

Tricks of the Trade

Are You Using the Wrong Shuttle?

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Some shuttles do some weaving tasks better than others. Here are some tips for choosing the right shuttle.

“Shuttles make weaving a joy—especially if you are using the best shuttle for the task.”

Shuttles are wonderful tools. They come in beautiful woods and finishes, they are not expensive (compared to looms!), they don't take up much space (you can never have too many!), and they make weaving a joy—especially if you are using the best shuttle for the task.



Stick shuttles and belt shuttles

Stick shuttles come in all sizes and shapes. Usually they have forked ends so that you can wind the yarn around the center, as in the shuttle above, or in a figure-eight sort of motion that takes the yarn to both sides. Stick shuttles with one beveled edge (like the one shown here) are also called belt shuttles. The beveled edge is used to press in the weft, particularly with looms that don't have beaters, such as inkle looms. Stick shuttles are useful for very narrow weaving or for weft yarns too thick to be wound on bobbins. A disadvantage to stick shuttles is that you can't "throw" them through the shed. Also, after each pick, you must manually unwind the yarn needed for the next pick.

TIP. To wind a bobbin for a boat shuttle, start with a very smooth base, covering the bobbin from one end to the other. Make each subsequent layer smooth and very tight.

Ski shuttles

Ski shuttles look like skis! And like skis, their shape is designed for fast movement. The yarn (often a very thick yarn or cut rag strips) is wound around the top of the shuttle so that the yarn does not touch the warp as the shuttle flies through the shed. Ski shuttles are ideal for rug weaving, especially with looms that make sheds big enough to accommodate them. They can be "thrown" through the shed like a boat shuttle. Their only disadvantage is that the yarn must be unwound before each pick.



Boat shuttles

Boat shuttles, not surprisingly, are shaped like boats. They are open in the center to hold a bobbin. The bobbin rotates on a rod, allowing the yarn to unwind as the shuttle goes through the shed. Boat shuttles can be "thrown" through the shed with little manipulation to achieve smooth selvages (the tug on the yarn as the bobbin rotates pulls the weft against the selvedge thread). Bobbins must be wound firmly and evenly, however, so that the yarn unwinds smoothly during weaving. A poorly wound bobbin can yank the weft too firmly and draw in the edge threads. Boat shuttles come in different sizes and weights. For wide warps, you need larger and heavier boat shuttles than for narrow warps.



End-feed shuttles

End-feed shuttles are shaped like boat shuttles but are equipped with pirns instead of bobbins. A pirn is wider at the base than at the point, and the weft yarn is wound around it in sections, from the base end to the top. As you weave, the yarn is pulled off first from the top end of the pirn, then lower and lower, and finally from the base. No tension is applied to the yarn by the pirn. Instead, the yarn passes through a tensioner at one end of the shuttle. The tensioner can be adjusted to apply the desired amount of pull against the selvages. End-feed shuttles are generally used with relatively fine yarns, and it takes a bit of practice to learn how to wind a pirn successfully. 