



Bassoon Throat Reamer (#E-03)

This tool is designed for the experienced reed maker who is well acquainted with the preliminary steps of reed making. It is designed to ream between the first and second wires to create or enlarge a chamber in the throat of the reed.

The principal function of this chamber is to reduce resistance in the playing characteristics of the reed, while maintaining stability.

A secondary function is to improve the overall vibration of "tired" reeds, namely those with undersized throats, and improve their low register response. With some practice and experimentation, the throat reamer will enable the reed maker to transform any decent reed into a really great reed.

How To Use The Throat Reamer

After you have used your regular reamer to control the bocal fit (about 3/8" +/-) it may be necessary to enlarge the throat of the reed. To check the throat size applicable to your reed shape, use a throat mandrel. After you finish reaming, remove all burrs and loose fibers inside the reed with a needle file.

For reeds having a tube length of 28 to 30mm (1-1/8" to 1-3/8"), the throat reamer should be fully inserted and reamed. For shorter tubes, ream only to the first wire, since reaming beyond that point will only weaken the reed. Excessive reaming will have similar results.

Testing The Reed

Normally the reed tube is modified to a more or less oval shape during this stage of reed making. To minimize resistance, the vertical dimension of the tube between the first and second wire must be maintained. To determine throat size, use a tapered forming mandrel, which should penetrate fully into the tube - for most reeds. Then ream as necessary, clean out any burrs and recheck the mandrel fit. After adjusting the wire, you can then ream again with a regular reamer for a proper bocal fit. Then follow up with a throat reamer as needed.

Notes:

The reamer should be centered in the reed throat; however, to enlarge the chamber or to compensate for an asymmetrical throat, it may be necessary to force the throat reamer to off-center. If additional enlargement of the throat is desired, or if the throat is round at the first and second wire, temporarily flatten the wire shape and then ream the throat. Finally, restore the wires to their original shape; this should result in a more oval configuration of the throat.