

Laminate Trimmers

The best machines are stable, easy to use with one hand, and don't require extra tools to adjust

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How many routers do you need? I thought four were enough, but when I needed to rout into a corner recently, none of the four could handle the operation. I had to add a laminate trimmer, a small router, to my collection. Now the laminate trimmer is what I reach for most often when I have to do any light-duty task, such as rout out a hinge mortise or plow a groove for an inlay. Most of the time, I keep a 1/8-in. roundover bit in the tool just to ease the edges of cauls headed for the vacuum bag or to take the sharp edge off a piece of lumber. Plus, the trimmer is small enough that I can use it one-handed.

Single-base models



**VIRUTEX
FR92D**



Advantages: This is a heavy-duty production tool. The fit and finish were excellent, and the tool was comfortable to use with either hand.

The open base made it easy to see where the bit was cutting. A large knurled knob made vertical adjustments both easy and precise. The tool comes with useful accessories, including a fence that doubles as a circle-cutting jig (up to a 10-in. radius) and a jig for cutting hinge and lock mortises. The trim guide is the beefiest of the bunch, and it was the easiest to adjust. **Disadvantage:** Virutex, a Spanish company, is well known in Europe. But because you have to order directly from the American distributor, you can't shop around for bargains.



A fence that becomes a circle cutter. The fence on the Virutex, when inverted, uses a steel dowel as a pivot point to cut circles.



**MAKITA
3707FC**



Advantages: This lightweight tool was a pleasure to hold and easy to use. The base is clear plastic

with two lights that illuminate the worksurface, so I could easily see where I was cutting. Although the switch is on top, the tool still could be used with one hand. An electronic speed control kept the speed constant even while the tool was under load. The trim guide was easy to install and remove and could be adjusted tightly. This unit ran smoothly and was relatively quiet.

Disadvantages: The vertical-adjustment control was inexact but adequate.



A better view. A clear plastic base and sub-base and lights built into the motor housing improve your view of the cutting action.



**PORTER-CABLE
310**



Advantages: Porter-Cable's production trimmer is heavy duty, and

the design is very stable. The round body was comfortable to hold right-handed, and the switch is in a convenient location. This tool had the best vertical adjustment of all the trimmers tested. An adjustment ring screws up and down on the body, and then locks into the base, allowing for easy micro-adjustments. This tool accepts the standard Porter-Cable edge-guide kit, and the subbase accepts standard Porter-Cable templates.

Disadvantages: The subbase is black and has a small hole, which made it difficult to see what I was cutting. For left-handers, the clamp knob can get in the way.



Precise vertical adjustments. The PC 310 trimmer has an adjustment ring that allows you to fine-tune the depth of cut.

When I went shopping for a laminate trimmer, I found that there were two categories: Those that were packaged to be used mostly for plastic laminate work, and those that weren't. Trimmers for laminate work have multiple removable bases, so the bit can reach into corners, and the trimmer can be

adjusted to cut at odd angles. Most of them also have a seaming base, which is used to make a nearly perfect joint between two pieces of laminate.

In the second category are basic single-base routers, and most of them hold the bit only perpendicular to the worksurface. These routers can be used

for laminate work, but they don't perform all of the functions of the multiple-base machines. In my opinion, the simpler single-base units are preferable for furniture making.

Many of the tools have a trim guide, a nice feature. The guide is an adjustable L-shaped arm that hangs off the base, with a

bearing at the lower end. Because you can align the bearing with the cutting edge of the bit, you don't need a bearing on the bit—any router bit will do. Manufacturers claim that the trim guide takes side pressure off the bit, yielding cleaner results. But using the trim guide also means that you can fine-tune the depth

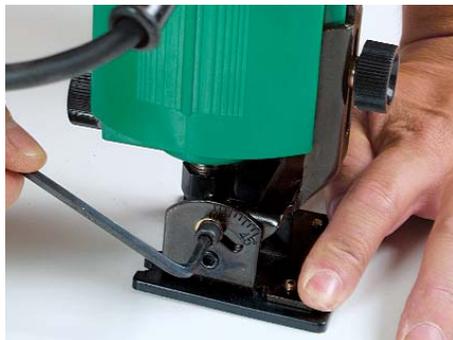
Single-base models (continued)



**HITACHI
TR6**

Advantages: The Hitachi is the second-least-expensive trimmer of those we tested.

Disadvantages: The tool was uncomfortable to use. It was too big to hold with one hand, and the two knobs that raise and lower the base and hold the trim guide in place dug into my palm. I also couldn't access the switch without using both hands. The small base and offset motor housing make the tool unstable. While the base allows for a tilt cut, there is no 90° stop, so I had to measure the angle each time. The base on the tool I tested was twisted and wouldn't sit flat, and the vertical-adjustment screw kept slipping in the threads. Also, the motor had a very loud whine.



Big motor with a small base. On the Hitachi, the ratio of the footprint to its offset-shaped motor housing makes this tool tippy.



**PORTER-CABLE
309**

Advantages: This bare-bones trimmer is well made and heavy duty, and it felt good in my hand. The switch is conveniently placed.

Disadvantages: Left-handers will be less enthusiastic about this tool because the adjustment knob will get in their way. The trimmer's round, squat body has a small subbase (or baseplate), making it a little unstable. Vertical adjustments, made by loosening a large knob and moving the motor housing within the base, were imprecise. It was hard to see where I was routing because the subbase is black and has a small hole. This could be a good tool for a production shop dedicated to a single function, but it's too limited for multiple tasks in a hobbyist setting.



Right-handed bias in the design. The knob that secures the motor to the base makes the tool difficult to use for left-handers.



**RYOBI
TR31**

Advantages: The Ryobi is an inexpensive, lightweight, all-plastic unit. The unit was stable and comfortable to

hold right-handed. An alternate two-handle base gave me more control when using this router, although it should be used for only light-duty tasks.

Disadvantages: If you hold the tool with your left hand, a wing nut will get in the way. This is the only trimmer that doesn't have a removable collet, so if it is ever damaged, the whole tool will need to be replaced. The motor is held in place with a wing nut that was difficult to tighten and loosen. Even when it was fully tightened, I was able to change the vertical setting by pushing down on the body.



Locking in the vertical adjustment. The motor is secured to the base with a wing nut that can be difficult to tighten.

of cut off an edge, adjusting the bearing position for the exact profile you want to shape.

A shop-tested comparison

I evaluated 10 of these trimmers, using them for several months in the cooperative shop where I work. I paid special attention to how the tools felt in

my hand and how easy they were to use. Initially, I assumed that usability would be a highly subjective judgment, but I was proven wrong. During the time my four shopmates and I were using these trimmers for everything from kitchen cabinetry to fine furniture, there was keen competition for a select few of

them, while others sat on the shelf gathering sawdust.

What made the favored tools user-friendly? I found that the trimmers in demand were popular because they were light enough to be used with one hand; had a switch that could be operated with the hand holding the tool; didn't have to be taken

apart for bit changes; gave the user a clear view of the cutting action; didn't have lots of little parts that could get lost or damaged; and let the user keep the bit perpendicular to the router base while adjusting the depth of cut.

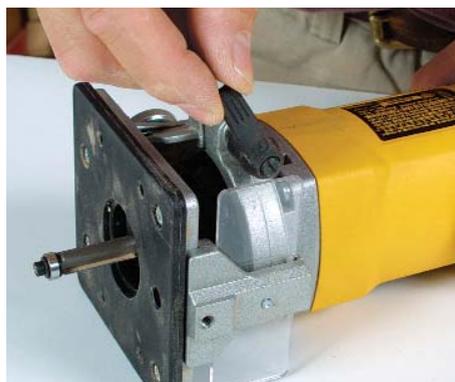
This last point requires a little explanation. When working

Multiple-base models



Advantages: The DeWalt is nicely balanced and has a side switch that can be operated with one hand. Its bigger base makes it stable, and each base is held in place with a finger-locking arm, so there are no screws to lose. The trim guide was easy to install with captive screws that won't get lost, and the adjustment was tight and true.

Disadvantages: I couldn't change the bit without taking off the base. Because the spindle-lock button is spring loaded, considerable pressure is required to hold it in place, which made the operation awkward. When making vertical adjustments, tightening the base can change the bit's depth and position. While the plastic storage case is well made, the base has to be removed to store the tool.



User-friendly features. On the DeWalt, the base is secured to the motor with a finger-locking arm, which is quick and easy to use.



Advantages: The Bosch felt good in my hand—squat and well balanced with a good-size base. The case is all metal, with plenty of space for the components and a separate space to hold tools and screws while you're changing bases.

Disadvantages: In general, this unit was difficult to adjust and assemble. The four dedicated bases must be screwed to the motor housing. The vertical adjustment was sloppy: To raise or lower the unit, I had to loosen the knob that holds the vertical position; but tightening the knob again changed the position of the bit. The trim guide, held in place with two screws, was difficult to adjust. And I couldn't change bits with both the base and trim guide in place.



Adjustments require a screwdriver. The Bosch kit comes with four bases, all of which must be secured to the motor with screws.



Advantages: The Freud fit comfortably in one hand and has a well-positioned switch. The three dedicated bases can be changed by loosening a screw without taking it out, so there is less chance of it getting lost.

Disadvantages: The unit's tall body and small base make it feel unstable. Control over the bit height on the 90° base was difficult: After loosening a knob and using an adjustment screw to raise and lower the base, it was difficult to tighten the knob by hand. The trim guide is held in place with two loose screws (not held captive with a nut), and it was difficult to adjust. The tilt base is marked in 5° increments, so anything more precise would need to be tweaked through trial and error. No laminate seaming base is included. This machine requires too many tools: Phillips-head and straight screwdrivers, four hex wrenches, and an Allen wrench.



Dial the speed to what you want. The Freud is the only trimmer with a variable-speed motor.

Multiple-base models (continued)



**PORTER-CABLE
97311**

Advantages: This Porter-Cable model felt great in my hand, the switch is well placed, and the machine is stable. The four dedicated bases are held to the motor with one large knob, which also is used for vertical adjustments. The bases accept standard Porter-Cable templates, and the kit needs only one wrench. The storage case has a place for everything. The offset base was easy to put on.

Disadvantages: The round vertical-adjustment knob, which was only slightly knurled, was difficult to tighten. Vertical adjustment for the 90° base was hit or miss: The bit fell and tilted as I adjusted the height, then rose and straightened as I retightened the knob. The trim guide had to be adjusted with an Allen wrench, which made the job difficult. The tilt base is marked in 5° increments, so anything more precise would need to be tweaked through trial and error.



Securing the bit. To change bits on this Porter-Cable trimmer, you need only one wrench because you can lock the spindle by pushing a button on the side of the motor housing.

MAKE/MODEL NO.	PRICE	AMPS
SINGLE-BASE MODELS		
HITACHI TR6 800-829-4752 www.hitachi.us	\$110	4
AUTHOR'S CHOICE BEST VALUE MAKITA 3707FC 800-462-5482 www.makita.com	\$150	4.4
PORTER-CABLE 309 800-321-9443 www.portercable.com	\$125	3.8
AUTHOR'S CHOICE BEST VALUE PORTER-CABLE 310 800-321-9443 www.portercable.com	\$159	4
RYOBI TR31 800-525-2579 www.ryobitools.com	\$70	3.8
AUTHOR'S CHOICE BEST OVERALL VIRUTEX FR92D 800-868-9663 www.virutex.com	\$250	5.2
MULTIPLE-BASE MODELS		
BOSCH 1609AKX 877-267-2499 www.boschtools.com	\$250	5.6
AUTHOR'S CHOICE BEST OVERALL DEWALT DW673K 800-433-9258 www.dewalt.com	\$180	5.8
AUTHOR'S CHOICE BEST VALUE FREUD FT1000ET 978-264-9900 www.freud-tools.com	\$140	7.5
PORTER-CABLE 97311 800-321-9443 www.portercable.com	\$230	5.6

with laminate sheets, it's best to sand or file the edges after trimming them, which masks any unevenness. But in furniture making—for example, cutting inlay grooves or hinge mortises—you're shooting for a finished operation as the bit makes a cut. You want a hinge mortise at exactly the right depth; you don't want to have

to shim it out or cut it deeper with another pass. A bit that stays perpendicular while its depth is adjusted is your best bet for getting the cut right the first time.

In general, I was disappointed with many of these laminate trimmers. Of the 10 tools my shopmates and I used, I'd characterize two of them as good

SPEED (RPM)	EASE OF VERTICAL ADJUSTMENT	EASE OF BIT CHANGES	EDGE GUIDE INCLUDED	CASE INCLUDED	TEMPLATES INCLUDED	TILT BASE	CORNER BASE	SEAMING BASE
30,000	Poor	Good: two wrenches	Yes	No	No	Yes	No	No
26,000	Fair	Good: two wrenches	No (but available as accessory)	No	Yes	No	No	No
28,000	Fair	Good: two wrenches	No (but available as accessory)	No	Yes	No	No	No
27,500	Good	Good: two wrenches	No (but available as accessory)	No	Yes	No	No	No
23,000	Poor	Good: two wrenches	No	No	Yes	No	No	No
30,000	Good	Good: two wrenches	Yes	No	Yes	No	Yes	No
30,000	Fair	Fair: two wrenches	Yes	Yes	Yes	Yes	Yes	Yes
30,000	Fair	Fair: one wrench with spindle-lock button	Yes	Yes	Yes	Yes	Yes	Yes
20,000 to 30,000	Fair	Good: two wrenches	Yes	Yes	No	Yes	Yes	No
30,000	Fair	Good: one wrench with spindle-lock button	No	Yes	Yes	Yes	Yes	Yes

and two as adequate. The other six got a thumbs-down from all five of us who used them.

Recommendations

None of these laminate trimmers does everything. If you just need a tool for furniture work, I wouldn't recommend any of the multiple-base models. But if I were working with

plastic laminate and needed to use all of a multiple-base tool's functions, the DeWalt would be my first choice because its attachment screws can be tightened by hand.

If you need a small router for making furniture and cabinets, I recommend the Virutex; the Makita and the Porter-Cable 310 tie for second place. Price dif-

ferences aside, the Virutex is the best choice if you want the extra mortising and circle-cutting jigs that come with it. If you don't, the Makita is a wonderful tool to use because of its clear-plastic base and the two lights that illuminate the cutting action. If you just want a basic, heavy-duty trimmer, the Porter-Cable 310 is ergonomically very

comfortable and has the best vertical-adjustment mechanism of all the tools I used. You could always make your own clear base for it.

_____ *Kim Carleton Graves builds furniture and cabinetry at his shop in Brooklyn, N.Y. Masha Zager contributed to the preparation of this article.*