A Working Professional's Personal AC Unit

BY TOM O'BRIEN

It always seems that whenever a heat wave sets in, I find myself atop an asphalt roof or inside an attic. Luckily, the last time the mercury approached triple digits, I had an Isotherm Cool Vest at my disposal.

Made from flame-retardant cotton, this product has polyester sleeves inside the front and back into which two large cooling packs are inserted and secured with Velcro. The standard model comes in Walmart blue, but the vest is also available in a bright yellow version that meets ANSI/ISEA Class 2 High-Visibility requirements.

Sizes range from small to extra large. The one I used was M/L, but Velcro adjustments at six different points led me to believe that it could be made to fit almost anyone.

According to the manufacturer's instructions, the cooling packs can be energized before use by placing them flat in a freezer or refrigerator for a few hours, or by immersing them in ice water for 20 minutes. They're ready to get to work when the clear liquid in each compartment has congealed into a white solid.

Although I feared that the experience of putting on the vest would be like taking the ice bucket challenge, what I felt was more of a cool breeze than an icy blast. Bullard, the manufacturer, explains that its cooling-pack inserts feature a phase-change technology that maintains a consistent 55°F for up to four hours, depending on the job conditions. I was working in a sweltering attic when I put it to the test, and it was easily two hours before I noticed sweat dripping down the back of my neck.

The first time I tested the manufacturer's claim that an exhausted pack is fully revived after only 20 minutes in ice water, I nonchalantly tossed both packs in the cooler. When the timer went off, I discovered that the fully submerged pack was solid, but the one I'd left floating on top was semi-liquid.

Photos: Tom O'Brien

Isotherm's cool vest is equipped with controlled-release phase-change cooling packs (not ice or gel packs) that are designed to maintain a consistent 55°F temperature for as long as four hours. The packs can be recharged in a cooler of ice water (right).

If you're planning to take advantage of a lunch break to recharge these batteries, pour extra ice over the top, or weigh them down.

When I had to put on a toolbelt, I was relieved to find that the vest did not get in the way. The 6-pound weight of the garment was not a bother, but the bulkiness was. When the cooling packs were fully charged, they were as stiff as concrete. But within a half-hour, they softened up to become more flexible and form fitting. Compared with being hot, miserable, and unproductive for hours, a few minutes of discomfort was a bargain.

Isotherm can be purchased online for about $220. Extra cooling packs are also available. bullard.com *—Tom O'Brien is a freelance writer and a restoration carpenter in New Milford, Conn.*

A Pair of Tough Cordless Routers

BY TIM UHLER

Over the past five years or so, we have been steadily marching towards a cordless jobsite. Until recently, the only tools that we still rolled out a cord for were beam saws and the routers we use to cut the sheathing out of all our window and door openings and along the top of rake walls. Last year, to get closer to our battery-powered goal, we added DeWalt's DCW600B 20V Max cordless router and then Milwaukee's 2723-20 M18 Fuel router to our tool inventory.

I first made the switch from using a saw to cut out door and window openings to using a big 3 1/4-hp router in 2001, after seeing another framing crew using this method on their jobsite and noting how efficient it was. The openings were perfectly trimmed, and the work went more quickly and safely. With a flush-cutting bit chucked in the router, there was virtually zero measuring or marking, and the cutouts were also perfectly straight, making it easier to use them elsewhere. What's not to like?

DeWalt's DCW600B 20V Max compact router has a soft-start brushless motor controlled by a variable-speed dial that spins router bits with 1/4-inch-diameter shafts from 16,000 to 25,500 rpm. When it's time to stop, it has an electronic brake that works very well. I like the depth-adjustment ring, which is easy to use, and the dual LEDs, which light up the work surface.

While the router runs great on a 20V battery, I prefer to use it with a Flexvolt battery. To cut 7/16-inch Zip Sheathing, I use a 1/4-inch-diameter spiral-cutting bit, and it does such an outstanding job, I don't miss our old 3 1/4-hp workhorse at all.

Milwaukee's 2723-20 M18 compact router also has a brushless motor that spins 1/4-inch-shaft bits, but from 10,000 to 31,000 rpm. For precise adjustments, it has a "micro-adjustment dial," and to simplify bit changes, the spindle lock is tool-free. The bit stops almost instantly, and the LEDs light up the work surface well. This compact router is compatible with offset and plunge bases, which are sold separately.

I had no trouble powering this router with a 5.0-Ah M18 Fuel battery, but—as with the DeWalt—I prefer to use bigger, 9-Ah batteries. And though the compact router felt like a toy out of the box, it had no trouble at all cutting through 7/16-inch-thick Zip Sheathing.

Bottom line. After using both routers for several months, not once have I wished I had a larger corded router on our framing sites. These two models are lightweight and easy to handle, yet have all the power I need. We've been using them for a year, and haven't burned one up yet. A production framer from Ontario emailed me last week saying they've run the DeWalt hard for a year, too, and it's still going strong.

Milwaukee's M18 Fuel and DeWalt's DCW600B routers have the power and speed the author needs for sheathing cutouts.

Photo: Tim Uhler

It helps to have a good 1/4-inch-diameter spiral-shank flush-cutting bit. We use a Whiteside bit and get about three houses out of one bit, which includes not only cutting out all the window and door openings, but also cutting the sheathing off along the top plates on the rake walls, which we build on the ground before lifting them in place. To see which router cuts faster, we've informally "raced" the two machines, and while the Milwaukee might have a slight edge over the DeWalt thanks to its 31,000-rpm motor, I can't say one is better than the other. Both cost around $300 with one battery. *—Tim Uhler is a lead carpenter for Pioneer Builders in Port Orchard, Wash.*

This battery-powered nail gun has two hooks, one for hanging it from a rafter and one for hanging it from a belt. There's a switch just above the battery that is used to set the "mode" to shoot one nail at a time, or bump fire.

Heavy Lift: Milwaukee M18 Fuel Framing Nailer

Milwaukee recently introduced its M18 battery-powered 30-degree framing nailer, which is similar in basic design to the Metabo HPT (formerly Hitachi) hoseless framing nailer that I reviewed a couple of years ago ("Hitachi Cordless Framing Nailer," Apr/18). I have reviewed a number of other hoseless guns from Paslode, Bostitch, and DeWalt, so I have a pretty good feel for this type of tool and was eager to try Milwaukee's new offering.

CORDLESS DOESN'T MEAN COMPROMISE

First off, this gun is fast. Milwaukee says it shoots three nails—either clipped or full round—per second. I was unable to test that because I'm too slow with a stopwatch, but there is no lag when pulling the trigger. The gun toenails very well and is a dream to use when toenailing into LSL rim board. The dial-type depth of adjustment works well, but I wouldn't use the gun for shear nailing, where it's critical not to over-drive nails. The gun is so powerful that it was hard to get a consistent depth.

The battery-powered nail gun has two hooks, one for hanging it from a rafter and one for hanging it from a belt. There's a switch just above the battery that is used to set the gun to shoot sequentially, one nail at a time, or to bump fire.

I like that the gun has two hooks. The belt hook is on the left side of the gun, and a second, larger hook that fits over framing material is on the right side.

PERSONAL LIMIT

Now let's get down to it. Despite all the great features and performance, I can't recommend this gun, because it is too heavy for me. It is heavier than our old Hitachi NV83A2 framing nailer with a full coil of framing nails. It is also jarring to my wrist when I'm shooting nails, to the point where my joints are sore the next day—which has never happened to me in 25 years on the jobsite. I'm 42 years old and can't afford to use a tool that has this effect on my body.

To make sure I wasn't overestimating the tool's heft, I weighed all the nailing guns I have worked with over the last few years, each loaded to full capacity with 3-in. x .131-in. framing nails. The new Milwaukee weighs just under 12 pounds (11 lb. 13.8 oz.) with the battery and one stick of nails. In comparison, my old Hitachi nailer weighs 11 lb. 6 oz. with one full coil, while the Makita stick nailer I reviewed last year weighs 9 lb. 14 oz. with two sticks. Granted, a pneumatic nailer has a hose that limits some motions, but at most it adds just under a pound, unless you are on a ladder and holding up a long length of hose. Most of the time, the hose is a non-issue. Cordless nailers tend to be heavier than pneumatic nailers because of the battery. But of all the cordless framing nailers I've used so far, the Milwaukee is the heaviest yet.

Still, this is a great gun that does its job very well. It has plenty of power and doesn't have any cycling time or an extra fuel cartridge like some other battery-powered nailers; adding the longer magazine (for an extra $80) makes going hoseless more reality than a dream. So, if you think the weight won't be an issue, then I think you'll be satisfied with the gun. Just check in with me in five years and let me know how your arm is feeling. You can find the gun online for $350. milwaukeetool.com. —*T.U.*

Photos: left, Kyle Davis; right, Tim Uhler