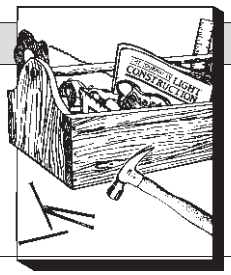
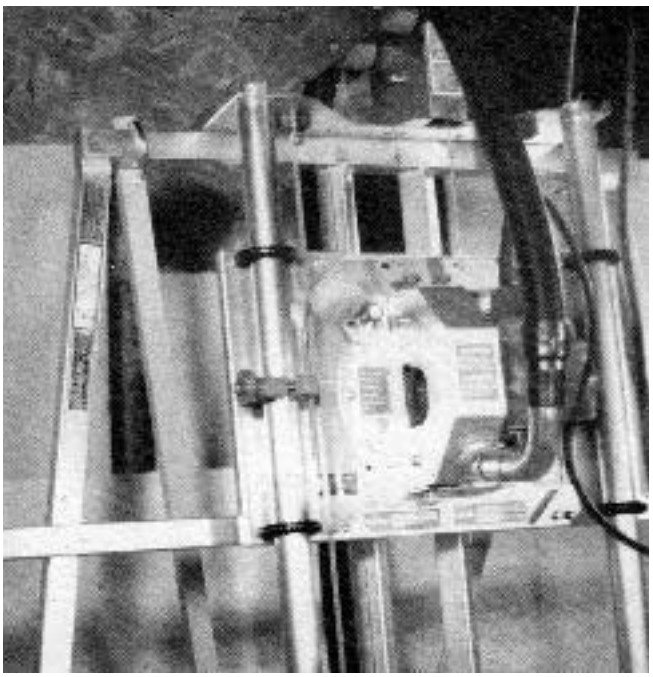


Contractor's Panel Saw

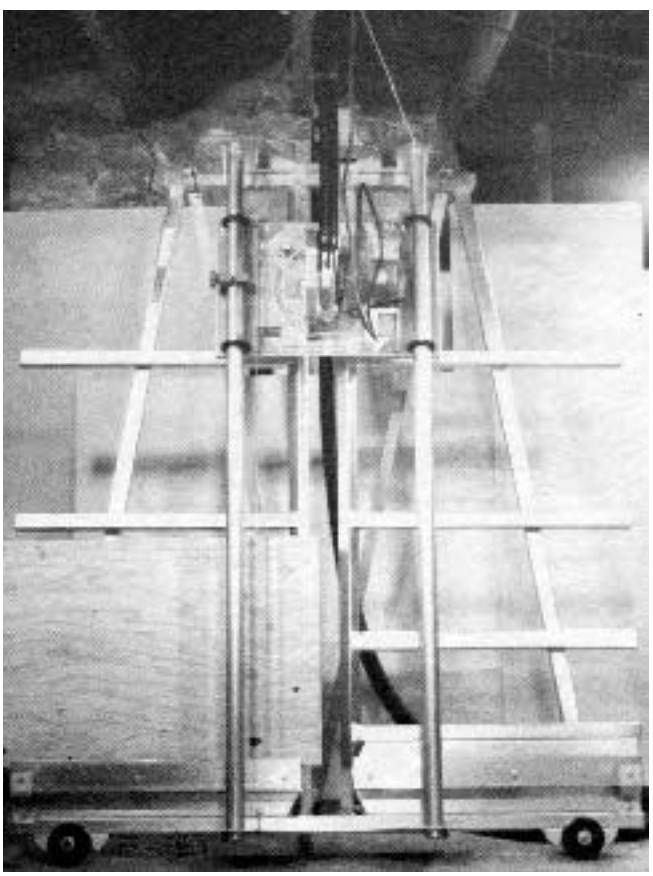
by Clayton DeKorne

Vertical panel saws are no strangers to the building trades. I've seen one in just about every lumberyard I've been in. In an effort to get these saws onto the building site, Safety Speed Cut has introduced a portable contractor's model. But "portable" is a relative term here. The frame of the model C-4 is 5 feet long (compared to 10 feet on the larger versions) and weighs 148 pounds (compared to 200 to 250). The saw stands 6 1/2 feet tall and is about 30 inches wide, so it will just fit through a conventional doorway. But even though it's big, it's small enough to move in an open pick-up truck to the site for cutting sheathing, decking, cabinets, and built-ins.

To test the model C-4, I set it up in my basement shop to cut cabinet carcasses out of birch plywood. I also ran test cuts on fir, oak, and luaun plywood, hardboard, and Formica. And to get a sense for lugging it around, I moved it to a building site to cut floor underlayment and panels for built-in bookcases.



A 2 1/2-hp Milwaukee motor powers Safety Speed Cut's *C-4 panel saw. The saw carriage rolls on graphite-impregnated nylon bearings (shown in each corner) that don't need lubrication.*



This downsized panel saw from Safety Speed Cut *is well-suited for small cabinet shops, or custom house sites where a lot of sheet material needs to be cut with speed and precision.*

Setup

Very little setup is required to assemble the model C-4. The all-steel frame is welded together from 1-inch-square tubing that is unlikely to warp. The stand must be bolted on with U-bolts and the hard rubber wheels need to be attached.

Like other Safety Speed Cut panel saws, the model C-4 comes with a Milwaukee 8-inch, 2 1/2-hp motor as standard equipment. The motor must be bolted to the carriage, and a counterbalance which supports the carriage, must be bolted to the frame. The carriage is preassembled and aligned on the frame. It runs up and down the frame along zinc-plated guide tubes on graphite-impregnated nylon roller bearings. The bearings don't require lubrication but the manufacturer recommends occasionally wiping the tubes clean to prevent corrosion of the smooth surface. The blade guard is attached with three thumb screws so it can be removed easily to change the blade. The guard also has a built-in "material pressure guard"—a spring-loaded half circle of plastic that ghosts the blade. This proved effective for making chatter-free cuts on thin laminate material.

Performance

The model C-4 can be used for both crosscutting and ripping large sheet material. Compared to lifting and balancing full sheets of plywood on a table saw, it was easy to process full sheets of plywood singlehandedly, since the sheets feed onto a roller bed and remain vertical, just as they are carried.

The roller bed is made up of large plastic rollers that are carefully aligned to hold sheet material square to the saw carriage. The rollers are made of "Delron," a nylon plastic used in many football helmets, and seem durable. Nevertheless, plywood probably shouldn't be dropped into the frame, or the roller might get beaten down and knocked out of whack. If this should happen, replacement rollers are available. Heavy-duty aluminum rollers are an upgrade option.

The prealignment of the bed and carriage permitted me to make extremely accurate square crosscuts

without making any adjustments. Safety Speed Cut guarantees the cut to 1/32 inch over four feet, but the saw I tested was closer than that. To rip sheet material, the carriage is locked in place along the guide tube and the saw motor is turned 90°. The conversion is fast. An indexing pin pops into fixed positions on the turntable so material can be rolled into the blade from either direction.

I was able to get very clean finish crosscuts and rips using a newly sharpened 48-tooth carbide blade. By feeding the saw slowly and evenly, tearout on crosscuts can be eliminated on both sides of the cut even on oak plywood. However, the finish edge of plastic laminate will chip unless the face is placed against the frame (away from the operator).

Cutting to a line is not easy. However, you can make accurate cuts using the vertical and horizontal steel tapes that come set up on the frame. The vertical tape—for measuring rips—is suspended along one guide tube. An adjustable pointer on the carriage clearly shows the width of the rip. The horizontal tape—for measuring crosscuts—slides in a track in the frame and can be positioned accurately. The tape didn't vibrate out of position when I used it and is not likely to get knocked out of place, but it should be checked whenever the saw is moved.

Because the frame is relatively short, the horizontal tape only measures 30 inches on either side of the blade. For measuring longer crosscuts, an optional "Quik Stop" can be used. This is an aluminum L-channel with a fixed tape that is bolted to the frame. An aluminum block with a single large-handled screw clamps on the channel and can be set up to 60 inches from the blade. I found myself using it for every cut, not just repeat cuts, because it was so easy to measure with.

My one complaint was that the roller bed is a bit short on the C-4, so long offcuts can fall off and bind the blade. One way around this is to arrange the order of crosscuts so the off-cut piece is less than 5 feet long. This doesn't always work, of course, in which case a helper is needed. The manufacturer makes 18-inch extension arms with one roller for increasing the length of the bed. This would be the first option I'd go for.

The basic model C-4 sells for about $750, which is about half of what any other panel saw costs. These are distributed through industrial woodworking suppliers, or, until the manufacturer sets up its distribution to building contractors, direct from Safety Speed Cut (13460 N. Hwy. 65, Anoka, MN 55304; 612/755-1600). Shipping adds $50 to $75. Extension arms are $59 a pair and the Quik-Stop is an another $129. At this price, I think the C-4 would be an excellent saw in a small off-site cabinet shop or on a custom house site where a lot of sheet material needs to be cut with speed and precision. ■

TOOLBITS

Keyless chucks save an enormous amount of time and eliminate the frustration of losing the chuck key or dragging the key across your work (if it's attached to the cord). I've used three kinds, all of which are available from Woodworker's Supply (5604 Alameda Place, NE, Albuquerque, NM 87113; 505/821-0500). *Chuckloks* are nothing more than a big rubber ring that slips over an existing chuck. These only cost about $6 apiece and take a little soap and determination to get on, but once in place they tighten the chuck, using the drill motor against the strength of your grip. A second ring, provided with each Chucklok, is used to hold the shaft so the chuck can be loosened or tightened by hand. I find hand tightening in this way is a little awkward. I leave the second ring off so I can get at the key holes when the battery on my cordless drill gets low and can't provide the torque to loosen the chuck. The size of the Chucklok is one deterrent, however. Occasionally I've left black smears on the work when screwing at an angle or in a tight spot. A more streamlined version is made by *Panasonic*. These come on Panasonic cordless drills, but are sold separately (for about $35) for use on other 3/8-inch cordless drills. These can be tightened and loosened by hand or used with the motor. For larger corded drills, *Jacobs*, the king of drill chucks, has keyless chucks, too, for around $50. These are heavy-duty, all-steel chucks that can also be tightened by hand. They are available for both 3/8- and 1/2-inch drills. I'm surprised Black and Decker, Milwaukee, Porter-Cable, and the other big tool makers that use Jacobs chucks on their drill motors don't offer the keyless version as standard equipment.

Pneumatic caulk gun update. I was mistaken about the price of the Roean Industries pneumatic caulk guns (see "Specialty Air Tools" *JLC,* Toolbox, 6/90). The prices I quoted—$45, for the quart sized gun, and $30 for the smaller one—turn out to be the distributors' prices (if you buy over 130). The list prices are $75 and $40, which is quite a bit more than even a high-quality skeleton gun.

Speaking of caulk, a reader sent in this tip: Whenever a sticky glob of caulk comes shooting out the end of a damaged tube, the mess can be burned off with a propane torch. Whatever's left on the gun can then be easily scraped off with a stiff brush. —*C.D.*