

# HONEX-TENSIONED End Feed Shuttles



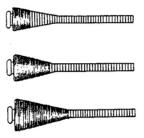
## **INSTRUCTIONS**

- · Filling End-Feed Pirns
- ·Threading the Honex Yarn Tensioner
- · Adjusting the Amount of Tension on the Yarn

#### FILLING END-FEED PIRNS

End-feed boat shuttles use a special, tapered bobbin called a pirn that does not spin inside the shuttle as yarn is released. Instead, the yarn is released off the end of the pirn, through a tensioning device, and then out the side of the shuttle. This design allows for consistent weft tension no matter how much yarn is on the pirn. The result is faster weaving with smooth selvedges.

To unwind smoothly, end-feed pirns must be wound correctly. Many types of bobbin-winders can be used to fill pirns, including hand-operated and electric winders designed for side-delivery bobbins or paper quills. However, the shaft on some winders may need to be built up with masking tape, duct tape, a paper quill or surgical tubing to provide a snug fit for pirns.



When filling a pirn, always keep your tension very firm. The full pirn should feel hard. Begin winding yarn at the wide end of the pirn, initially covering about one inch. Gradually wind on more yarn, carefully following the cone shape of the pirn.



For 8" and 5½" wood or plastic pirns, move down the pirn about one-half inch with each new layer of yarn. Each layer should cover no more than about two inches. For the smaller Swedish paper pirns, move down the pirn less

than one-half inch with each new layer of yarn and each layer should cover no more than about 1½ inches.

Keep in mind that the weft yarn will unwind off the small end of the pirn. Never wind too far forward or back over the area already filled. With practice, winding a pirn is no more difficult than filling a conventional, side-feed bobbin.

#### THREADING THE HONEX TENSIONER

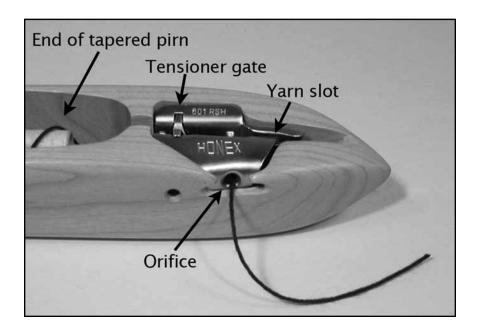
Threading weft yarn through the Honex tensioner is quick and simple.

Insert a filled pirn onto the pirn shaft. Leave about six inches of yarn trailing off the small end near the Honex tensioner.

With your left hand, hold the yarn taught to prevent any more from feeding off the pirn. Do this by using your left index finger to hold the yarn tight against the pirn or against the bottom of the shuttle at the end of the pirn.

Use your right hand to straighten and lower the yarn, first into the tensioner gate and then through the slot at right end (front) of the tensioner.

Then, still with your right hand, gently pull the yarn toward the rear of the shuttle. The yarn will slip along side the front of the tensioner, then down, and will finally pop up into the orifice on the side of the tensioner.



### ADJUSTING TENSION ON THE YARN



The Honex tensioner is quickly adjusted to properly tension yarn in a wide range of sizes.

A 2mm hex wrench is required to adjust the tensioner, and each shuttle is shipped with this small tool.

There are small holes in the wood on either side of the shuttle near the tensioner. To change your yarn tension, insert the hex wrench into each of the holes in turn, making sure it slips into the adjusting hex screws in the tensioner.

Turn the adjusting screws clockwise to increase tension on the yarn, and counterclockwise to decrease tension. Both sides should be adjusted equally. Note that the screws

might turn with some stiffness.

Start with a half turn at a time on each side until you achieve the proper tension for the yarn you are using.

