TM TOOLMASTER

Using ER Collets

The ER collet system has powerful and accurate clamping. Accuracy is achieved by the clamping of the cutter along its outside diameter. Because of the two tapers the pressure is uniform along the shank of the cutter, where single angle collets have the cutter held by a pitching method usually at one end. These collets are easily recognized by the single cut from one end only, along the length of the collet.

The ER collet has cuts from both ends of the collet. This allows the collet to clamp on the shank of the cutter parallel The other benefit of ER collets is they also have 1mm of movement so a 6-7mm collet can cover 6mm and 1/4", reducing the amount of collets needed



Cut from the bottom end



Single cut from one end

Using ER Collets

The correct way of using an ER collet is as follows

1. First fit the collet into the nut. This is done by placing the collet in the nut and rotating the nut so that the collet clips into the extraction ring. (See "A" & "B")

This needs to be done so that both the tapers will be used when closing down the collet on the shank of the cutter.

It is also important that the collet is clipped into the extraction ring so that when removing the cutter, the collet will be ejected from the taper and releasing the cutter.

A check can be made if the collet has been clipped into the extraction ring by holding up the nut with the collet unsupported in the nut.

After the collet has been clipped into the nut, then the nut and collet should be screwed on to the chuck.

Once the nut has been attached to the chuck then the cutter should be inserted into the collet and the collet nut tightened.

If using threaded shanks be sure to have the cutter shank in far enough so that the major area of clamping is on the shank and not the threaded area.





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