

The **Kelton ER Handles** are a significant advance in the design of wood turning handles and are acknowledged as being extremely versatile.

Here are a few ideas and guidelines that may assist users to gain the maximum benefit from the ER handles.

## **Holding round shafts**

The collets used in the Kelton ER handles are designed to hold round shafts (within the capacity of the collet). They should **not** be used to hold irregular shaped items. (Hexagon or rectangular for example) Otherwise damage will likely occur to the precision made collet. Similarly they should **not** be tightened down beyond their capacity (eg: fitting a shaft with a smaller diameter than the stated capacity of the collet)

While they are primarily designed to hold turning tools they can be used to hold other tools. (Providing appropriate safety equipment and practices are used)

Some examples of round shaft tools that wood turners have found could be fitted include:

1. Inertia sanding pads (if fitted with an appropriate shaft)
2. twist drills (for drilling holes in turnings)
3. fixed sanding pads (if fitted with an appropriate shaft)



**This user made adapter, with its stepped shaft allows an inertia sander unit to fit either handle. (inertia sander not shown – for clarity)**



**ER collets can be sourced to suit various round shaft tools**

### **Easier fitting tools**

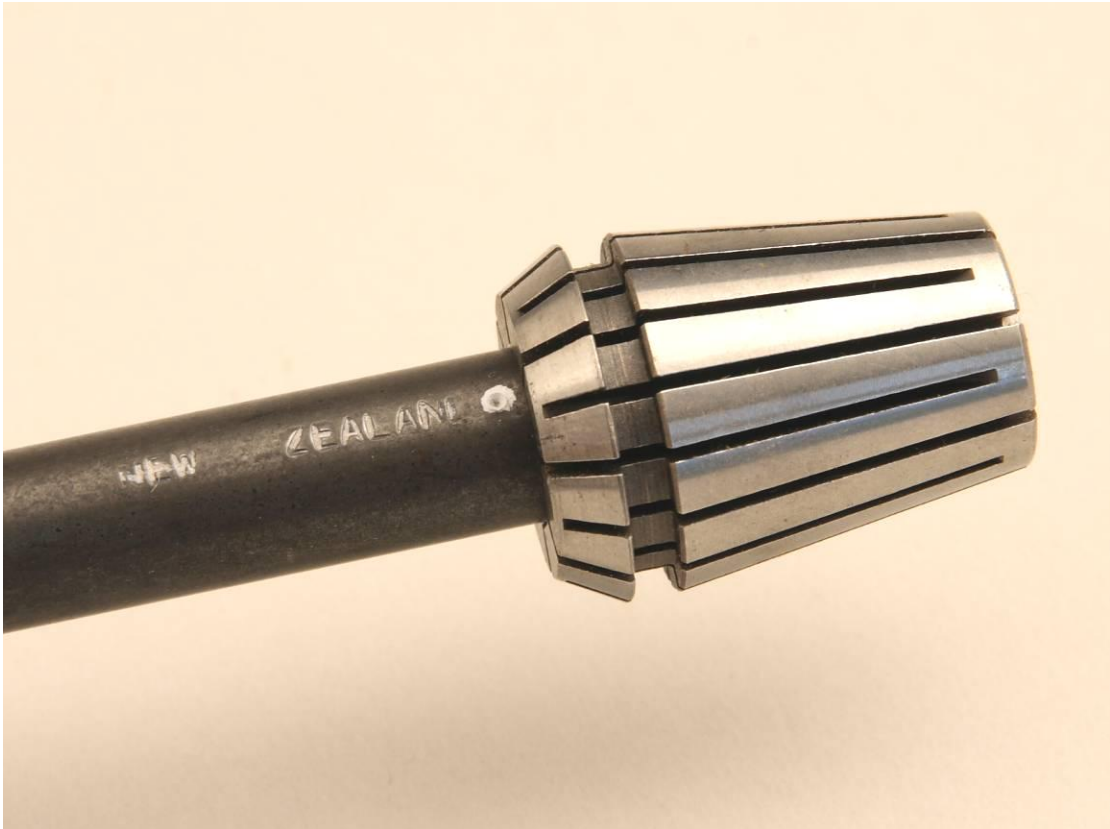
The nominally 1mm of gripping tolerance of the ER collets allows them to suit a range of tools. If however the tool shaft diameter is close to the largest size that the collet will accept, users may find the following ideas useful. It should allow them to undertake tool changes more easily.

1. Grind a small chamfer on the rear end of the tool. This allows a 'lead in' to help fit the tool into the collet.
2. Lightly and carefully 'finish' the shaft (on a belt sander etc if available) to slightly reduce the diameter of the shaft. (For a distance at least equal to the length of the collet (to provide adequate gripping) Care should be exercised to ensure the shaft remains as round and uniform as possible. Light sanding, by hand, with an appropriate abrasive may suffice. This process may be required when holding the small 8mm Kelton Hollowers in the ER16 handle, if it is found to be too tight for easy usage.



**Note how the end has also been chamfered by the user. (Not essential on this particular tool, but may be beneficial on some tools)**

Another tip is to mark the insertion depth on the tool shaft. All shafts fitted in the ER collets should be inserted at least the length of the collet. Users may elect to mark each tool with a small marking (with a permanent marker or perhaps a punch mark) to ensure they have fitted the tool the correct depth each time. See photo below.



**A small mark on the tool can make it easier to ensure the minimum insertion of the tool.**

### **Industry standard collets**

Kelton ER handles use industry standard ER collets, that come in an extensive range of sizes. ER collets have been particularly chosen for their superior gripping, ease of use and versatility. Another advantage is they are readily available in either complete sets or individually, from engineering suppliers. By using ER collets, users are not restricted on where they buy replacement or extra collets.

(Note: ER collets are generally available in both metric and imperial sizes)



**A set of ER25 metric collets (2mm to 16mm)**

The Kelton ER handles come supplied with collet sizes that should suit many users. If however you require extra collets, check with your local engineering tool supplier or on the internet (eBay etc). They are often sold in sets or individually.

### **Storing your tools**

One big advantage when using the Kelton ER handles is you can easily remove the tools for sharpening and storage. Those turners who travel or demonstrate will no doubt enjoy the space saving. Some woodturning and engineering tools are supplied in plastic containers that are ideal for storing your tools. Similarly, the ER collets should be stored appropriately to ensure they don't rust or get damaged. The collets are precision made items that deserve to be stored and maintained appropriately. A small plastic fishing tackle box or similar is a good option for storing small accessories such as the collets.

The Kelton ER handles are covered in a cushion type cover that has been selected for its ability to provide a good comfortable grip without being too soft and vague. To protect the grip, ensure it is not exposed to sharp edges or allowed to rest on sharp items for extended periods.

The **Kelton ER Handle** system is perhaps the most versatile handle system ever made for wood turners.