



Woodsmith **PLANS**

# 17 PROFILES — 3 BITS



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You don't need a drawer full of router bits to create interesting profiles. Make all of these and more with just three basic bits.



Over the years I've accumulated a lot of router bits. The "workhorse" bits with standard profiles get used over and over, while the more exotic "big money" bits just gather dust. This led me to realize you don't need a drawer full of expensive bits to rout fancy profiles.

**JUST THREE BITS.** The photo above illustrates the point. All of the molded edges shown (all examples are  $\frac{3}{4}$ "-thick stock) can be made using just three common router bits. These are bits you'll find in just about any woodworker's collection. And as you can see, the possibilities for putting them to use are pretty impressive.

The three bits (shown at left) I used to make these examples are a  $\frac{1}{2}$ " roundover bit, a  $\frac{1}{4}$ " roundover bit, and a  $\frac{1}{2}$ "-dia. core box bit.

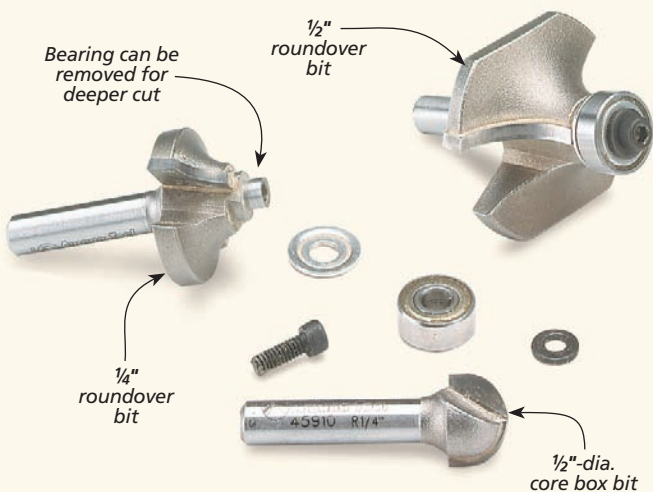
**ONE BIT, SEVERAL CUTS.** The following pages show how to use them to make a few of my favorite profiles.

There's really no great secret to the process. First, I try to avoid getting stuck on the idea that a single router bit can only make one type of cut. The truth is that many types of router bits can produce a variety of shapes depending on how you put them to use. To make some of

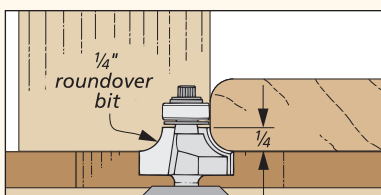
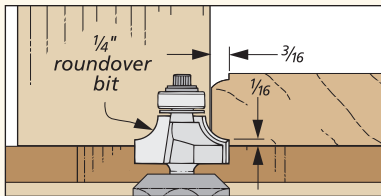
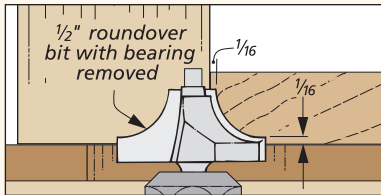
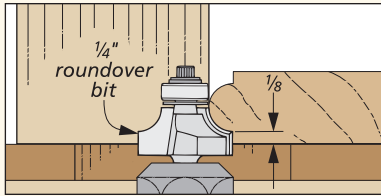
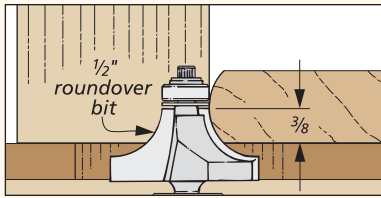
the profiles you see above, I used different parts of the bit or changed the depth or height of the cut. For example, a core box bit (or cove bit) can be used to create a wide, shallow cove or a deep hollow.

**MULTIPLE BITS.** Some of the simple profiles you see were made using only a single router bit. But to create the more complex shapes, you'll need to use a combination of bits. For instance, a  $\frac{1}{2}$ " roundover along with an accurately cut  $\frac{1}{4}$ " cove creates a large reverse ogee.

**ACCURATE CUTS.** One of the keys to successful results is to make the cuts carefully and accurately. Two or three (or more) light cuts will often yield better results than one deep cut. This is more important than doing the job quickly. And finally, a little fine sanding is often needed to "blend" multiple cuts into one smooth, seamless profile.



## One Setup



## SHOP TIP: DESIGN YOUR OWN

As you can see, the layout tools I used to design these profiles are pretty basic. A section of 1/2"-dia. dowel works great as a template for a 1/4" roundover or a 1/4" cove (1/2" core box bit). And a 1"-dia. dowel was my template for a 1/2" roundover bit. Chances are if you can draw it on paper, you can find a way to make it with a few common router bits.



## Two Setups

