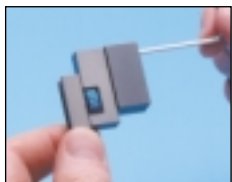
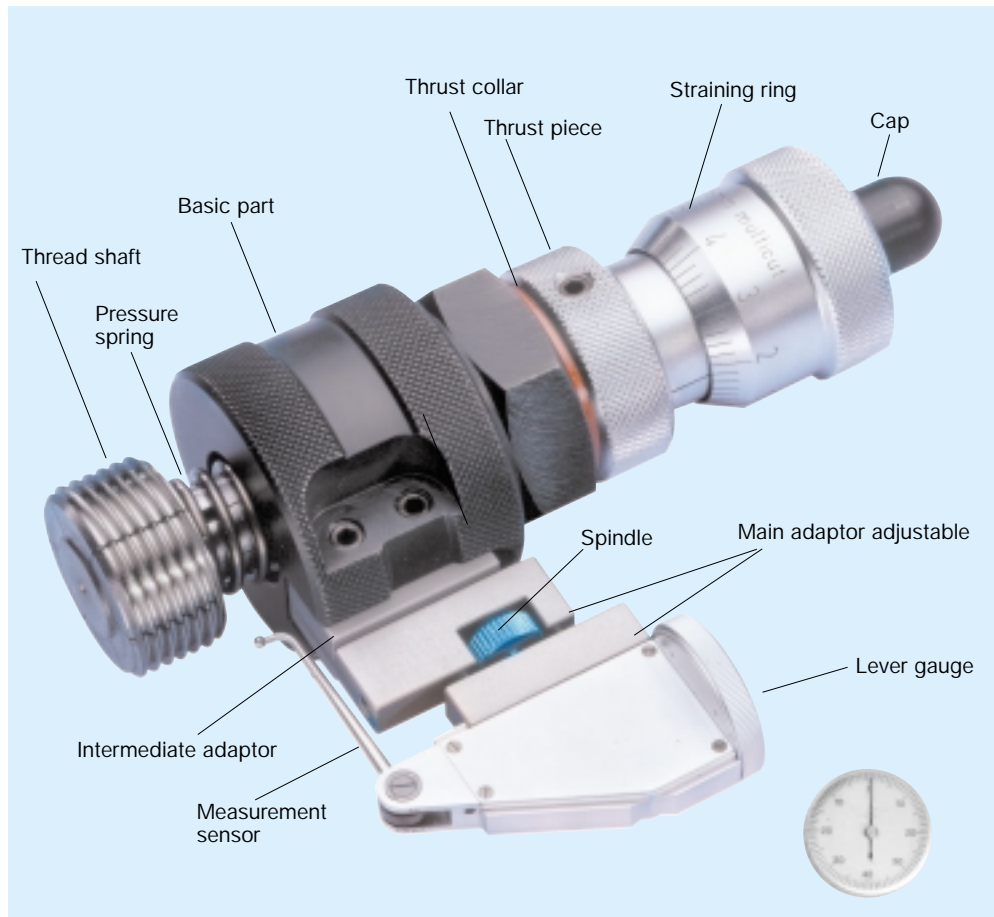


# Operation instructions for *multicut*\* measurement adaptor

Using the *multicut*\* main tool and the *multicut*\* measuring adaptor you can measure the positional deviation (relative position) of the sealing surface from the center axis of the screw-in bore without causing any damage.

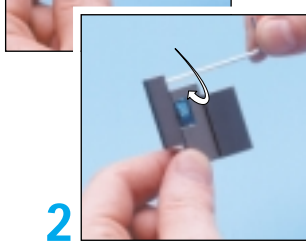
Select the required *multicut*\* main tool corresponding to your screw-in thread.

Determine which intermediate adaptor you require where you either measure the width of the retaining slot for the *multicut*\* steel section with a caliper gauge on the *multicut*\* main tool or read off the width measurement (w-measurement) from the steel section data sheet (see *multicut*\* product catalogue).



1

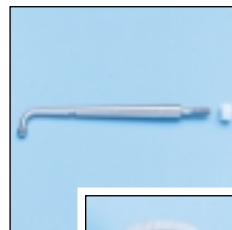
Using a suitable Allan key mount the intermediate adaptor on to the adjustable main adaptor.



2

Turn the bolt for securing the lever gauge to the left (anti-clockwise), using the Allan key, until the bolt is visibly screwed into the main adaptor.

If the measurement sensor is mounted into the lever gauge please continue to read from Fig. 6 or, if not, mount it as described in the following text.



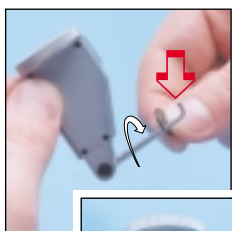
3

Place the plastic liner over the thread of the measurement sensor and screw the measurement sensor into the lever gauge until a slight resistance is felt.



4

The measurement sensor is positioned so that it can be rotated about the measurement axis. By rotating the measurement sensor about the measurement axis ensure that this appears as shown in the illustration on the right.



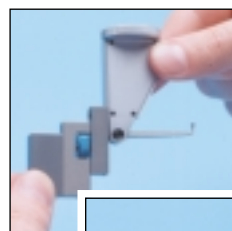
5

Rotate the measurement sensor further in until the measurement ball is positioned above. Note here that the plastic liner allows only a slight distortion and that overstraining should be avoided. If necessary use the enclosed assembly key SW 1.5.



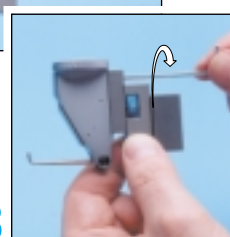
6

The measurement sensor is positioned so it can be rotated about the measurement axis. By rotating the measurement sensor about the measurement axis ensure that this appears as shown in the illustration on the right.



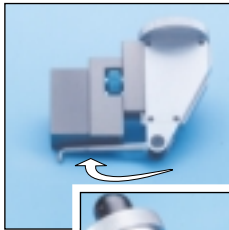
7

Allow the lever gauge guide to slide up to stop in the retainer of the adjustable main adaptor.



8

Fix the lever gauge into the main adaptor by rotating the securing bolt with the Allan key to the right (clockwise).



**9** Bring the measurement sensor into the measuring position by rotating through 180°.

**10**



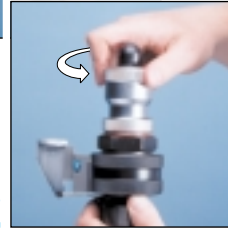
Place the main adaptor, with the lever gauge, into the retaining slot of the *multicut*\* and clamp these by tightening up the two setscrews with the Allan key.



**11**

Hold the *multicut*\* with one hand on the screw-in thread and rotate the thrust piece with the other hand to the left (anti-clockwise) until the measurement sensor is located at a sufficient distance from the threaded shaft (usually 2-3 mm, approx).

**12**



Hold the *multicut*\* with one hand on the screw-in thread and rotate the tensioning ring with the other hand to the left (anti-clockwise) until you feel the stop. Do not use any force here!



**13**

By lightly pressing with the ball of the thumb on the cap unscrew the tensioning bolts and bring the threaded shaft into the exit position.

**14**



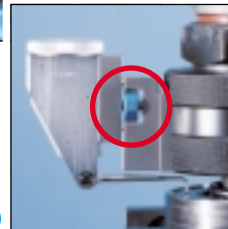
Hold the *multicut*\* on its main body and on the thrust piece. Screw it into the screw-in bore.



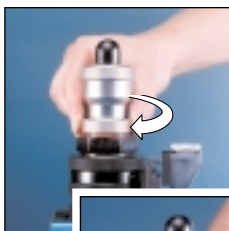
**15**

Hold the *multicut*\* with one hand on the thrust piece and on the main body. Rotate the tensioning ring with the other hand to the right (clockwise) until the threaded shaft is distinctly tensioned and the *multicut*\* has been fixed.

**16**



By rotating the spindle on the adjustable main adaptor position on the measurement sensor ball over the sealing surface to be measured, if necessary.



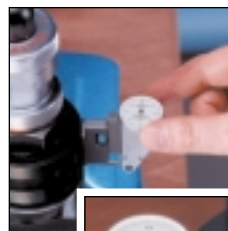
**17**

Rotate the thrust piece to the right until the measurement sensor ball contacts the sealing surface. When the measurement sensor ball contacts the sealing surface this can be seen by the deflection of the needle of the lever gauge. Rotate the thrust piece about one rotation further until the measurement sensor is pretensioned by about 0.25 mm.

**18**



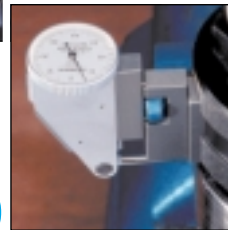
Hold the *multicut*\* on its main body and rotate it to the right (clockwise) until a transitional point of the lever gauge indicator can be determined.



**19**

Rotate the movable scale ring of the lever gauge until the indicator points exactly to zero.

**20**



Hold the *multicut*\* on its main body and rotate it to the right (clockwise) until a further transitional point of the lever gauge indicator can be determined. The indicated value is the positional deviation (relative position) of the sealing surface to the middle axis of the screw-in bore



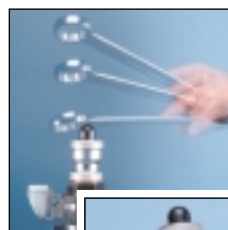
**21**

Rotate the thrust piece about 3-5 rotations to the left (anti-clockwise) in order to lift the ball of the measurement sensor from the sealing surface.

**22**



Rotate the tensioning ring to the left (anti-clockwise) until you feel the stop and, with this, free the tensioning bolt so that it can move axially.



**23**

By tapping lightly with an open-end or ring spanner on the cap release the tension bolts and the threaded shaft springs back into the exit position. Note; when tapping on the cap it is important to allow the open-end or ring spanner to fall under its own weight in order to avoid any possible damage to the *multicut*\*.

**24**

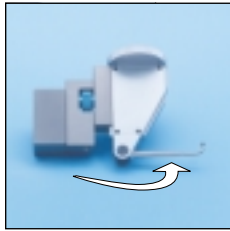


Hold the *multicut*\* on its main body and on the thrust piece. Screw it out of the threaded bore. Please note here that the tensioning bolt remains loose.



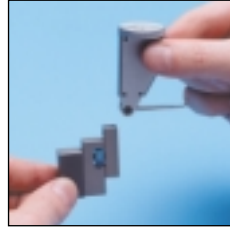
25

Release the two setscrews in the *multicut\**, using the Allan key take off the main adaptor with the lever gauge.



26

Bring the measurement sensor into the park position by rotating through an angle of 180°.



27

Release the securing bolt in the main adaptor by rotating to the left (anti-clockwise) with the Allan key and take off the lever gauge. Separate the intermediate adaptor from the adjustable main adaptor by loosening the two bolts with the Allan key and store all parts away in the case provided.