



Autolock 'S' Type Chucks

The Clarkson Autolock Chuck is automatically self-tightening and has been designed to hold cutters rigidly, to prevent the cutter slipping, pushing into the chuck, or pulling out into the work and to ensure that cutters run concentrically.

The Small Chuck is supplied with four collets to accommodate cutters with 1/4", 3/8", 1/2" and 5/8" (or 6, 10, 12, 16mm) diameter shanks.

The Large Chuck is supplied in two types determined by the strength of the taper shank fitting. In cases where the gauge line diameter of the taper is less than 1.1/2" (or 38mm) the Chuck is equipped with a 1" (or 25mm) bore collet; two collets to hold 1" (or 25mm) and 1.1/4" (or 32mm) diameter shanks are supplied with the larger taper shanks.

The Miniature Autolock Chuck is available to meet cases where the visibility of small diameter cutters is of prime importance, and this has two collets, 1/4" (or 6mm) and 3/8" (or 10mm) bore.

The Adaptor Chuck fits Large Chucks which shank sizes above 1.1/2" (or 38mm) diameter, making it possible to use the range of small cutters 1/16" (or 2mm) or 25/32" (or 20mm) diameter in the Large Chuck.

Metric collets can be supplied for use with our range of metric cutters.

Chucks are available from stock in a wide range of standard tapers, and other fittings can be made to order.

When changing cutters of same size shank it is only necessary to slacken the sleeve, screw out old cutter, replace sleeve against face of body, and then screw in fresh cutter, lightly locking sleeve as previously instructed.

Particular attention is drawn to the solid H.S.S. hardened centre (4). This centre engages with the centre hole in the shank of the cutter, and holds the cutter true, also ensuring the cutter is rigid in chuck. If the solid centre wears or is broken it should be driven out from the back and new centre inserted.

The following points should be remembered by operators.

The chuck being automatically locking it is impossible for the cutters to slip. The fastest speeds and feeds the cutter and work will stand, can therefore be safely used.

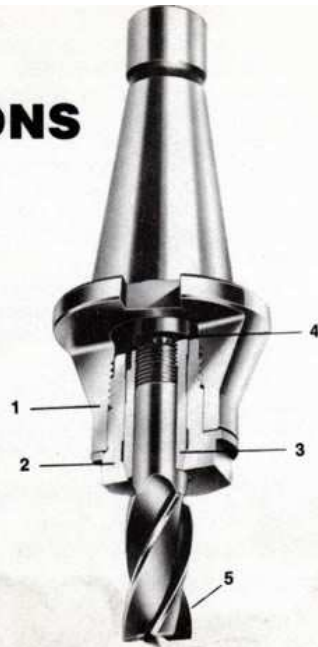
The cutters cannot push up or pull down, so that it is perfectly safe to come down to final depth with full cut, with the knowledge that the cutter cannot move up or down while working.



Clarkson-Osborn International

P.O. Box 37, Penistone Road
Sheffield S6 3AH Tel: (0742) 768622 Telex: 54304 Fax: (0742) 754012

ASSEMBLY INSTRUCTIONS For 'S' TYPE CHUCK



Clean component parts before assembly.

1. Insert the collet (3) into the bore of sleeve (2), ensuring that the driving flats of the collet engage in the mating slot of the sleeve.
2. Insert sleeve and collet assembly into the chuck body (1) and screw sleeve in until the flange meets the face of the body.
3. Insert cutter and screw into collet until it locates on the centre (4) and becomes tight.
4. Take the Autolock spanner and give a final tighten to the sleeve.

The following points will confirm that assembly is correct:

- (a) The flange face of the sleeve and the end face of the body must be in contact.
- (b) When the threads of the cutters shank and collet are just engaged, it is possible to move the collet axially. After the cutter has been screwed in this movement should have been eliminated.

To RELEASE after cutting, unscrew the sleeve (2) half a turn using the spanner. The cutter may then be screwed out of the collet.

If Cutter turns in the chuck under the effect of cutting forces, the split collet (3) is forced into the taper seating of the sleeve (2), thus increasing the grip on the shank.

Heavy cutting forces transmit a turning action to the sleeve (2), locking it more tightly against the face of the body (1) ensuring complete rigidity.