One of the most common questions we get about our router is what sizes we offer and if other manufacturer's cutters will fit our tool. Right now we only have one size, 1/2" square tipped. We plan to offer a 1/2" spear point, but we currently have no plans to offer the wide range of sizes companies like Veritas produce. Fortunately, it is possible to use many other cutters in our router... unfortunately it requires a minor but permanent modification to that cutter: adding a secondary notch.



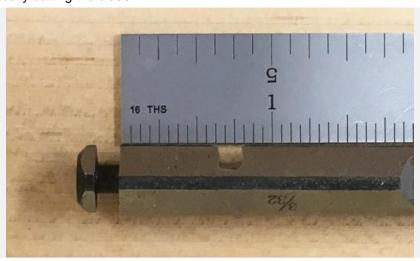
Adding the second notch isn't hard, but take your time and check the fit often.

The reason for this second notch is simple; without it you won't be able to take a cut less than 1/2"-1" deep depending on the cutter you're using. That's not good considering almost any cut you'd want to make with a narrow blade will tend to be very shallow. This is usually when people ask why we didn't just make the threaded posts taller like other router planes... it's because the 3500's cutter can move to the side positions and a taller post would stick up through the handles, so they have to be somewhat short. This is true of the original Preston design as well. So, by adding a secondary notch you can use many other manufacturer's blades. Lie-Nielsen is a no-go because they use a square shank, but any diamond shank measuring around 3/8" square should fit. To make this notch you will likely need to use a Dremel tool with a grinding wheel which can be further refined with diamond files if you have them. Standard files won't work (at least not on Veritas' cutters) as the shanks are heat treated. Work slowly, keep the notch as square as possible, and check your progress frequently.



A variety of cutters, from left to right: vintage Record, an unaltered Veritas, the WMT cutter, and a modified Veritas.

The notch is technically 0.155" tall and 0.130" deep, but that doesn't really matter. What matters is making it just tall enough to fit around the depth adjustment nut and deep enough that it won't bottom out on the adjustment nut. There should be clearance all the way around the nut when the cutter is installed and clamped down. The position of the notch is about 0.8" below the top notch, but that's on the Veritas cutter. It may differ on other cutters based on how tall the shank is. Basically, make the notch such that the adjustment nut keeps the cutting edge of the blade slightly above the sole of the tool (so no cutting occurs) when it's at its maximum height. Then as you lower the nut, you start to take a cut which naturally gets thicker as the nut drives the blade lower and lower. When you bottom the nut out on the body of the tool, you should be able to move back to the upper notch and continue. It's a good idea to layout the notch and check all these positions before actually cutting the blade.



Location of the second notch, just under 13/16" below the upper notch for a Veritas cutter.



This vintage Record cutter would also work well in the WMT 3500 router.

Now for a few important notes, disclaimers, etc. The most obvious thing to state here is you're modifying these cutters at your own risk. Second, the Veritas cutters neck-down on the shank width fairly high up which means you aren't getting the usual amount of support for the cutter when it's clamped in the tool. As a result, you may find it doesn't align perfectly straight every time or can shift if pushed on hard enough. In our experience, this has been a minor inconvenience at the most. Make sure the blade is straight as it is clamped in place. If it's not, simply turn it slightly until it looks good, then clamp it down. At that point it shouldn't shift. Yes, it's possible if you push on it sideways with high force, but small blades are typically only going to see light forces and usually take them head on, not sideways. Finally, you obviously can't rotate the cutter 90 deg in the side positions simply by adding a notch. This is true, but why would you want to? Smaller cutters are generally for smaller work so using it in the standard middle position is ideal. For larger sweeping cuts where the 90 deg rotation is desirable, use our cutter.



Note the narrowing effect of the Veritas cutter.



This is roughly the starting point for the blade where a flush cut would be taken. Notice how there isn't a lot of supporting material on the shank to align the cutter in the V-groove.



The narrow cutter installed with the added notch. Not too shabby.

And that's all there is to it. A small change to cutters many of you probably already own or can purchase at a reasonable price and you can route any size area you want.