

BUYING A **Plunge Router**



The best tools plunge smoothly, provide precise adjustment, and have easy-to-reach controls

In 20 years working as a finish carpenter and cabinetmaker, I've acquired a lot of tools, but the most versatile is the plunge router. I've used it to make moldings, do sink

by David Frane

cutouts, cut curved casings, and mortise door hardware. You can do many of these things with a fixed-base router, but not as safely or easily as with a plunge router. With a fixed-base router, depth settings are a one-shot deal. Each time you release the lock, the setting is gone for good. But plunge routers have stops that allow you to change the depth of cut without losing the original setting.

Advantages of Plunge Routers

It might sound strange, but there are good reasons for changing depth

settings between or even during cuts. It's not always practical to make cuts in a single pass. For one thing, the router might not have the power to remove all the stock at once. Or the strain of doing so might break the bit or splinter the material. A plunge router allows you to make a series of shallow cuts which put together add up to a much deeper cut.

Safety. A plunge router can also be safer to use than a fixed-base router. At the end of a cut, it's easy to release the depth lock and retract the bit into the base. This allows you to put the router down without worrying that the bit's going to hit something before it stops spinning.

Like most people who learned on a fixed-base router, I know how to tilt a spinning bit into the work. But I never liked doing it, especially on cuts where the bit projects well beyond the base. You're much less likely to have an accident or ruin a piece if the base is firmly against the stock, and it isn't when you tilt a router.

More Power Means More Weight

All things being equal, more power is better. But power comes with a price tag, partly in dollars but mostly in weight. There's a huge difference between handling a router that weighs 6 pounds and handling one that weighs 16 pounds. I own three plunge routers, and the heavy 3-hp unit is almost always in a table. Every now and then I need to use it freehand, but most of the time I use a lighter 2-hp model.

Smaller 1½-hp and 2-hp routers work fine in a table, but they don't have the continuous cutting power of 3-hp units. So if you plan to do a lot of heavy cutting, like making wide dados in hardwood, machining Corian, or cutting templates in dense materials, buy a big powerful router. But if you do a broad range of carpentry tasks, such as shaping edges, dadoing for shelving track, and mortising hinges, you'll be happier with a smaller router.

The lightest router I tested was Festool's 6-pound OF1000E. The heav-

Bosch 1613AEVS



The router I tested was a pre-production model of the 1613AEVS, a new and improved version of the 1613EVS. The 1613AEVS has exceptionally smooth plunge action and a quiet motor with soft-start circuitry. Maximum bit diameter is 1½ inches with the sub-base on and 35/16 inches table mounted. The best feature on this tool is the fine-adjustment mechanism. The micrometer-style knob has 5/8 inch of travel, and is easily adjusted in increments as small as 1/256 of an inch, about half the thickness of a dollar bill. The T-handle grips and built-in trigger switch haven't changed from the earlier model. Improvements include tool-less bushing installation, stiffer spring loading on the plunge lock, and a roomy plastic case.

DeWalt 621



The DW621 is a thoughtfully designed and beautifully made router. The first thing you notice is the oversized plunge leg that doubles as an exhaust port for dust collection. Unlike other routers with hollow dust-collecting bases, this one exhausts to the top of the machine, which makes it easier to keep the hose out of the way. The plunge action is extremely smooth, and I particularly like the plunge lock, which is activated by twisting the left-hand grip. A switch and safety are built into the right-hand grip. The switch takes some getting used to, but activating quickly becomes second nature. The plunge stop has tight-fitting rack-and-pinion gears and a superior fine-adjustment knob that's graduated to 1/128 inch. For \$20, you can get a height-adjustment knob that allows you to mount this tool in a table. The optional fence costs \$35, but is well worth the money.

iest was Porter-Cable's 7539, which weighs in at 17.25 pounds. Most 1½-hp and 2-hp models are in the easier-to-handle 9-pound to 12-pound range.

Improved Control Circuitry

The biggest differences between the routers sold today and the ones you could get a decade ago are the switches and electronic control circuitry. Nowadays, most routers, but especially the bigger ones, have variable speed motors.

Speed. The main reason to regulate motor speed is to match the rpm to the

diameter of the bit being used. Look at the average carpenter's collection of bits and you're likely to see straight bits in the ¼-inch to ¾-inch range, along with an assortment of smaller round-over and flush trimming bits. I own close to 100 bits but rarely use anything over 1¼ inches in diameter. Small bits are safe and effective to use at speeds in the range of 20,000 to 24,000 rpm. Large-diameter bits should be run at lower speeds, which is why routers with the power to drive big bits are generally equipped with speed control. A single speed is fine for

DeWalt 625



The DW625 has clean plunge action and a smooth, powerful motor with soft-start circuitry. It's a solid, well-made machine that's lighter and more compact than other routers in its class. The depth stop rod rides up and down on a well-machined rack-and-pinion mechanism. There's a fine-adjustment knob attached to the bottom end of the rod. It does the job, but would be easier to use if it had finer threading. Unlike most routers, the switch is on the left and the plunge lock lever is on the right. If you want to mount it in a table, you'll need to spring for an optional \$25 depth-control knob.

Fein RT-1800



Fein is best known in this country for making triangle sanders and dust collection vacuums. You may not have seen their plunge router because it's been on the market only about a year. It's a smooth-running, powerful machine without a lot of bells and whistles. The depth stop rod is attached to a rack-and-pinion mechanism that's controlled by a large wheel on the motor housing. The wheel's widely spaced $\frac{1}{16}$ -inch graduations are easily split to make $\frac{1}{32}$ -inch adjustments. It's one of the better-made rack-and-pinion systems, but lacks a separate fine-adjustment mechanism. The RT-1800 has a 3-inch plunging depth and will accept 3-inch-diameter bits. The plunge-limiting knob could double as a depth-control knob but is so tiny it's hard to get at under a table.

Festool OF1000E



The fit and finish of the OF1000E are as good as it gets. And the unusual design makes it clear that a lot of thought went into every feature. On one side is a pistol grip that houses a trigger switch. Across from it is a knob that functions as both grip and plunge lock. A simple sliding plunge stop is coupled to an extremely precise fine-adjustment mechanism. The motor is smooth, incredibly quiet, and surprisingly powerful for its size. But what this tool is really about are the accessories. My favorite is the FS guide rail, an aluminum straightedge that the router clips onto and rides like a rail. Cabinetmakers may want to consider the optional 32mm line-boring jig. This specialized tool has a small motor and collet but a large price tag.

small routers because you don't use them with large bits.

The only router I tested that doesn't have variable speed was Porter-Cable's 693PK.

Soft start. When I first started using routers, you flipped the switch and the motor went to full speed within a few thousandths of a second. As a result, routers tended to jump or torque when you turned them on. And the bigger the motor, the more the router jumped.

Most modern routers have something called soft-start circuitry. Instead

of going immediately to full speed, the motor ramps up in stages. I never actually timed it, but I doubt it takes much more than a second to reach operating speed. So soft-start routers don't jerk at startup, which is good because it's safer for the operator and puts less wear and tear on brushes and bearings.

Brakes are common on miter saws, but you almost never see them on routers. Only two plunge routers have brakes, Makita's 3612C and Porter-Cable's 7529. The Porter-Cable brake is definitely superior, because it allows the motor to wind down gradually. It

takes only a second to stop, but the action is smooth, like soft start in reverse. By comparison, Makita's router jerks to a sudden halt the second you hit the switch.

Feedback and overload circuitry. Most variable-speed routers are equipped with feedback circuitry designed to maintain a constant speed. It does this by raising and lowering the power input in response to the cutting load. For example, if you lower the feed rate, the router will sense it and cut the amount of power going to the motor. This prevents the bit from revving to a



Grip-mounted triggers, like the ones on the Bosch (left) and Porter-Cable 7529 (right) routers, are more convenient and safer than the housing-mounted switches on earlier plunge routers.

higher rpm. If you raise the feed rate or hit a denser section of material, the circuitry senses it and delivers more juice to the motor to keep it from slowing down. You can't see it, but you can hear and feel that the motor is running at a constant speed, and that produces a better-quality cut.

Stationary tools, like table saws, usually have overload switches, which cut power to the motor when it gets too hot or draws too much current. This feature is not very common on hand-held tools,

which is why they burn out sooner. The list of routers that have overload switches includes the DeWalt DW625, Fein RT-1800, Festool OF1000E, and Porter-Cable's 7529 and 7539.

On/off switch. On most power tools, the switch is built right into the grip, but that's not always the case with plunge routers. My favorite models have their switches in the grips, making them easy to turn on, and even more important, easy to turn off in an emergency (see photos, above). If the switch is not in the grip, it should be where you can get at it without shifting your grip.

Plunge Action

Depth settings on a plunge router are adjusted by sliding the motor housing up and down the posts that connect it to the base. To maintain settings, you clamp the motor onto one of the posts by activating a plunge lock. It's important for the slide action to be smooth and consistent, because it's easy to make mistakes when the housing sticks or drags on the posts. The lift springs should be strong enough to raise the bit but not so strong that you have to muscle it down.

Plunge stroke. The amount of travel between the high and low positions of the motor determines the router's plunge stroke. For example, if the tool has a 2-inch range of motion, a bit that



On most plunge routers, pivoting the turret under the depth stop incrementally raises and lowers plunge depth.

Freud FT1000EK



Picture a laminate trimmer kit where a plunge base has been substituted for the offset base and you're looking at Freud's FT1000EK. The motor looks diminutive in a full-size plunge base, but its 7.5-amp rating puts it in the same power range as 1¹/₄-hp and 1¹/₂-hp models. By comparison, the average laminate trimmer has a 5.0-amp motor. The base plunges smoothly, but the lift springs are very stiff. The FT1000EK has simple knob-shaped handles and a basic sliding stop rod. The slide-style switch is well within reach of the grip. This router has a variable-speed motor with soft start. It comes in a plastic case along with straight and tilting bases. You also get a full-size fence and an add-on dust collection port.

just touches the stock at the up position would be 2 inches into it at full depth of cut. Plunge capacity is not a make-or-break issue unless you make a lot of cuts that start out shallow but end up deep. The only time it matters to me is on those rare occasions when I install mortise locks or site-fabricate doors.

Most plunge routers have a stroke of around 2¹/₂ inches, but Fein's RT-1800 and Porter-Cable's 7539 will both travel 3 inches.

Setting Depth of Cut

Most carpenters use plunge routers the same way they'd use a standard base router. By that, I mean they never

Freud FT2000EP



This isn't one of the best plunge routers on the market, but it's a lot of tool for the money. It comes with a simple functional fence and a large depth-control knob that's easy to grab. You can fine-tune plunge settings by turning the threaded plunge rod, or make big adjustments by hitting the quick-release button. There's nothing special about the switch or plunge lock, but they're both easy to reach. The fit and finish aren't bad, but the plunge action is stiff and the motor is louder than most.

Hitachi M8V



This router is a small version of the M12V. Unlike Hitachi's larger router, this one does not have soft start. But with its lighter 1.5-hp motor, the M8V does not jerk when you turn it on. This is a nice little router, but it's been around since the mid-'90s, so some of its features seem dated. There's nothing wrong with the stamped-steel lock lever or the housing-mounted switch. But for what it costs to buy this router, you could get a 2-hp model with features like grip-mounted controls and a fine-adjustment mechanism.

Hitachi M12V



This is a lot of router for the money, in part because it comes with accessories like a depth-control knob, bushing, and fence. The M12V has clean plunge action and a smooth, powerful motor. It's a good router to put in a table, as long as you don't plan to use oversized bits. That's because the bushing mounts prevent you from using bits that are more than 2 inches across. Although it has soft-start circuitry, the router jumps a bit when you hit the switch. The rack-and-pinion depth stop is adequate, but lacks a fine-adjustment mechanism. That said, this is a solid, reliable machine that has withstood the test of time. It hasn't got all the latest bells and whistles but is a reasonable choice for someone who wants to get maximum power for minimum dollars.

release the plunge lock when the bit is spinning. There's nothing wrong with this, but it's a sign that they're not taking full advantage of the plunge router's capabilities.

Stop rods. If you're going to plunge cut, you'll need to use the depth stop rod, which slides up and down on the motor housing and limits the depth of plunge by bottoming out on the base. Raising the rod allows the bit to plunge deeper; lowering the rod prevents the bit from going quite as far. The bottom end of the rod lands on a turret on the base of the router. The turret pivots so that it can be set to a number of different heights (see

photo, previous page). If you index the final depth of cut off the lowest turret setting, you can use the higher settings for intermediate cuts.

In its simplest form, the stop is a smooth metal rod that slides up and down by hand and is clamped in place with a thumbscrew. The Porter-Cable 693 and 7539 and the Freud FT1000 use this method.

Threaded rods. On some models, the stop is a piece of coarsely threaded rod. To make a big adjustment, you push a quick-release button and slide the rod. More precise adjustments are made by twisting the rod to thread it up or down. It's not flashy, but it's a

simple effective way to make an accurate setting. Freud's FT2000EP and Makita's 3612C both have threaded stop rods.

Rack-and-pinion. Nearly half of the routers I tested use a knob-activated rack-and-pinion mechanism to raise and lower the rod. However, most of them are hard to adjust with precision because of slop in the gears. The only exceptions are the DeWalt models, both of which have tight-fitting gears.

Fine Adjustment

Many plunge routers have separate mechanisms for making fine adjustments to the position of the rod. Although



Many routers, like the DW625 shown here (left), use a rack-and-pinion mechanism to raise and lower the depth stop rod. Additional fine adjustment is provided by the thumbscrew at the bottom of the stop. The fine-adjustment mechanism on Bosch's 1613AEVS (above) works independently of the plunge lock, allowing fine adjustment in increments of $\frac{1}{256}$ inch.

you can do good work without a fine-adjustment mechanism, it's easier if you have one.

Both DeWalt routers have mechanisms that lengthen or shorten the rod after it's locked in place. The DW625 relies on a large thumb wheel that threads into the bottom of the stop rod (see photos, above). The DW621 uses a knob attached to the top of the rod. It's easy to make ultra-precise adjustments because the knob controls a stop that rides up and down on very fine threads.

Festool's OF1000E uses a simple sliding rod that's held in position by a float-

ing clamp mechanism. The clamp itself can be raised and lowered with great precision simply by turning a thumb wheel. The threading is extremely fine, so it's easy to make minute adjustments to the plunge depth.

Strictly speaking, Bosch's 1613AEVS doesn't even have a fine-adjustment mechanism on its stop rod. But it has something better — a knob that independently raises and lowers the motor housing, even when the plunge lock is engaged. You can use it in conjunction with the plunge rod or any other time you want to incrementally raise or lower the bit. Unlike other fine-adjust mechanisms, this one is useful when the router's in a table and when you're not using the stop rod.

Depth-control. Many routers, especially those intended for use in tables, are equipped with a depth-control knob. Threading the knob in increases depth of cut by pushing the motor closer to the base; threading it out has the opposite effect. A depth-control knob is a practical necessity for table-mounted use because it's nearly impossible to use depth stops and plunge action when the router is upside down.

Most carpenters who own routers equipped with depth-control knobs don't bother to use the plunge stop rod. Instead, they use the knob alone to raise and lower the bit. I used this



Shaft-lock mechanisms allow you to change bits with a single wrench.

Makita 3612C



This is a router that seems to have been around forever. It's the only 15-amp model I tested that does not have soft start. And it has the same kind of simple toggle switch that was common 15 years ago but that you rarely see now. I'm not knocking the retro features; I've done some of my best finish work with routers with fewer features than this one has. And the 3612C is not completely old-fashioned. It has a variable-speed motor and a threaded stop rod with a fine-adjustment mechanism. The motor is extremely powerful, but unfortunately Makita equipped it with an electric brake. I'm sure they intended this as a safety feature, but I found it a hazard because it makes the tool jerk to a sudden stop.

method for years, but it has a downside. It's a slow way to raise and lower the bit because you have to thread the knob all the way up and down. Even worse, it prevents you from cutting in steps because you can't retract the bit when the knob is up against the motor.

Plunge Lock

The plunge lock prevents the motor from sliding up and down the legs while you're cutting. It should lock firmly and be within easy reach of the grips. The large spring-loaded levers on the Bosch and all three Porter-Cable models are particularly nice because they automatically engage when you release them. My favorites are the lock-knobs that double

Porter-Cable 693PK



The 693PK is designed around a motor that's been in production since the dawn of time. This is what routers used to look like, what with the nearly all-metal casing, top-mounted toggle switch, and two-wrench collet. But that's the beauty of this machine. Everyone knows that the 6902 motors last forever, and among a certain group of tradespeople that's more important than cutting-edge features. The 693PK comes with two bases and a motor. Most people leave the standard base in a table and use the plunge base for freehand work. The plunge base is solid, but nothing fancy. It has a simple stop rod and a large spring-loaded plunge lock. Plunge action is smooth; it's the enclosed travel-limit rod that makes it sound raspy.

Porter-Cable 7529



The first thing you notice about the 7529 are the comfortable molded-plastic grips. The switch and safety are built into the right grip. The safety takes some getting used to, but after a while it's no big deal. This router has a hollow base and integral dust collection. Unlike other P-C models, it has a large opening through the base. The plunge action is smooth and the motor is powerful. I really like the brake, which works like soft start in reverse. A secondary switch on top of the motor housing makes it easier to operate the tool in a table. But the plunge rod is very basic and lacks what I consider a true micro-adjusting knob. It has something called a "micro plunge adjusting knob," but it's really just a miniature depth-control knob.

Porter-Cable 7539



Weighing in at 17.25 pounds, this is the Godzilla of plunge routers. This tool is nearly all metal, the only significant plastic components being the grips and motor housing end cap. This is an extremely powerful tool, which I've personally put in a table and used like a shaper. If you plan to do this, be sure to buy the optional depth-control knob. The 7539 has a large spring-loaded plunge lock and a grip-mounted trigger switch. However, the depth stop rod is pretty basic and hasn't got a fine-adjust mechanism. The standard sub-base is sized to accept a threaded bushing, so to use bits that are larger than 1 inch diameter you need to make or buy a larger base plate.

as handgrips on DeWalt's DW621 and Festool's OF1000E.

Collets. Most of the routers in this test, even some of the small ones, accept 1/4-inch and 1/2-inch collets. The better models come with both. A few routers come with 1/2-inch collets and give you an adapter sleeve for 1/4-inch bits. Whenever possible, it's a good idea to use 1/2-inch shanks because they're stronger and don't flex as much.

Very few routers still require you to use two wrenches to change bits. Most now come with shaft-lock buttons that allow you to do it with one (see photo, previous page). I don't think shaft locks make it any easier to change bits, but I

like them because it means there's one less wrench to keep track of.

Cords

When it comes to cords, longer is better. Who wants to use a 50-foot extension when all you need is another foot or two? Also, cords that are rubbery and flexible are easier to coil and less likely to get hung up than ones that are stiff and plastic-like. I asked a product manager at one of the tool companies how much money they saved by switching to cheaper cords and was surprised to hear that good cords cost maybe a buck or two more than lousy ones. So when I see a cheap plastic cord, it makes me nervous that corners were also cut on parts I can't see.

Accessories

The things that come with a plunge router are often as important as the parts that are permanently attached.

Dust collection. Ten years ago you couldn't buy a router with dust collection because there was no such thing. But nowadays collection systems are common. In most cases, dust collection is an afterthought, a plastic nozzle piece you screw to the top of the base. But in a few instances the system is integral to the tool. DeWalt pioneered integral dust collection on the DW621 (see photos, next page). Dust travels through a port in the base, up through an oversized plunge rod, and out through the vac hose you connect to

Plunge Router Specifications

Manufacturer	Model	Street Price	Weight in Pounds	Motor Rating in Amps	Motor Rating in HP	Speeds	Collets Supplied	Plunge Stroke in Inches	Cord	Place of Manufacture	Standard Accessories
Bosch	1613AEVS	199	9.7	12	2	11,000–22,000	1/4", 1/2"	2 1/4	10' rubber*	USA	plastic case, add-on dust collection, bushing, bushing adaptor, base alignment device, wrench
DeWalt	DW621	199	9	10	2.0	8,000–24,000	1/4", 1/2"	2 1/8	8' rubber	England	bushing adaptor plate, vac hose adaptor, wrench
DeWalt	DW625	259	11.25	15	3.0	8,000–22,000	1/4", 1/2"	2 7/16	9' rubber	Italy	bushing adaptor plate, add-on dust collection, wrench
Fein	RT-1800	350	12	15	3.25	8,000–22,000	1/2"	3	9' rubber	Italy	bushing adaptor plate, add-on dust collection, wrench
Festool	OF1000E	330	6	7.5	1.25	10,000–22,000	1/4", 8mm	1 7/8	13' rubber	Germany	hard-plastic case, edge-guide, dust collection fittings, wrench
Freud	FT1000EK	159	6.5**	7.5	n/a	20,000–30,000	1/4"	1 15/16	8' plastic-like	Spain	fence, standard base, tilt base, wrench, plastic case
Freud	FT2000EP	179	13	15	3.25	8,000–22,000	1/2", 1/4" sleeve	2 3/4	8' plastic-like	Spain	depth-control knob, fence, add-on dust collection, wrench, edge guide
Hitachi	M8V	215	6.4	7.3	1.5	10,000–25,000	1/4"	2	7' rubber	Singapore	wrench
Hitachi	M12V	209	11.7	15	3.25	8,000–20,000	1/2", 1/4" sleeve	2 7/16	8' plastic-like	Malaysia	depth-control knob, fence, bushing, bushing adaptor, wrench
Makita	3612C	249	13.2	15	3.25	9,000–23,000	1/2", 1/4" sleeve	2 3/8	9' rubber	USA	2 wrenches
Porter-Cable	693PK	199	11.5**	10	1.5	23,000	1/4", 1/2"	2 1/2	7' rubber	USA	standard base, 2 wrenches, case
Porter-Cable	7529	229	11	12	2.0	10,000–23,000	1/4", 1/2"	2 1/2	10' rubber	USA	wrench, dustcup
Porter-Cable	7539	299	17.25	15	3.25	10,000–21,000	1/2"	3	10' rubber	USA	2 wrenches

* The 1613AEVS I tested was a pre-production model. It's not clear that the same cord will be used on production models.

** Tool has multiple bases — this is what it weighs in the plunge base.



DeWalt's DW621 is one of three models with integral dust collection and the only one that ports to the top (above). Dust is drawn through the opening to the left of the bit and up through one of the plunge posts (right).



the top of the router. A similar system is used on the Festool and Porter-Cable 7529 routers, except the vac port is down on the base. It's a hassle to trail a vac hose, but if you have to, it's easier to keep the darn thing out of the way if it connects to the top of the tool. An add-on plastic port works about as well as an integral system, but it's the sort of thing that breaks when a tool is dropped.

Fences. A fence is essential. It allows you to dado, rabbet, and mill profiles with bits that don't have bearings (see photos, next page). It's more economical to buy a router that comes with a fence because tool companies charge a fortune for accessories. Optional



A fence is essential for many milling operations. Fences range from simple but effective edge guides (above left) to Festool's aluminum rail system, which makes long straight cuts easy (above right).

fences usually have more bells and whistles than factory standard fences. But any fence will do as long as it has some kind of fine-adjust mechanism, and most of them do.

Bushings are another essential accessory. They fasten to the bottom of the base and guide the router in or around templates. Hinge mortising jigs are designed to be used with bushings. And site-made jigs often work better when you guide with a bushing instead of the edge of the base. Porter-Cable makes bushings in a wide array of sizes. Retrofit kits are even available to put these bushings on competing brands of routers. That said, a single bushing is all most carpenters are ever going to need.

Cases. Only a third of the routers I tested came with cases. That's surprising, because if there's any tool that ought to have a case, it's a plunge router. For one thing, routers come with wrenches and a number of small, easily lost parts. And you don't want to bash exposed mechanisms like stop rods or end up with a tool that doesn't plunge smoothly because the posts got dinged.

Favorites

I used to do a lot of on-site cabinet-making, and at that time I would have

killed for a router like the Festool OF1000E. It's extremely well made and very easy to use. I especially like the optional guide rails, because they allow you to make long, straight cuts with great precision.

In terms of versatility and overall ease of use, it's hard to beat 2-hp models like those made by Bosch and DeWalt. They're light enough to use hand-held but powerful enough to put in a table. I particularly like the fine-adjustment mechanism on Bosch's 1613AEVS because it's equally useful in plunge mode, when the router is in a table, and when it's being used like a fixed-base model. And the lack of a safety on the grip-mounted switch makes the tool easier to use.

DeWalt's DW621 is extremely light and compact for a 2-hp router. I particularly like the knob-shaped grip that doubles as a plunge lock. And when it comes to precision and ease of use, the fine-adjust mechanism on the DW621 is second to none.

If you're looking for something in the 3-hp range, consider DeWalt's DW625 or Porter-Cable's 7539. DeWalt's model has a smooth, powerful motor, but is relatively light and compact for a router with its kind of cutting capacity. The controls are well placed and easy to use, and it has a rea-

Plunge Router Manufacturers

DeWalt Industrial Tool

800/433-9258
www.dewalt.com

Fein Power Tools Inc.

412/922-8886
www.fein.com

Festool

888/337-8600
www.festool-usa.com

Freud U.S.A. Inc.

800/472-7307

Hitachi Power Tools

800/829-4752
www.hitachi.com/powertools

Makita U.S.A.

800/462-5482
www.makitatools.com

Porter-Cable

800/321-9443
www.porter-cable.com

S-B Power Tool

877/267-2499
www.boschtools.com

sonably good fine-adjust mechanism.

The Porter-Cable model is a real bruiser, the heaviest router I tested. It's also extremely smooth and powerful. The nearly all-metal construction and features like a spring-reinforced cord suggest that this machine is really built to last.



David Frane is a former finish carpenter and a contributing editor to The Journal of Light Construction.