Fast-Setting Glue Guns

by Ross Welsh

When I was learning woodworking, many years ago, all power tools had cords, and glue joints were clamped while drying. Although I'm still a yellow-glue-and-clamps kind of carpenter, I've tried to keep up with cordless tools and other modern innovations.

Two new glue guns recently caught my eye. The Weller Portasol G200K (Weller Tools, 919/362-1670, www.coopertools.com) is a cordless, hot-melt glue gun, similar to the corded variety I've used to hold tiny pieces of trim for pneumatic nailing. The HiPURformer Advanced Bonding System (Titebond, 800/669-4583, www.titebond.com) is a semi-corded, electric glue gun that preheats in a separate base.

Weller Portasol

The butane-powered Portasol G200k is a new twist on the traditional glue gun but uses traditional 1/2-inch glue sticks. This professional tool has no cord and is shaped a lot like a cordless drill, with similar dimensions. But, at 1.8 pounds, it weighs considerably less. Instead of a battery in the grip, the Portasol has a refillable, butane fuel tank. For testing, I bought a 320-ml. can of butane (typically used to fill cigarette lighters).

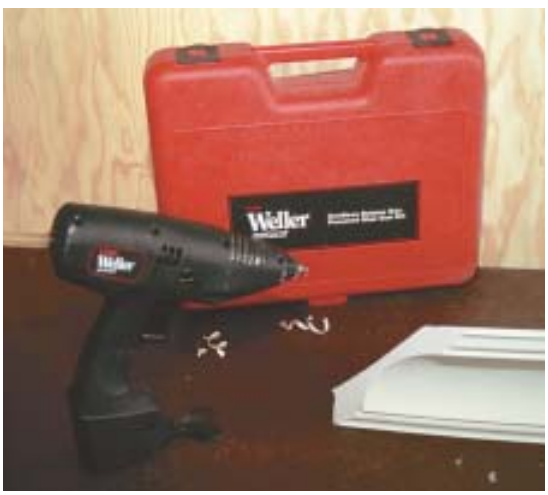
Filling the gun was easy. Depressing an ignition button, after turning on the gas valve, ignites the gun. A mild roar inside the gun and a glowing "Ignition View" window confirm that the gun is working. A thermostatic control cycles the gun off and on as needed to maintain a 383°F working temperature, reached in about four minutes. Among glue guns, 383°F is on the high side of the temperature spectrum, allowing the use of higher-strength glue sticks.

Various nozzles come with the kit, including a standard applicator, a needle, a diagonal, and a spreader. The supplemental nozzles install and remove easily with a 1/2-inch wrench but, oddly, don't fit properly in the molded case. I resorted to keeping them in a plastic sandwich bag instead. I also had trouble stashing the 320-ml. fuel can in the case — I had to leave the cap off to make it fit and so had to place it with its nozzle opposite the hinge to prevent it from leaking, a dangerous situation. Next time, I'll buy a smaller canister. The blow-molded case does accommodate about a dozen glue sticks and holds the gun securely, even with a fresh, full-length glue stick loaded.

The manufacturer claims that this tool will melt glue at a rate of 3 1/2 pounds per hour and will run up to five hours without refueling. Although I didn't keep close track, the claims seem reasonable. The instructions for use caution against laying the gun on its side during operation; a foldout stand built into the housing keeps it upright. The stand operated easily and was reasonably sturdy.

Although its adhesive doesn't provide a permanent, high-strength bond, this tool reached working temperature quickly and functioned well at its intended use. Its merit lies in its portability, but, at $160, portability doesn't come cheap. Corded guns are comparatively inexpensive. Professional models with detachable cords sell for about $40 — I can use my plug-in model for about five minutes unplugged.

Given the limited use of traditional hot-melt adhesives, I can't justify the cost; but if portability is more valuable in your work, you may be able to.



Shaped like a cordless drill, the Portasol G200K is a pro-duty, hot-melt glue gun. Powered by butane, the high-temperature gun can melt the strongest glue and run up to five hours on a fill-up.

Titebond HiPURformer

A smaller, more convenient version of industrial hot-melt, polyurethane glue guns, the HiPURformer brings the virtues of high-strength hot-melt adhesive to the job site. The gun is scaled down to a dispenser that weighs less than a pound and, with a 1.4-ounce cartridge installed, measures 14 inches long, 7 inches tall, and 2 inches wide.

This gluing system is a collaboration between Steinel, a German tool manufacturer, and Franklin International, maker of Titebond wood glues. The whole system comes in a case slightly larger than an old-style lunchbox.

There are three choices of glue for this tool: two for woodworking and one multipurpose formula. The "fastest" glue has a 30-second set time, is thinner than the others, and is

intended for general woodworking. The other woodworking glue sets in 60 seconds and has a thicker, gap-filling quality. The multipurpose glue has a 75-second set time and is formulated to bond melamine, ceramics, metal, most plastics, marble, glass, and brick. The manufacturer cautions against using it with copper or copper-based alloys, like brass, however.

The glue is ready for use about 10 to 12 minutes after plugging in the base station; an indicator lights when the adhesive is ready. The gun is good for about 15 minutes of remote use before needing to reheat.

Adhesive shelf life is listed as 12 months when the polyurethane cartridges are left in their foil wrap, but they should be used within four weeks after initial use. It's important to keep the nozzle cap on during heating and after use. I had good results following this recommendation, restarting open tubes after a four-week break. But I've heard complaints that some users have been unable to restart a cartridge, even the next day. At $8 a cartridge, it isn't hard to understand why reuse is desirable. I was careful to cap the tube, disassemble the gun as it cooled, and generally baby the tool, and I never had a problem.

A socket on the base station acts as a wrench for unscrewing the cartridge cap (it gets hot). The cap can then be transferred to a holder in the handle. The wrench worked well, but the holder seemed a little weak.

I tested the manufacturer's claims of strength and ability to eliminate clamps on a small drawer divider project, gluing $^3/_{16}$-inch- and $^3/_8$-inch-thick stock. Clamps would be too cumbersome for such a project, making it an ideal test of the adhesive and gun. Initially, I used too much glue and had to remind myself not to wipe

Assembly work is where the HiPURformer system really shines. The high-strength adhesive sets in as little as 30 seconds, making clamps unnecessary. The joints are strong, but the glue is expensive — $8 for a 1.4-ounce tube.

the hot excess away with my finger. But, for this small project, hand pressure and a square block for reference were all I needed.

Franklin claims that bonded materials can be machined or planed after 1 hour; structural joints shouldn't be stressed for 24 to 48 hours.

The gun is plastic, and at $100, one might expect it to be sturdier. Most of the time it worked well for me, but I occasionally had problems. It has to be heated thoroughly for the plunger to work smoothly and consistently. I once neglected to disassemble the gun while it cooled, and the plunger stuck to the cartridge. If you're willing to baby the tool, it should work for you. If you don't have the patience, you should probably wait for the next generation.

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Two-Way Laser
by Gary Katz

With two separately rotating lasers on one tool — one casting a level line, and the other casting a plumb line — the new Toolz model RT-7690-2 self-leveling laser (Toolz, 800/984-0404, www.robotoolz.com) is definitely out of the ordinary. You can operate the laser functions separately or use them together to cast a crosshair pattern.

In brightly lit rooms or outdoors, dim laser lines hamper the potential of rotating lasers. Although most makers provide red-lens "beam-enhancement" glasses, they don't help much. A good electronic detector is far more effective, and the RT-7690 includes one of the best remote detectors I've used. The sensitive detector controls all functions of the tool after the laser is activated. You can adjust the three rotating speeds, change the six scan modes (150-degree chalkline, dot, and four settings in between), and even rotate the dot or scan line to precisely where you need it, all without assistance. The on/off switch also acts as a pendulum lock, which protects the sensitive instrumentation during transport.

Testing the tool against preset benchmarks, I found accuracy to be within about $^3/_{16}$ inch at 100 feet and $^1/_8$ inch at 50 feet. Field calibration is easily done with a hex wrench; calibrating the level-line laser automatically adjusts the plumb-line laser.

In general, the tool worked well; I was impressed with the all-in-one remote control–laser detector. But I have a complaint regarding the laser's out-of-level sensor: When the laser is tilted to an angle that exceeds its capacity to self level, it beeps and shuts down. However, if the laser is accidentally bumped, but the tilt angle doesn't exceed the tool's self-leveling range, the instrument restarts automatically. The result may be a laser line that's off by more than $^1/_8$ inch from the original elevation, wreaking havoc on your layout.

The laser base unit requires four D-cell batteries (an AC adapter is available from the manufacturer); the remote control–detector uses a 9-volt battery. The RT-7690-2 includes the laser with target-remote, a case, a rod bracket, and enhancement glasses and sells for about $520 to $550.

Moving the laser and changing the beam spread are easy with the intelligently designed remote control–detector. But holding the detector horizontally for horizontal lines takes some getting used to.

Saw Stand Accessories
by Jeremy Hess

About a year ago, TracRac introduced its TracMaster aluminum miter saw stand. Since then, the company has developed a couple of new accessories meant to make the stand more versatile. I recently had the opportunity to check these items out, testing their practicality and performance on a couple of remodeling jobs.

Router Table

The aluminum TracMaster router table (TracRac, 800/501-1587, www.tracrac.com) slides into the stand's top rail and is secured by a sturdy, cam-type lock with a heavy-duty handle. Mounting templates for the most popular routers, plus a generic template for less popular routers, are included in the package. Other than attaching the mounting plate to my 2-hp Skil plunge router, no assembly was required.

Reference lines formed into the aluminum table are a good aid to fence alignment. In addition to the table's ABS fence, an aluminum auxiliary

Sturdy and low-tech, the heavy-duty aluminum handle locks the router table to a TracMaster miter-saw stand or to optional aluminum hardware that can be mounted on a work bench or tailgate.

The TracRac's wide stance and sturdy legs give the router table stability. An integral, switched outlet and 2-inch dust port make dust collection easier. However, the table's unusually short power cord leaves a connector or power strip dangling in the air.

fence and various throat plates are included with the kit, so you can use bits up to $2^3/_4$ inches wide without making modifications. Plastic and aluminum seem like sensible fence materials, considering the stand's portability and potential exposure to humidity and temperature swings, which could corrode or distort other materials. The clear plastic guard covering the bit provides adequate protection but keeps the line of sight clear and flips out of the way for bit changes. A front-mounted remote switch makes starting and stopping the router safe and convenient, eliminating blind groping for the switch or trigger. An additional outlet is energized by the power switch, which along with the integral dust port molded into the fence, allows automatic dust collection.

I tested the table on oak, pine, and poplar, using ogee, roundover, and beading bits for shaping and straight bits for dadoes. The fence held securely and TracMaster's wide footprint provided good stability. The portability of this 20-pound table gives the TracMaster a big advantage over other router tables. At $179, it's priced only slightly higher than router tables with less versatility.

Optional TracMount channels increase the versatility of the accessories. The top-mounted TracMount (above) can be mounted on a tailgate or sawhorse and is included with the vise, or it can be purchased separately for $34. The side-mounted TracMount ($58) provides a flush surface that won't interfere with bench-top projects (right).

TracVise

The TracVise is an excellent job-site vise. Weighing under 10 pounds, the compact aluminum and stainless-steel vise is built to take the weather. The $5^1/_2$-inch-capacity, smooth aluminum jaws prevent marring of soft materials. Integral V-grooves in the jaws will grip up to $2^1/_2$-inch-diameter pipe or dowel. At $179, the vise could cause sticker shock to some, but this is one well-made tool.

Lightweight and portable, both the router table and the vise go from workshop to job site with ease and make smart additions to the existing saw stand. When I tested saw stands (see "Portable Miter-Saw Stands," 8/02), I gave the TracRac's stand a lukewarm review, but these accessories greatly increase its versatility.

Although both accessories are obviously targeted to TracMaster miter-saw stand users, you don't have to own the stand to use them. Optional TracMount hardware makes them available for independent use.

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