

Tapered Tenon Cutters

U.S. Des. Pat. No. D547,155

  **Caution:** Always wear safety glasses when using this tool. Blades are extremely sharp. Handle with care.

The body design of the Veritas® Tapered Tenon Cutters is similar to the Veritas® Dowel and Tenon Cutters; however, the straight-edged high-carbon steel blade will put tapered tenons on the tips of turnings, dowel or rustic furniture components to fit into tapered holes, such as on the legs and spindles of a Windsor chair.

Available in five diameters, $\frac{3}{8}$ " , $\frac{7}{16}$ " , $\frac{1}{2}$ " , $\frac{9}{16}$ " , and $\frac{5}{8}$ " . The sizes are the minimum diameter of tenon the cutters will taper; the maximum is $\frac{1}{2}$ " greater, over a total tenon length of $2\frac{1}{2}$ " . A starter set of the $\frac{3}{8}$ " , $\frac{1}{2}$ " and $\frac{5}{8}$ " sizes will cover most tenoning requirements for typical chair making. If you have all five sizes, you will be able to cut tenons up to $1\frac{1}{8}$ " in diameter and as long as 2". Works equally well in soft, green or hard woods.

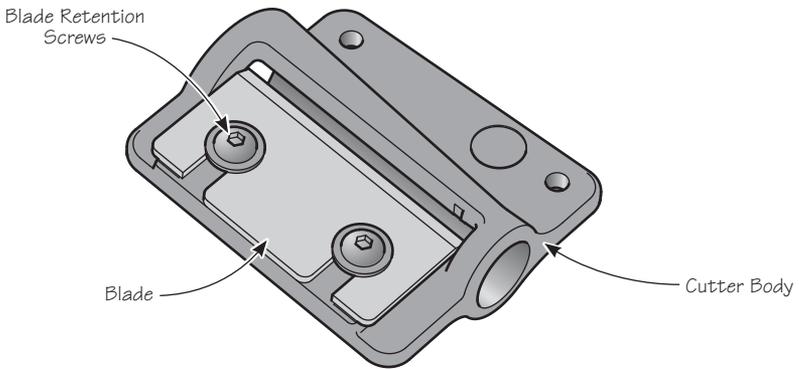


Figure 1: Tapered tenon cutter components.

Making Tapered Tenons

The cutter works much like a hand-held pencil sharpener; you either rotate the workpiece while pressing it into the cutter body or you can rotate the tool on the workpiece.

In most instances, the tenon produced should be concentric with the rest of the workpiece. To help achieve a properly aligned tenon, keep the workpiece centered in the infeed, as shown in **Figure 2**.

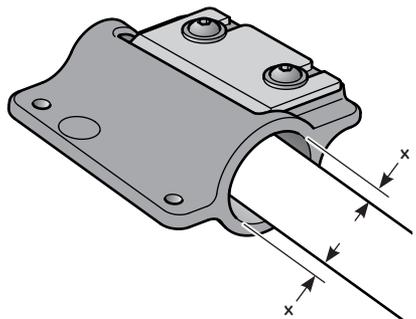


Figure 2: Workpiece alignment.

⚠ Caution: Do not use these cutters with a power feed to make dowelling, as sustained use will lead to extreme heat build-up and the bodies of the cutters will become extremely hot.

In some cases, such as with tenons longer than 2", you may need to first cut the tenon to the required length and major diameter with a larger size cutter, then make a second pass with a smaller size cutter. (See **Figure 3.**)

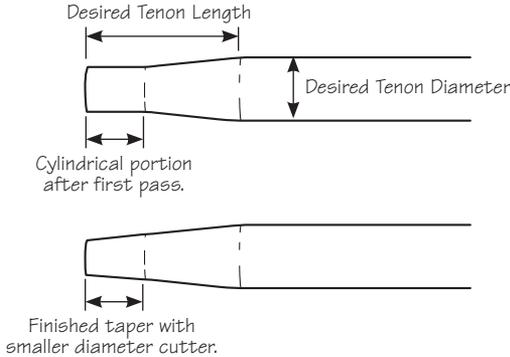


Figure 3: Creating a long tenon in two steps.

Adjustment

⚠ Caution: Be aware that the blade is sharp; careless handling can result in serious injury.

Since different wood species and conditions yield different results, you may need to adjust the blade accordingly. Always make a test tenon with a scrap piece of wood of the same material as your workpiece, then check the diameter of the tenon by test fitting in a hole of the same size.

The blade is retained with two screws. A 1/8" hex key is provided to loosen or remove the screws for blade adjustment or removal. (Be aware that the hex nuts are not captured and will fall out when the screws are removed.) The blade bed has index lines to help judge the blade's position and relative movement.

If shavings clog the mouth, start with the blade further out. **It may be necessary to skew the blade to achieve the desired taper without clogging.**

Sharpening

The high-carbon steel blade is supplied with a 30° bevel. As supplied, the cutting edge is adequate for rough work in most woods; however, accuracy and surface finish will be improved with additional sharpening.

Start by lapping the back of the blade and then proceed to honing the bevel. A 1° to 2° micro-bevel honed on the final edge will strengthen the edge and reduce your sharpening time.

Care and Maintenance

The cast zinc body of the tapered tenon cutter is durable and corrosion resistant; however, the high-carbon steel blade may rust if exposed to moisture. If storage conditions are damp or humid, the cutter should be wrapped in a cloth or stored in a plane sack. This precaution will also guard against dings and scratches. Periodically, or following exposure to moisture, take the tool apart to clean it. Remove the blade from the body and clean all parts using a cloth dampened with a dab of light machine or mineral oil.

Sizes Available

- 05J61.04** 3/8" Tapered Tenon Cutter
- 05J61.05** 7/16" Tapered Tenon Cutter
- 05J61.06** 1/2" Tapered Tenon Cutter
- 05J61.07** 9/16" Tapered Tenon Cutter
- 05J61.09** 5/8" Tapered Tenon Cutter

Accessories

- 05J61.20** Replacement Straight Blade
- 05J60.20** Optional Curved Blade*

** The curved blade (for dowel making) should be used only with the three smallest sizes.*