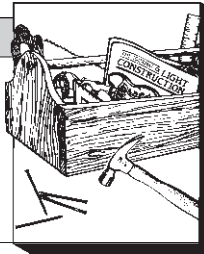


Multitalented Belt Sanders

by Clayton DeKorne



The AEG HBSE 75 S and the Ryobi BE-321 are among the new generation of small, streamlined belt sanders. Their sleek appearance is characterized by an in-line motor that centers the weight of the tool over the belt and lets you sand flush to corner edges. They have a low center of gravity so they are stable, move easily across the work, and are comfortable to hold. Both the AEG and the Ryobi sanders operate at variable speeds, which gives you added control over the sanding surface. Both offer a sanding frame that clips to the bottom of the sander to provide stability and precise depth control. And both easily convert into portable benchtop sanders with a few available accessories.

(compared to the smallest Porter-Cable belt sander which weighs 12 pounds). While this makes them maneuverable, it also makes them slightly less efficient for removing a lot of material than the big conventional sanders with a lot of weight over the belt. Consequently, I find myself wanting to bear down on them, which of course makes them bog down and produce an uneven surface.

The Ryobi also has two minor inconveniences, an impossibly short cord and a small dust bag that needs to be emptied frequently.

While these are not the most aggressive sanders I've used, each has accessories that make them more versatile than most sanders. The AEG comes with two cast-aluminum sup-



New breed of sanders: AEG's lightweight, variable-speed belt sander is shown, at left, with bench-top supports and a guide for square or beveled edge sanding. Similar attachments are available for the Ryobi model, at right.

Variable-Speed and Depth Control

A variable-speed motor greatly increases the control you can have with a belt sander. High speed is used for aggressive sanding of solid wood. Slower speeds are useful for sanding veneers, laminate edges or any delicate surface such as one with a lot of work invested in it. The AEG ranges in speed from 200 to 380 rpm. The Ryobi ranges from about 230 to 350 rpm. The wider range of the AEG is noticeably better.

With the sanding frames on each sander, it is possible to sand away a fixed, minute amount of material. These metal frames attach to the base of each sander and act as outriggers to stabilize the sander in all directions. It is almost impossible to rock or tilt the sander in these frames. You can't gouge the work surface with the edge of the belt or produce drum marks. Both frames adjust with a knob so you can set the depth of the material you want to remove. Both seem equally sensitive—on the order of 1/64-inch per turn. This lets you sand solid banding on plywood panels without zipping the veneer off. The AEG frame glides across the work surface on a series of small brushes. The Ryobi frame glides on a perimeter of plastic that is similar to the material used on most router bases. The Ryobi frame is easier to get on and off than the AEG but doesn't seem quite as sturdy.

Small and Versatile

Both the AEG and Ryobi sanders are lightweight. The AEG weighs 8.4 pounds; the Ryobi is just 7.9 pounds

ports that screw to the top of the motor housing. The sander can then be flipped onto its back as a makeshift bench sander, and will remain stable. The supports can stay in place without intruding much when using the sander right side up. In fact, they are useful as handles and provide some needed weight. The Ryobi achieves the same thing with two c-clamps that fit into holes in the side of the tool housing.

In addition, both sanders have fences for use when the machines are inverted on a bench. The Ryobi guide can sit either parallel to the belt or perpendicular to it; the AEG works only parallel. Both can be adjusted to any angle between 0 and 45 degrees. As parallel guides, they are excellent for edge sanding rail stock because the square (or bevel) of the rip stays true. These guides are also useful for end-grain sanding and "adjusting" miter cuts when set perpendicular to the belt. And they provide excellent control for safety sanding small pieces.

The AEG and Ryobi sanders take a 3x21-inch belt. The tracking works well on both machines, though the Ryobi is a bit more responsive.

The AEG HBSE 75 S lists for \$259 and with all the accessories included the list is \$417. The lowest discount price I've seen for the package is about \$295. The Ryobi lists for \$244 and the total package goes for \$388.95. Its low price is about \$209. The AEG is superbly engineered and a bit more rugged, which, I believe, justifies its higher cost. The Ryobi, despite some minor inconveniences, is still an excellent tool and you certainly can't beat the price. ■