

Kelton ER Handle System Guide for Use

The Kelton ER Handles are a significant advance in the design of wood turning handles and are the result of years of considered development.

They utilize a unique tool holding and coupling system that sets them apart from their competitors.

They can be used as individual handles, of differing lengths, or screwed together when a longer handle for additional leverage/control is required. There is also an auxiliary side handle to provide a great degree of additional control when hollowing.

Kelton ER Handles come in three different sizes: ER16, ER25 and ER32, plus the Torque Arresting handle (TAH) which can also be used as a handle for small tools using the set screws, or as an extension on the other handles. The photos in this guide show the ER25 and ER16. Note: the ER32 is a larger version of the ER25 handle.



What makes them unique?

The handles have many unique design features that really make a difference:

1. Round shaft woodturning tools vary in diameter depending upon the manufacturer. The **Kelton ER Handles** use easily interchangeable, precision made collets available in a large range of sizes. These collets are industry standard units and are readily available worldwide. They also provide superior holding ability and do not mar the tool shaft.

The great advantage of the system is each collet has a clamping capacity range of 1mm. This means the 1/2" collet, for example, can hold tool shaft diameters of 12 to 13mm (1/2" = 12.7mm). This allows the user to swap tools, of various types, in seconds. Similarly the collet itself can be changed in seconds, to accommodate different size tool shafts (eg: from 1/2" to 5/8" - 12mm to 16mm- for the ER25 Handle). The handle is shown here with only a few of the optional collets.



This unique holding system has been incorporated in the different size **ER Handles**. The small **ER16 Handle** accepts collets that accommodate tool shafts up to 10mm (3/8") and is ideally suited for smaller work or spindle work, where shorter handles can be an advantage. While the larger **ER25 Handle** accepts collets that accommodate tool shafts up to 16mm (5/8"), and the **ER32 Handle** to 19mm (3/4"). The collet nut can be tightened by hand or by a spanner, if required, though hand tightening is nearly always sufficient due to the superior holding qualities of the ER collets.

2. Some turners prefer to use long handles and some turning operations, such as hollow turning, can benefit by using longer handles. The **ER Handles** can be easily combined by simply removing the collet nut and collet from the small handle and screwing it into the rear of the larger handles. The handle is then almost seamless along its length.

Shown here being screwed together.





3. Handles that are used on a daily basis, for extended periods or even by the occasional users, need to be comfortable (not hard and cold). The **ER Handles** are covered virtually all their length with a comfortable grip that provides an almost seamless and positive feel. The grip material gives the user the 'feel' and vibration dampening qualities they need without being too soft, like some handles.

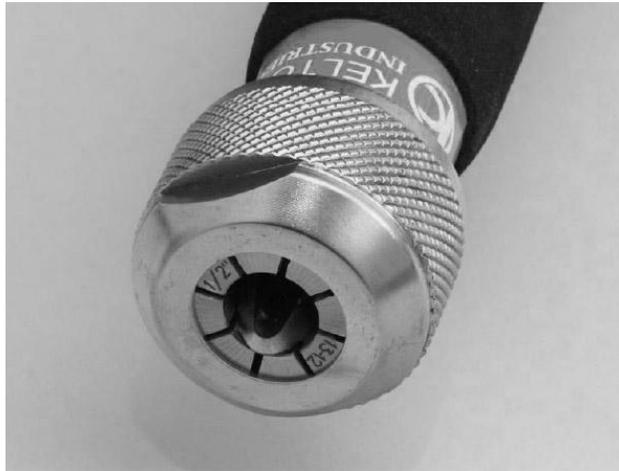
4. Some turning operations, such as hollow turning, can create unwanted rotational forces on the tool handle, (the tool wants to spin in your hands) and this can cause a loss of control. To substantially reduce this loss of control, the **ER Handle** system incorporates an auxiliary handle that can be simply screwed into the larger handle, when required. The added advantage is that the user has direct indication of the tool tip angle, (inside the hollow form) by viewing the corresponding angle of the auxiliary handle.



5. The **ER Handles** are constructed from thick wall steel tubing, to give them adequate heft.

The larger handles have a dedicated internal compartment that can be filled by the user with lead shot, etc to suit their individual requirements for further vibration dampening if desired. The compartment is plugged by a removable fastener, so any fill material can be easily removed or added as required.

6. Similarly the hollow tubing provides the ideal place to store and protect the turning tool while in transit. Simply slide the tool inside or reverse the tool and slide it within the handle, see photo, where tool tip is protected. Note: double ended tools can be used.



7. As the turning tools can be easily removed from the **ER Handles**, they can be stored safely, individually and are easy to sharpen. Eg: the handle does not obstruct the sharpening process. The handles and tools can be stored and transported in a more convenient manner. Great for those who travel to turning venues or have limited space.

*Note: to further extend the capability of the **ER Handle** system, it may be possible to machine the end of some tool shafts (eg: square shaped tools) to a suitable round shaft, that can be held in the collet system. Consult the appropriate tool manufacturer for advice and/or availability.*

The Kelton ER Handle system is not only adaptable to suit your needs it allows you to transport, sharpen and use your tools without the restrictions that can be caused by traditional handles.

Features that other handles don't have.

- Industry standard precision collets that accept a range of shaft sizes
- Different size handles to suit the work, that together form a complete system
- Easily combined to create longer handles without the need for couplers
- Full covering for an almost 'seamless' grip for a more comfortable feel