The Long and Short of It: Bandsaw Blade Length

I want to get one of your Wood Slicer blades for an old Walker-Turner bandsaw I bought not long ago, but I don’t know what length to order. Do you know what will fit my saw?

We don’t know what blade length fits your saw either, but fortunately it’s easy to find out. It’s especially easy, of course, if you have an old blade that fits the saw — just measure its length. Make a mark on the inside of the blade, and align it with the zero point on a measuring tape laid on the floor. Roll the blade along the tape until the mark reaches bottom center again, and there’s your measurement. The exact measurement is just a target, by the way — if your blade measures 114-5/8”, you don’t have to special-order that exact length. Try a blade of 114” or 115” length; it’s more than likely that either one will work just fine.

Most bandsaws will accept a range of blade lengths, sometimes with as much as 2” difference between the shortest and longest blades that the saw can use. If you don’t have a blade to measure, or if you simply want to know if a 93” blade will fit a saw rated to handle 92”, here’s how to determine the range of lengths you can expect to mount on your saw.

With no blade on your saw, lower the upper wheel as far as it will go by turning the tensioning knob counterclockwise until the wheel moves no lower. Measure the distance from the center of the upper wheel shaft to the center of the lower wheel shaft.

Now raise the upper wheel as far as it will go. Once again, measure the center-to-center distance between upper and lower shafts.

Multiply the shorter shaft-to-shaft figure by two, since the blade covers this distance twice in a complete circuit. Add one full wheel circumference, since the blade travels around half of the upper wheel and half of the lower. (Circumference is wheel diameter times 3.1416.) This sum is the saw’s theoretical shortest blade length. Do the same arithmetic with the longer shaft-to-shaft length to find the theoretical longest blade length. Blade length listed in owner’s manuals is usually the average of these two figures, or a convenient whole number somewhere in the vicinity. In practice, your saw can use blades from a little greater than your shortest length to perhaps 3/8” or 1/2” less than your longest length. Example: the shortest shaft-to-shaft distance on our Delta 14” saw (with riser block installed) is 30”. Max distance is 31-1/8”. So the shortest theoretical blade length is 2 x 30” plus 14” x 3.1416, or 60” + 44” = 104”. The longest theoretical length is 62-1/4” + 44” = 106-1/4”. Thus we can expect the saw easily to handle any blade length from 104-1/4” to 105-3/4”. We describe the saw as using nominal 105” blades, knowing that a little more or less will work equally well.