

Skill Activity 1

ROUTER BIT IDENTIFICATION

Router bits may be made of high-speed steel (HSS), solid tungsten carbide, or steel with carbide tips. Each type has advantages for certain applications. HSS bits are tough and relatively easy to sharpen, but dull quickly when used on plywood, plastic laminates, or hard heavy wood. Carbide tipped bits last longer than HSS, but are more difficult to sharpen. They also tend to be brittle, and may break if carelessly handled or abused. Solid carbide is used mainly for small sizes that would be difficult to manufacture with carbide tips.

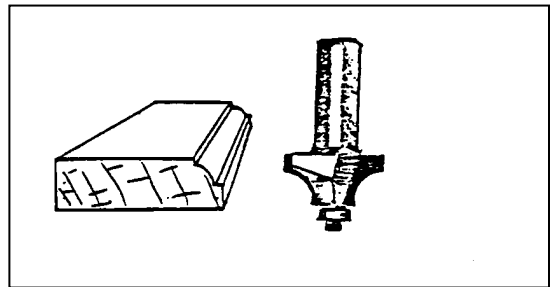
Router bits may have shanks of any size, from 1/8" to 3/4". The most popular sizes are 1/4" and 1/2". The larger shank sizes support the cutting edge better, and reduce vibration in the cut.

Task: Using Fig 26-29 on p. 460 of *Modern Cabinetmaking*, study the bits in our cabinet until you are comfortable you can identify them.

ADDITIONAL TYPES OF ROUTER BITS (not shown in text)

1. BEADING BITS

2 flutes, solid or ball bearing pilot.
Sizes: 1/16 to 3/4 inch radius.
(These bits are identical to Rounding-over bits of the same size, only with smaller diameter pilots. Those with ball bearing pilots may easily be converted from one type to the other.)
Used for routing decorative beads on edges of stock.
Pilots need a smooth surface to run against.



2. SLOTTING CUTTER WITH ARBOR

2 or 3 lips, 1 7/8 inch in diameter.
Sizes: 1/16 to 1/4 inch kerfs.
Used with an arbor, with or without a ball bearing pilot, to cut slots in edges of stock.
Arbors come in various lengths, with 1/4 or 1/2 shanks.

