I use one even though my saw will accept blades up to $1\frac{1}{4}$ in. If you frequently alternate between rips and curved cuts, a $\frac{1}{2}$ -in. blade is a good compromise. Regardless, you want an aggressive tooth profile, the best being hook tooth and skip tooth. And fewer teeth, like 3 tpi, are better than more. Both the profile and smaller tooth count prevent the blade from bogging down under load.



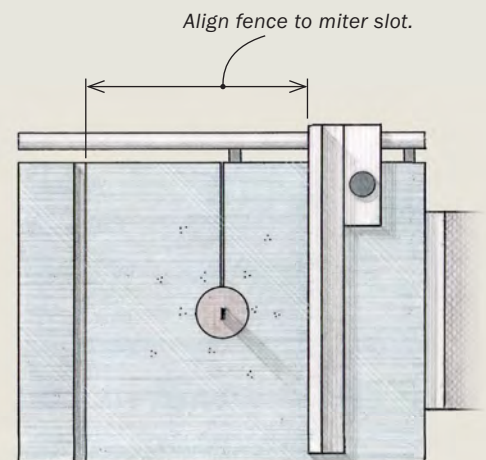
Tension

I've had my saw for over 15 years, but early on I wasn't tightening the blade sufficiently. This can let the blade wander during the cut and lead to more friction between the blade and guides. Friction causes heat, which can break blades prematurely. Now I tighten the blade fully and adjust the guides carefully to minimize friction.



Alignment

For a quality cut, you need the blade to track correctly. Because the fence is critical for straight rips, I ensure its alignment with the blade by aligning it with the miter slot at the front and back of the table. To control drift, I feed slowly to avoid sending the blade off course.



RIP WIDE, THEN WAIT

Joint a reference edge before ripping wide. Joint an edge of a roughsawn board (right), and then rip it into pieces $\frac{1}{8}$ in. to $\frac{1}{4}$ in. wider than their final dimension (below). The longer the part, the more extra width you should leave in case the part develops crook when ripping.



Let the boards acclimate. The rough rips release stress in the wood, causing workpieces to move. To let them work out this movement, O'Malley lays the parts on edge with space between them. He comes back the next day to continue milling.



edge will need cleanup and refining. So I rip my finished parts $\frac{1}{16}$ in. to $\frac{1}{8}$ in. wider than final width, again depending on the part's length. If I'm ripping thinner strips from a wider board, I rejoin a reference edge between passes. The result is multiple pieces of the same width, with one edge jointed and the other edge bandsawn.

Plane (or joint) to width

This may sound surprising, but I run my parts through the planer on edge to size them to final width. It works great provided there's enough bearing surface on the tables. For thinner parts of the same width, I group multiples and pass them through the planer together, letting them act like one thick workpiece. For example, I would never try to run a single $\frac{3}{4}$ -in.-thick by 3-in.-wide piece on edge through the planer. The piece is too likely to tip, and the planed edge probably won't come out square. But if I gang four pieces of the same width and hold them together as one larger block, they will stay vertical and their edges will be square. For longer stock, I set up infeed and outfeed roller stands to support the work.

When I need just one part or when the piece is too wide to plane on edge, I rip it on the bandsaw $\frac{1}{16}$ in. wide and then joint

JOINT AND PLANE

Joint a face, and then plane. If a workpiece has any bow, joint it with the concave face down. Then use the planer to thickness the board and bring the opposite face parallel.



BRING TO FINAL WIDTH



Square an edge to a face. After the rough rip, the board is likely to have crook. If it does, place the concave edge against the table for better stability. This jointed edge will go against your bandsaw fence when ripping.

Rip a touch wide. O'Malley rips his finished parts $\frac{1}{16}$ in. or more over width, going wider as the parts get longer. If he's ripping multiple narrow strips from a board, he joints the board's bandsawn edge between passes.



the final edge. Be aware of your jointer's depth of cut; don't go past your desired dimension.

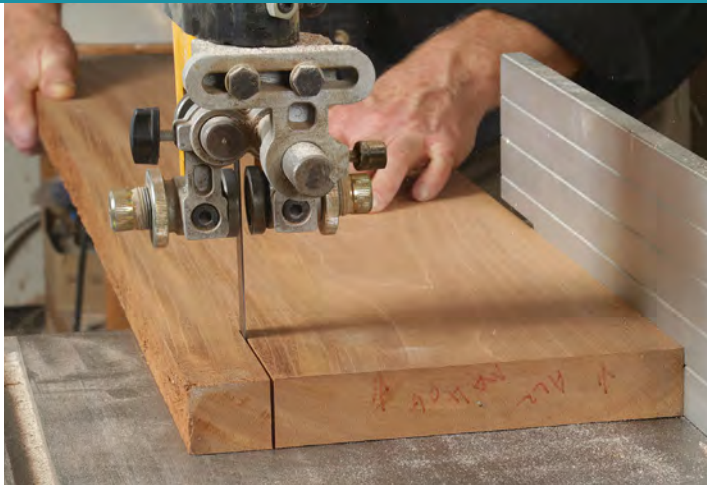
Jointing the edge may be another surprise. Returning to the jointer goes against common milling practice, but I think we should reconsider. For one, whether you rip with a bandsaw or tablesaw, that edge will have machine marks that need to be cleaned up. Some people do this with a handplane, but I argue that my jointer works just as well and is quicker. Plus, when are perfectly parallel edges crucial? Not with boards glued up for a tabletop, since you'll bring the whole top to dimension, including making its outer, unglued edges parallel after gluing. Perhaps perfectly parallel edges are important for a floating raised panel in a larger door, but I believe that less than perfect is fine. Because floating panels need room to move, there is also room for slight variation in the width from one end to the other. While there is always the ideal to strive for, there is also acceptable reality. □

Tony O'Malley makes custom cabinetry in Emmaus, Pa.



Plane parts to final width. To stabilize narrow parts of the same width, hold them together so they act like a single block of wood. Hold them tightly as they come out the outfeed side, too.

ON WIDE BOARDS, JOINT A SECOND EDGE



Rip slightly wide before cleaning up the bandsawn edge at the jointer. If a board's too wide to be planed to width, simply rejoin the ripped (and rough) edge. Just watch your jointer's depth of cut to make sure you don't go past your desired dimension.

