



The Benefit of a Well Made Tenon

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Have you ever made a tenon for a scroll chuck only to reverse your bowl and discover it doesn't turn true? If you understand what shape and dimensions are required for a tenon to fit the jaws of your chuck most securely, and then make the tenon accurately, your bowl will turn truer and reduce the time required to retrue it.

Most of my experience is with dovetail jaws. They pull the jaws tight against the base of the tenon as they are tightened around the tenon, which creates the best potential for a true fit.

Profile
jaws clamp straight in against the tenon compressing the wood with the serrations of the jaws and are less likely to clamp with as much accuracy.

The inside of dovetail jaws, the clamping part, is smaller in diameter around the base of the tenon and larger in diameter around the end

of the tenon. When the tenon is properly formed, the larger diameter of the end of the tenon will not pass through the jaws, holding the work securely in the jaws of the chuck.

It is best, when possible, to make the tenon the appropriate diameter to fit the jaws when the chuck is

scrolled in nearly all the way. Scroll chuck jaws are manufactured in a completely circular form and then cut into four separate jaws that slide toward the center of the chuck as they tighten around the tenon.

Vicmarc jaws form a perfect circle when there is a 2mm gap between adjacent jaws to allow for the kerf of the saw blade that was used to cut them into four jaws. When cutting a recess in a bowl blank for the outside of dovetail jaws to expand into, make the recess just larger than the jaws when they are completely closed. When the jaws are expanded beyond a true circular form, they will still hold, but your work is more likely to turn true when the jaws make contact completely around the tenon.

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