



Filter-free Air Scrubber

BY TOM O'BRIEN

I learned ages ago that clients wouldn't appreciate my flawless miters if they came home to find their living spaces covered in sawdust. Over the years, I've amassed a sizable collection of vacuum-attached power tools and dust containment products, but I'd never found an affordable—or portable—option for filtering breathable air within a workspace until I discovered the Dust One, a 25-pound air scrubber on wheels from Vortex Dust Control Solutions (1).

Cyclonic design. At first glance, all I could think about was the robot in the classic TV series *Lost in Space*, but the manufacturer of the Dust One assured me that its distinct, robot-like appearance is purely functional. Instead of trapping airborne contaminants in filtration material, it sucks particles into a cyclone that spins them out via centrifugal force and drops them into a collection bin at the bottom **(2)**. Essentially this is a compact, portable variation on the technology that many woodworking shops use to capture sawdust.

A significant advantage of cyclonic design is that it eliminates the need for expensive filters that clog up and frequently have to be replaced. The maker claims that the Dust One removes over 99% of airborne contaminants and meets OSHA standards. For emptying the collection bin when it fills up, Vortex suggests using a HEPA vac.

Double duty. As with other air scrubbers, this device can be set

up in one place and run continuously to make air safer to breathe and prevent dust from escaping the work zone. To create negative air pressure, the 4-inch round exhaust port is easily connected to flex duct and vented outside.

A unique feature of the Dust One is its extendable intake port (3), which enables users to capture dust at the source, before it spreads throughout the work zone. Lockable wheels and handles on both sides of the top-mounted motor make wheeling the unit from place to place effortless. Its noise level (55 dB according to the specs) was noticeable but not bothersome, even when it was running continuously.

Performance. Over a matter of months, I put the Dust One to use on every dirty job that came along: mostly drywall sanding and woodworking but also a bit of concrete grinding and some demolition work. I did not have the ability to perform dust sampling, so I can't provide quantitative evidence, but qualitatively speaking, I think the difference in the air between when the machine was running and when it was off is like comparing the air in Aspen to the air in Mexico City.

After pole-sanding a roomful of drywall on a hot summer day, I was particularly impressed that the visible dust accumulation on horizontal surfaces was negligible, and what stuck to my face







The Dust One air scrubber uses cyclonic technology, rather than filters, to separate contaminants from breathable air (1). Centrifugal force drives airborne particles away from the vortex and drops them into a collection bin at the bottom, which can be emptied by a HEPA vac when it fills up (2). In order to capture dust at the source, the flexible inlet extends almost 3 feet, bends in any direction, and stays where it's put (3).

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Tools of the Trade

did not make me look like a mime. I want to believe that if this air scrubber was used alongside a vacuum-operated sanding system, one could possibly dispense with dust curtains altogether; I should test out that hypothesis on my own house first. Happily, a few weeks after I started using it in my home workshop, which shares a basement with our washer and dryer, I noticed that my wife was no longer asking me if I could "please cut those damn things outside."

According to Vortex, the Dust One is particularly well suited for demolition work. On a recent project, it did a splendid job of tamping down the mess generated from tearing out drywall, fiberglass insulation, and other modern building materials. The next time I have to gut out a roomful of 100-year-old lath and plaster, I will be more than happy to be able to put it to use.

On the jobsite, the Dust One was nimble as well as effective. Get-

ting it to the job was not quite so effortless. It's half the weight of my benchtop power tools but twice as bulky. The top-mounted handles are useful for wheeling it around but not so much for carrying. On those occasions, what worked best was to grab it around the middle, tip it so it was horizontal, and carry it under one arm as if it were a rug. The unit and the box containing the manufacturer's 6-inch-by-25-foot exhaust duct wanted the bed of my compact pickup almost all to themselves. But that serves me right for downsizing.

The Dust One is made entirely in the USA, assembled in a small shop, and not subject to supply chain issues. It's available directly from the manufacturer for \$1,035. A starter kit that includes exhaust duct costs \$1,154. vortexdustcontrol.com

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Skil Jobsite Table Saw

BY MARK CLEMENT

I work alone, so I sign the contract, do the design, carry the tools, and pick up the trash. I also store the tools in my tool truck. Carrying and storing were the weak spots in my game, though, especially my table saw. It was too big and too heavy for what I needed it to do, and its folding stand served no purpose other than to waste space in the truck.

In my quest to find a truly portable saw that sets up quickly and doesn't take up more acreage in my truck than necessary, I zeroed in on the Skil TS6307-00 10-inch jobsite table saw. In short, the saw is awesome. Compact. Powerful. Smartly designed. Not only does it solve the specific suite of problems I had with previous table saws, but its well-executed design features generalize into a whammer slammer of a table saw for just about anybody who has to carry one from here to there, then rip a mile of lumber with it.

Out of the box. Unlike table saws that ship with stands that re-

quire assembly, this one has folding legs that lock and unlock with a push of a bottom. The legs are rock-solid, and the splay keeps the saw stable for ripping long stock. There's no outfeed support, but that's not an issue for me since most supports I've seen don't work very well anyway. The saw is very light (Skil says it weighs 51.2 pounds) and has nice, overmold grips to carry it like a tray. On its right side is a handle for carrying it like a satchel; I use that to tie the saw to a bar in my truck so I can store it vertically and free up floor space.

On my saw, the tall, rack-and-pinion fence was parallel to the blade right out of the box, and the blade height adjustment is as smooth as on any tool I have ever used. The bevel is light, easy to adjust, and doesn't fall to a default 30-degree angle upon disengaging the quick-release lever.

The power switch is a push-button-on/paddle-off setup. The problem is, you have to reach through the paddle switch to turn it









Skil's TS6307-00 10-inch table saw has sturdy fold-out legs (1). The author found that the paddle-off switch sometimes interfered with the smaller, push-button power-on switch (2). The plastic throat plate locks securely into place (3), and the saw is light enough for easy one-handed transport (4).

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on. In doing so, it's way too easy to immediately turn the tool off if your finger taps the paddle. A simple fix would be to make the "on" opening wider. I think many users may remove the paddle in real life; instead, I lift the paddle a little to hit the on button. It works, and I won't be tempted to modify the tool.

The unit has—and I love this—an electric brake that works at least 50% to 75% of the time. This may be a function of the fact that I got an early model, but that it works at all is awesome: 50% of electric brake is 100% better than no electric brake at all.

The plastic throat plate locks into the table and releases with the push of a button, so it stays put instead of ending up on the floor of my truck. The included push stick has dedicated storage, so when I carry the table saw like a tray, or store it in the truck, the push stick doesn't wiggle loose or fall out.

Power and performance. Despite its light weight, the saw hits like a heavyweight and can suck all the amps out of a 15-amp breaker (ask me how I know). It has a maximum cutting depth of $3\frac{1}{2}$ inches, which enables me to plow through 4-by stock, and has the power to do it if it has enough juice. I've used it to bevel 2x6 stock for barn sash windowsills at a full-depth 12-degree bevel and to rip $5\frac{1}{4}$ pres-

sure treated stock to width for a deck renovation. On that project, it easily handled the extra 2x8s that needed to be ripped to 2x4s. Even maple 1-by stock for a kitchen remodel was no match for this tool.

Dust collection. The blade is housed, so sawdust and shavings go down and out instead of flying all over the place. A 22.5-degree elbow directs the dust down; on a shed for which I did a good bit of ripping, I shot the dust into a 5-gallon bucket and, by volume, captured 10 gallons of dust. The chute can clog up, especially with long rips in wet treated deck boards, but not that often.

Storage. Because the legs fold into the saw frame, storing it is what I call "cubular." There's no handle or rail or wheels, as would be required to move a larger table saw. So while it still has a blade-right rip capacity of 25½ inches (something I have nearly zero use for), it folds up tight and sits like a box on the truck floor.

Currently available for less than \$300 (at Lowe's), this is a valuepriced jobsite saw that more than holds its own against the higherpriced competition. skil.com

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Kapro Ledge-It Square

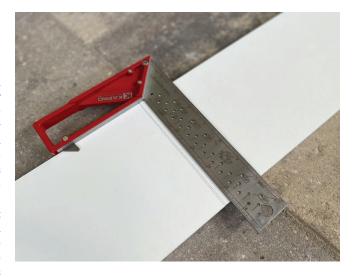
BY TOMMIE MULLANEY

All carpenters have a vital set of tools in their toolbelts, and one of those tools is guaranteed to be some sort of square. Over the last few months, my toolbelt has included Kapro's 353 Ledge-It square, sort of a try square on steroids with some interesting innovations. The Ledge-It, which comes in 8-, 10-, 12-, and 16-inch versions—I tested the 12-inch square—has a cast aluminum handle and a stainless steel ruler with conveniently placed etchings and holes every ½ inch (every centimeter for metric) for fluid pencil marking at common angles.

Ledge support. The square has a retractable metal ledge support inside the handle, a small feature with a large impact on how the tool can be used. Without a ledge support, you often have to balance the square on the edge of the wood, and it can be tricky to hold the square still while you're marking the workpiece. This retractable ledge takes that instability out of the equation, allowing you to make marks along the ruler with confidence. And if you don't want to use it, the ledge support tucks away inside the handle.

Common angles. As on most squares, common angles are etched on the ruler to make workflow easier and more efficient. In addition to the etchings at 10, 15, 22.5, 30, 45, 50, and 60 degrees, there are holes for pencil marking. I'm a fan of stainless steel rulers on a jobsite for their durability and accuracy, and these etchings offer great clarity and should stand up to everyday jobsite use.

Accuracy. Kapro says that the 90-degree angle on its square is certified. When I checked the square's accuracy (by marking a line, then flipping the square over on the same edge and marking



The Kapro Ledge-It square gets its name from a small but handy retractable support that folds back into the handle.

a second line), I found it to be about 1/64 inch out of square; that's more than accurate enough for most carpenters. For more accuracy, I would need to spend a lot more money for a square with smaller tolerances. As it is, the 12-inch Ledge-It is priced at \$25, a great value for most general carpenters and hobbyist woodworkers. kapro.com

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