

Jointer/Planer Combo Machines

JOINTER

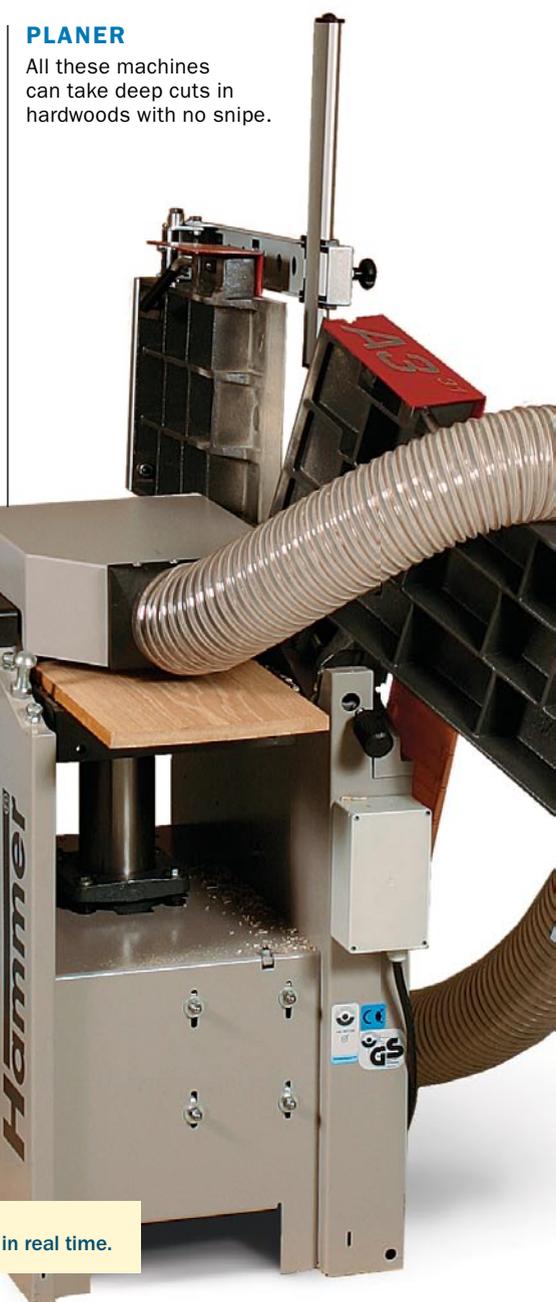
Although their tables are somewhat short, these machines can joint stock up to 12 in. wide, a boon for a small shop.

Wide jointer, heavy-duty planer, one small footprint

BY ROLAND JOHNSON

PLANER

All these machines can take deep cuts in hardwoods with no snipe.



JOINTER TO PLANER IN 60 SECONDS (MORE OR LESS)

It takes only 50 to 80 seconds to change these machines from jointer to planer or vice versa. On most, you first move or detach the jointer fence. Next, pivot the jointer tables up and out of the way (see inset photo). Then pivot the dust hood over the cutterhead and crank the planer bed to the desired height. To change from planer to jointer, lower the planer bed to accommodate the dust hood in its lower position, lower and lock the tables, and replace the fence. The time needed for either changeover directly relates to how much cranking it takes to reset the planer bed.



FineWoodworking.com

See the jointer-planer changeover in real time.

Working in a small shop can be a challenge, given the large tools woodworkers tend to accumulate. I'm always rearranging my tablesaw, bandsaw, jointer, drill press, workbenches, and dust collector to optimize space and give myself room to work.

Combination jointer/planers—commonplace in Europe but still a rarity in the United States—maximize available space because they use a single cutterhead for two operations. The jointer bed typically is designed to swing up and out of the way, providing access to the planer bed below. An integrated dust hood pivots to accommodate both operations.

These machines also present some questions: Do you pay a premium for a combo, compared with separate machines? Do you sacrifice performance, or is a combo machine equal to the sum of its parts? How different is a combo from the machines most of us are accustomed to using?

To answer those questions and others, I looked at the four jointer/planer combinations that are moderately priced and readily available. All use a 12-in.-wide cutterhead, with jointer beds ranging from 50 in. to 59 in. long. Each manufacturer offers larger, pricier machines, but they are not practical for many hobbyists. One well-known brand, Laguna Tools, is not represented; its redesigned jointer/planer wasn't available in time for this review.

The basic questions, answered

All four combo machines delivered excellent results in my tests. Using maple, white oak, and cherry, I face-jointed and edge-jointed long, wide boards without difficulty, and planed boards with no snipe. These

combo machines don't sacrifice performance, and they don't command a steep premium. Costs range from \$2,500 to \$4,400, not much more than a pair of conventional machines. An 8-in. jointer costs



MINIMAX USA FS 30 SMART

www.minimax-usa.com
866-975-9663

List price: \$4,400

Power: 230v, 4.8 hp

Jointer bed length: 59½ in.

Footprint: 64 in. by 36 in.

Weight: 650 lb.

Changeover time: 50 sec.

Cutterhead: Tera standard.
Replacement knives, \$45 per set. Euro-style cutterhead guard, \$275.

MiniMax has the fastest changeover

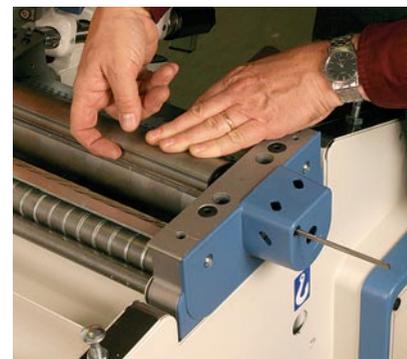
The MiniMax USA has two standout characteristics: It has the same type of swing-away cutterhead guard found on conventional jointers, and it comes with Tera knives as standard equipment. These disposable knives are extremely easy to change and are held in place with wedges and centrifugal force, so they need no fussy adjustments, as conventional knives do.

This machine has other strong points. It takes less than a minute to change modes. That's mainly because the planer bed must be lowered only 3¾ in. (38 cranks) to accommodate the dust hood. The 59½-in. jointer table is one of the longest. It also has the best fence, mounted to a bracket attached to the end of the infeed table. When you switch from jointing to planing, you just lift off the fence in one motion and stow it nearby. (Fences on the others must be loosened, slid to one side, and locked there.) It's also the only one with a stop to prevent it from deflecting sideways under lateral pressure.

I found two small drawbacks. One, the MiniMax has two dust-collection ports, so you have to remove and reattach the dust-collector hose at every changeover. Two, the crank that moves the planer bed works counterintuitively—clockwise to lower, counterclockwise to lift. It fooled me for a while.



Easy off. The MiniMax fence lifts off, easing the changeover from jointing to planing. It's also the easiest to set for angled jointing.



Quick change. Tera knives, standard on the MiniMax, are the easiest to change because they index themselves perfectly.

Hammer is well-built

The Hammer is very nearly the equal of the MiniMax USA. It's a well-engineered, well-made machine that's a pleasure to use. Its \$3,582 list price makes it worth serious consideration.

One useful feature on the Hammer is the gravity-actuated stops that prevent the jointer tables from dropping. I also like the height of the jointer tables. At 33½ in., they're 2 in. lower than the MiniMax and 1½ in. lower than the Rojek. For me, the reduced height made it easier to work around the Euro-style cutterhead guard.

Cartridge knife inserts—the only type available for the Hammer—are nearly as easy to change as Tensa knives. You loosen a set of locking screws, remove the cartridge, reverse or replace the disposable knife, reinstall it in the cutterhead, and tighten the lockscrews—with no adjustments needed.

On the negative side, the Hammer has a shorter jointer table than two of the others. Changeover takes a little more than a minute and entails 75 turns of the crank to move the planer bed.



Crossing the bridge. The Hammer and the Rojek have a T-shaped guard. It takes a little practice to learn to maneuver over the guard when jointing.

Pretty quick change. Double-edged cartridge knife inserts are easy to change and reset without having to make lots of tiny adjustments.



HAMMER A3 31

www.felder-usa.com
866-792-5288 (East Coast)
800-572-0061 (West Coast)

List price: \$3,582

Power: 230v, 4 hp

Jointer bed length: 55 in.

Footprint: 61 in. by 27 in.

Weight: 660 lb.

Changeover time: 1 min. 3 sec.

Cutterhead: Quick-change cartridge. Replacement knives are \$31 to \$57 per set.

Other accessories:

Jointer-table extension, \$160
Handwheel with digital readout for planer height, \$67

as much as \$1,700; a heavy-duty planer costs \$800 to \$1,200. A conventional 12-in. jointer—a behemoth next to these combos—costs about \$4,000 all by itself.

How different are they?—Combos aren't radically different from conventional jointers or planers, but it takes time to get used to them.

You have to change some shop practices to use these machines effectively. It's much more productive to do all the jointing for a piece, then change over to do all the planing. Of course, sometimes you have to joint and plane a single piece, or joint an edge when the machine was last used in planing mode. When you do, you'll encounter

an unfamiliar setup step that may seem tedious, especially at first (see "Jointer to planer in 60 seconds," p. 58).

If you're accustomed to a jointer with a massive cast-iron fence and a swing-away guard over the cutterhead, these combo machines will seem very different. Most have a sliding cutterhead guard, often

Rojek offers no-frills performance

This is a moderately priced, no-nonsense machine that performs well. The jointer table is a generous 59 in. long. But the Rojek lacks some of the refinements of the MiniMax and the Hammer.

For one, its standard cutterhead knives, held in place with traditional jackscrews and locking gibs, take time and patience to install accurately. Rojek supplies a decent dial indicator to help set the knives. You can also outfit the machine with a Tersa cutterhead, an option that I recommend.

For another, the 315 must be plugged in to change the knives. A switch setting lets you override a motor brake and rotate the cutterhead; it doesn't work if you unplug the machine. I dislike that type of design because of the chance—however remote—that you could accidentally start the machine.

The third big shortcoming is changeover time. I averaged 1 minute, 20 seconds, time spent mainly moving the planer bed the 7½ in. (90-plus cranks) required to accommodate the dust hood.

There were other, minor annoyances. The power switches, on the left end of the front panel, are in a slightly inconvenient position for planing because you have to reach around the forward-tilted tables to hit the switch. And the instruction manual is the worst of the lot.



ROJEK MSP 315

www.rojekusa.com
800-787-6747

List price: \$3,100

Power: 230v, 5 hp

Jointer bed length: 59 in.

Footprint: 60 in. by 47 in.

Weight: 569 lb.

Changeover time: 1 min. 20 sec.

Cutterhead: Four-knife cutterblock standard. Replacement knives, \$90 (Tersa knives, \$99). Optional 3-blade Tersa head, \$356

Other accessories:

Planer-bed extension, \$179
Jointer extension, \$190



The opposite way. The Rojek's jointer tables tilt to the front, unlike the tables on the other machines. When planing, you have to reach around the tilted outfeed table to reach the power switch.



No quick change. To loosen the gibs holding the Rojek's knives in place, you need a hammer and a block of scrap. Fine-tuning the knife adjustments takes patience.

called a bridge guard, which is designed to let stock pass beneath it when face-jointing a board. (Only the MiniMax has a swing-away guard.) Bridge guards are adjustable, so you can move them away from the fence for edge-jointing.

I had to get used to passing wide stock beneath the bridge, then reaching over

it with my push blocks as I moved the stock to the outfeed side of the cutterhead. But once I'd mastered those moves, I appreciated having a guard that covered the cutterhead completely.

The fences on these jointer/planers are aluminum extrusions. They hold the angle you've set resolutely, but most can

flex slightly under lateral pressure (the MiniMax fence has a stop to prevent flexing). That doesn't affect the accuracy of the jointing.

The bottom line

All the jointer/planers are well-made machines that perform their two tasks very

Rojek's low-cost alternative

This is a slightly smaller, simpler version of the Rojek MSP 315. The jointer beds are fixed, not pivoting, a design that makes it harder to set the cutterhead knives properly. Controls, cutterhead, and fence are essentially the same on both machines.

Changing from jointer to planer means raising or lowering the planer bed and moving the dust hood. When planing, the hood covers the cutterhead and a bolt holds it to the fence. When jointing, the hood rests on the planer bed, which you raise to press the hood in place. The changeover is fussy and takes a little over a minute.

The dust-collection setup trades simplicity for effectiveness. Plenty of large shavings miss the hood, littering the planer bed and surrounding nooks and crannies. Cleaning out the mess quickly becomes tiresome. The other machines have better systems.

Because the jointer bed doesn't swing out of the way, the overhanging outfeed end intrudes when you're feeding stock into the planer. It's an annoyance, but not a hazard. The 310 has a jointer bed that's barely 50 in. long. Extensions, a \$190 option, also fit the 315.



ROJEK MSP 310M

www.rojekusa.com
800-787-6747

List price: \$2,500

Power: 230v, 3.6 hp

Jointer bed length: 49½ in.

Footprint: 52 in. by 36 in.

Weight: 534 lb.

Changeover time: 1 min. 9 sec.

Cutterhead: Four-knife cutterblock standard. Replacement knives, \$90 (Tersa knives, \$99). Optional 3-blade Tersa head, \$356

Other accessories:

Planer-bed rollers, \$179

Jointer extensions, \$190



Hangover. The Rojek's jointer table limits your access and view when planing.



Dust collection one. For jointing, the dust hood fits underneath the cutterhead and is clamped in place by the planer table.



Dust collection two. For planing, the dust hood sits on the jointer table over the cutterhead, held with a bolt in the fence. This low-tech design isn't very effective.

well. Some small design details account for the differences among them. The boxes on these pages give the specifics.

The Hammer is clearly the best value at about \$3,600. It's a well-made machine that's a pleasure to use, and its knives are easy to change. But its fence isn't quite as handy as the one on the MiniMax.

The Rojek machines are the least expensive. They perform the basic functions of planing and joining, but are a little more awkward to use.

The best overall—but only by a nose—is the MiniMax, mainly because it has the best overall fence design. It's the easiest to handle when changing from jointer to planer

mode, and the easiest to adjust for different angles. A standard Tersa cutterhead is another plus, as is the machine's quick changeover time and long jointer fence. But at \$4,400, the MiniMax is also the most expensive jointer/planer tested. □

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