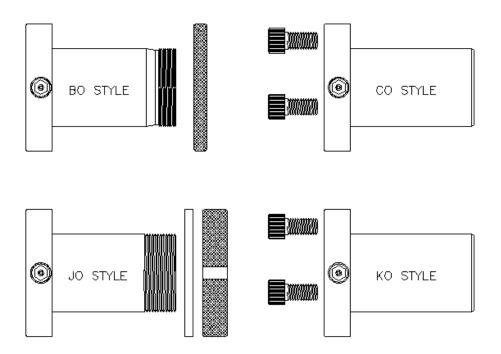
## WKW Hydro Loc Saw Sleeves



Using lock rings on all hydro loc tooling is recommended

WKW Hydro Loc Saw Sleeves are designed for use with straight bore tooling where increased precision is required. Each sleeve is made from heat treated High Strength Alloy Steel and is designed with the latest proven O-ring technology and will provide extremely reliable, accurate, and true running tooling. The O-rings used for these sleeves have been tested at pressures of double what is recommended to pressurize the sleeve and have performed successfully where welded sleeves have failed. The O-ring design will also give you the option to replace the inner sleeve if the need ever arises.

**BO Style Hydro Sleeve:** The BO style hydro sleeve is designed so that the hub o.d. and i.d. expands to make contact with both the spindle and the tool assembled to it. The hub diameter is made so it can be slip fit into the bore of the tooling. The spanner nut is meant to be tightened against the tooling to allow perfect alignment to the sleeve flange using the 3 small set screws in the spanner nut. Pressurizing the sleeve to 300-350 bar (4,500-5,000 p.s.i.) will tighten the sleeve to the spindle. The BO style hydro sleeve can be used for the following:

- 1. To convert straight bore cutterheads to hydro style tooling.
- 2. For mounting head units such as head, saw blade, and groover combination head units on tenon arbors.
- 3. Converting Straight bore insert tooling to hydro.
- 4. Splitter head units.

**CO Style Hydro Sleeve:** The CO style hydro sleeve is also designed so that the hub o.d. and i.d. expands to make contact with the spindle and the tool assembled to it. This style sleeve is designed to be bolted to the tooling using 3 cap screws supplied with each sleeve and does not require a spanner nut. The hub diameter is designed for a slip fit into the bore of the tooling to be used with it. The CO style hydro sleeve can be used in many applications where the B style hydro sleeve is used at a lower cost and will deliver an equal performance. Pressurizing the sleeve to 300-350 bar (4,500-5,000 p.s.i.) will tighten the sleeve to the spindle. The C.O. style hydro sleeve can be used for the following.

- 1. To convert straight bore cutterheads to hydro style tooling.
- 2. Perfect for converting straight bore insert tooling to hydro.

**JO Style Hydro Sleeve:** The JO style hydro sleeve has been around for many years and is designed for a more heavy duty work load. This sleeve will expand only inward towards the spindle and the tooling assembled to it will be tightened to the sleeve and against the sleeve flange by using a heavy spanner nut that is tightened securely with a spanner wrench. The spanner nut will have slots on the o.d. for a spanner wrench and a 1/4" thick spacer will be supplied between the spanner nut and the tooling. The threads can be made either right or left hand depending on rotation. Pressurizing the sleeve to 300-350 bar (4,500-5,000 p.s.i.) will tighten the sleeve to the spindle. The JO style hydro sleeve can be used for the following.

- 1. Commonly used for splitter units where multiple saws and spacers are used.
- 2. Large tenon or stacked tooling assemblies.
- 3. Splitter head units using heads and saw blades.

**KO Style Hydro Sleeve:** The KO style hydro sleeve is similar to the JO style hydro sleeve except there is no spanner nut and spacer. The sleeve must be bolted to the head and any tooling attached must be one piece or a fixed unit. Typically, the KO style hydro sleeve will be for short assemblies whereas the BO style can be used for wider or longer assemblies. Pressurizing the sleeve to 300-350 bar (4,500-5,000 p.s.i.) will tighten the sleeve to the spindle.

Caution: To prevent damage, always pressurize hydro tooling on a spindle. In the case of the BO and CO style hydro sleeves, because they expand both inward and outward, the o.d. capacity must also be filled to prevent distortion from occurring while pressurizing.

Using the WKW air grease gun (SE1536B) will deliver consistent, reliable, and exact pressures needed when pressurizing all hydro loc tooling.