

Offset-Layout Technique for Dovetails

This offset-layout technique utilizes some new layout tools from the Glen-Drake Toolworks to measure and adjust assembly clearances for hand-cut joinery. This technique is fully illustrated in a DVD that is available by calling (800) 961-1569. It uses a Kerf-Starter™ to establish the kerf and an Offset-Gauge to place the kerf in the waste. Here, Kevin Glen-Drake shows you how to cut and fit a large single-tail dovetail.

The Tails:

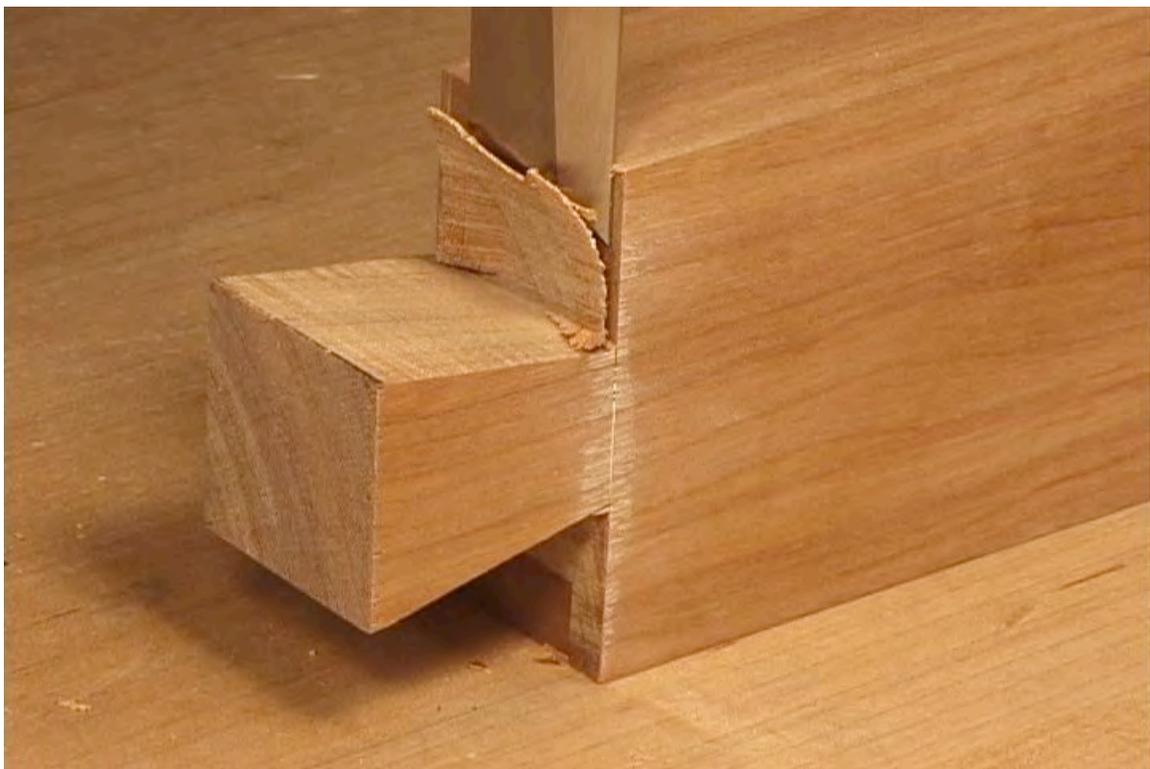
1. Using any method you like, cut a shallow rabbit on the inside face of the tail piece just shy of the shoulder line. This rabbit helps register the tail-piece against the pin-piece when you layout the pins, and it will cover up the inside of the joint, giving you a nice clean inside corner.



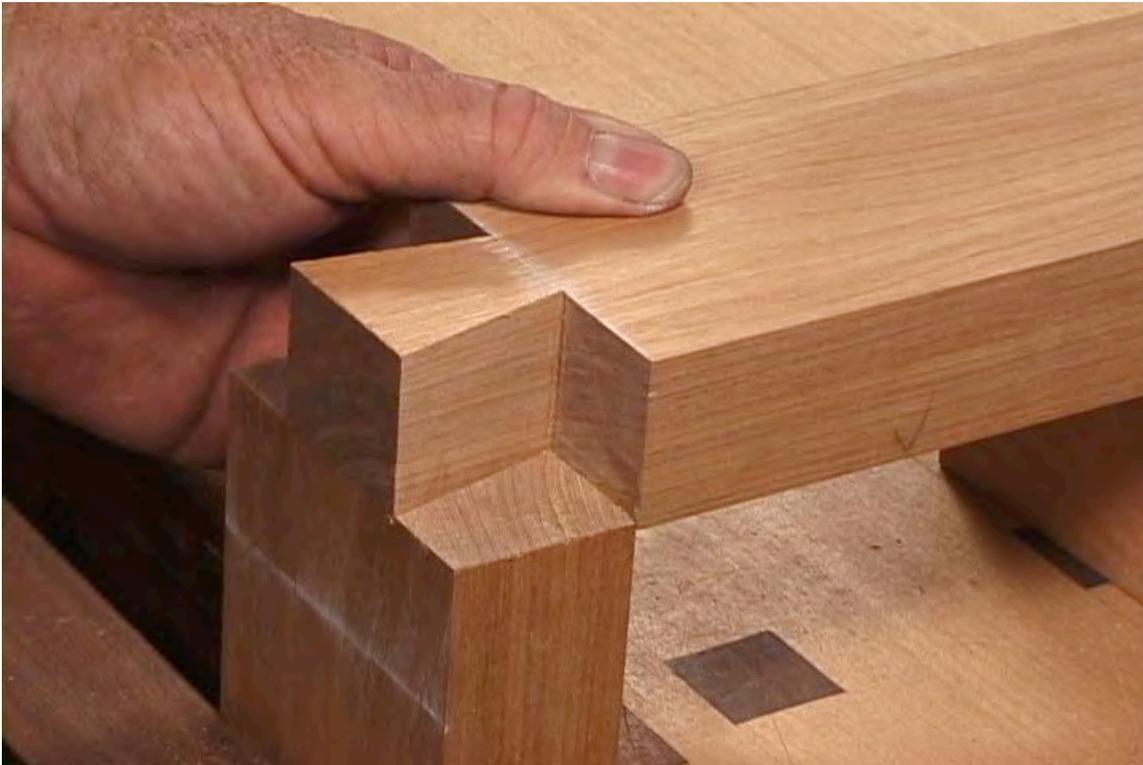
2. Use your Tite-Mark to pare the rabbit down to the shoulder line and then carry that line all the way around the tail piece to establish a shoulder line that lines up precisely with the shoulder of the rabbit.
3. Use your Kerf-Starter to establish the tail kerfs across the end grain. Do not mark the descending long grain (angular) line. Just eyeball the angle and make the cut.



4. Remove the waste by sawing above the shoulder and then chop down to the shoulder line to make the shoulders nice and crisp.



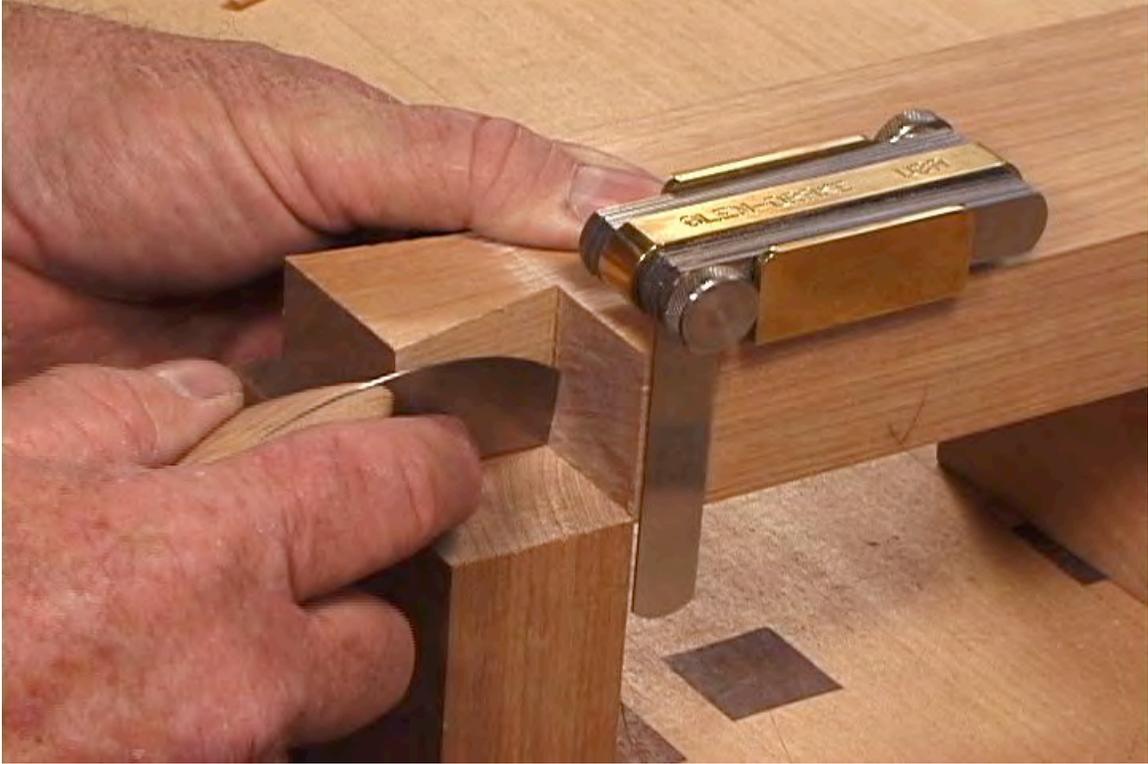
5. Use your Tite-Mark to mark the pin-piece shoulder line. (The rabbit reduced the thickness of the tails, so set your gauge from the tails and not the tail piece.)
6. Use the shoulder of the rabbit to register the tail piece against the pin piece for layout.



7. Select an offset blade from your offset gauge that is the thickness of your Kerf-Starter, minus (that's minus) the clearance you think you need for the type of wood you are using, the ambient humidity, the fit (snug, press, or loose), etc. A clearance of .002-.004 works for most hard woods.
8. Set the offset-gauge on top of the tail piece so that the blade you have chosen will descend along the side of the tail piece.



9. Use the blade of your square to flush-up the tail edge with the pin edge, using the offset blade as a spacer. This will shift the tail piece to the left.
10. Use your Kerf-Starter along the right side of the tail to mark the right side of the tail socket.



11. On the same side, register the offset blade (vertically) on the pin piece and flush-up the edges once again. This will shift the tail piece to the right.



12. Use your Kerf-Starter along the left side of the tail to mark the left side of the tail socket.
13. Carry the kerf lines down the pin piece using a square. Draw your Kerf-Starter upward along the square until you feel it click into the shoulder line. Then increase the pressure and remove a shaving, angling your Kerf-Starter in the direction of your cut.



14. Make your cuts and clean out the waste.



15. And press it together.

