

## Weigh In!

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# TOOLS

OF THE TRADE



## Festool Kapex KS120 REB Miter Saw

BY TOMMIE MULLANEY

**Festool first released the Kapex** 10<sup>1</sup>/<sub>4</sub>-inch sliding compound miter saw in 2008, and I've owned and used one on an almost daily basis since 2018. I'm admittedly a big fan, so last year, when the company rolled out the latest version of the saw, the KS 120 REB, I was eager to test it and find out how it compared with the older one. With an ergonomic vertical handle and lime-green accents, the new saw sure does capture your attention ... but so does the \$1,500 price tag.

### NEW FEATURES

I finally received a sample of the saw to try out a few weeks ago. Here are some of the improvements that Festool has made in the latest iteration of its flagship tool.

**New bed extension tables.** This feature gives the saw bed a larger footprint and significantly better stability, while preserving the "V-groove" interface of the original design, so the UG wings and original crown stops still attach the same way. These extensions are more than just bars; rather, they're an extension of the cast magnesium base itself, sliding out over 6 inches for additional material support on either side of the saw bed (1, 2).

**Cleantec locking dust port.** A locking port has been added to the saw to remove any chance of the vacuum hose accidentally disconnecting from the saw. There is nothing fun about having a disconnect halfway through a cut, and while I like covering myself in man glitter as much as the next carpenter, I like to do it on my own terms.

Introduced late in 2020, the bayonet-style Cleantec port is widely used among other Festool tools, such as track saws and sanders, and accepts either Festool's 27-mm-diameter hose or its higher-capacity 36-mm-diameter hose (the smaller hose fits inside the port, while the larger size fits over the port). I've found that using the shortest length of the larger-diameter hose provides the best dust extraction (3).

Along with the Cleantec dust port is a new rubber dust hood—or more accurately, a scoop—fitted to the bottom of the shroud covering the blade. This hood does a fantastic job of collecting cutting debris, and it's nice to have the option of folding it back or removing it altogether for more cutting clearance when needed (4).

**Magnetic brake.** Also new is a magnetic brake that will bring the variable speed, 1,600-watt direct-drive motor to a complete stop within three seconds. Festool says that this brake has no contact points, so it will never wear out, unlike the older, electrical brake, whose failure causes the whole motor to fail. Along with other improvements to the motor structure—the saw is noticeably smoother and more powerful than my old one—the new brake should improve the saw's overall reliability.



The latest version of Festool's Kapex 10<sup>1</sup>/<sub>4</sub>-inch sliding compound miter saw, the KS120 REB, has a magnetic rather than an electrical brake, which should result in longer motor life (1). The base has slide-out extension wings for better stock support (2).

Photos by Tommie Mullaney



The saw is now equipped with a bayonet-style dust port that is compatible with both 27 mm and 36 mm Cleantec dust extraction hoses (3). A removable rubber dust hood improves the saw's already outstanding dust collection when the saw is connected to a vacuum system (4).



The tool-free connection between the new UG stand and extension wings has been redesigned to be more robust (5). The assembly can be folded up for transport (6).

**Relocated MiterFast storage.** The Kapex includes an angle transfer device called MiterFast that makes the transfer of inside and outside angles from the workpiece to the saw quick and easy without complex angle calculations. Festool now stores this device on the back of the saw, where it is

completely out of the way.

**UG Stand and extension wings.** Most of my testing was done with the saw clamped to my Festool MFT table, because the new and improved UG stand and extension wing system (\$960) were out of stock. When I finally tracked down a set, I was happy to find that

Festool has improved on the attachment of the UG wings to the UG stand, with a larger, more robust tab to connect to the base of the saw (the new saw will also work fine with the older stand and wings). A key part of what makes the system so great, the stand weighs only 47 pounds, and it has a very small footprint and wheels that allow you to roll the saw around any jobsite with ease (5, 6).

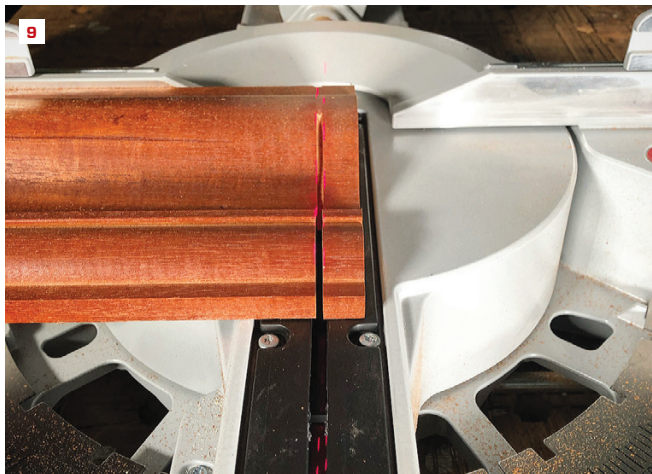
The wings are designed to fully support material up to 94.5 inches in length. For repetitive cuts, they have integral flip stops, as well as a metric or imperial tape measure (your choice) on both the left and right sides. According to Festool, the crown stops have been redesigned so that they now attach to the wings themselves, rather than to the saw.

#### FEATURES THAT AREN'T NEW BUT ARE STILL GREAT

One feature that makes the Kapex unique is the 30-mm rail-forward design, which not only makes the footprint smaller so you can cut with the back of the saw against a wall, but also reduces the blade deflection and head play that are all too common in sliding miter saws. I also like the counter spring balanced bevel adjustment, which allows you to position the bevel at any angle; even when it is not locked in place, the head will stay in position. This makes angle adjustment much less tedious and more accurate. Bevel gauges on both sides with easy-to-read lime-green arrow indicators make it possible to quickly dial the saw in to a fraction of a degree (7, 8).

In addition, I really like the fully adjustable dual-line lasers, which accurately define the cut area for precise cut placement. This is another feature that helps me to be deadly accurate with my cuts, yet efficient (9).

**Cutting capabilities.** Another unique aspect of the Kapex is that it has a 10-inch blade with a cutting capacity that rivals most saws with 12-inch blades. The saw can handle stock up to 4<sup>3</sup>/<sub>4</sub> inches thick in its special cutting position, and up to 6<sup>5</sup>/<sub>8</sub>-inch crown in the nested position. It can cut miters from 50 degrees (left) to 60 degrees (right), and it offers a trenching capability with a simple flip of a knob, which allows you to cut trenches for lap joints or other jobsite challenges.



The saw's counter spring balanced bevel adjustment allows you to adjust the bevel at any angle without having to lock the head in place to keep it positioned (7). Increments are clearly marked and easy to read (8). Powered by the saw rather than by separate batteries, the dual laser lines define both the left and right sides of the cut (9). A fast-action hold-down clamp can be used to secure the workpiece to the saw table, resulting in safer and more accurate cuts (10).

One minor gripe I had with the old saw was the stock blade; I replaced it with a Tenryu IW-26080AB3 Miter-Pro Plus 80-tooth blade, which provided cleaner cuts and fewer flying offcuts. I tested the new saw using the stock Festool 495388 60-tooth blade that came with it. I'm told that Festool has made improvements to the stock blade, but I still plan to replace it with the Tenryu blade, which I feel is quieter.

Another minor complaint is that the blade guard sometimes gets in the way of cutting bigger stock, such as a 4x4, and tends to push small offcuts forward into the path of the blade.

**Safety.** While many miter saws come with some sort of hold-down clamp, most of them are threaded and—let's face it—nobody has time to mess with adjusting them. But the Festool clamp features a slick fast-action cam design and an octagon-shaped foot that allows

you to quickly and safely secure your workpiece on the left or right side of the blade. I don't typically use the clamp with basic moldings such as base or casing, but it's an excellent solution for wide material, or even for cutting extra-short pieces, as it allows you to clamp a sacrificial board to the saw bed (10).

Like all Festool tools, the new Kapex is covered by the company's 3-2-1 warranty program, which offers three years of coverage, including wear & tear on things like the motor brushes, a two-day standard repair time, and a one-month money back, no questions asked, satisfaction guarantee. [festoolusa.com](http://festoolusa.com)

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