

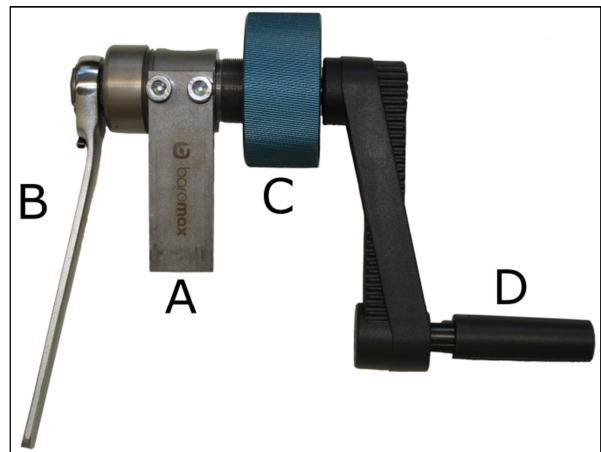
Coning of High Pressure Tubing

High pressure connections consist of a 58° cone that acts as the sealing surface and a left hand thread to fix the collar on the tubing.

When preparing high pressure tubing it is important to first prepare the cone before cutting the thread as otherwise the coning tool may damage the first pitches.

Procedure for cutting the cone is as follows:

1. Cut the tubing to the favoured length e.g. by using a hacksaw.
2. Fix the coning tool with bracket (A) properly in a bench vice so that ratchet (B), knurled wheel (C) and crank handle (D) can be easily operated.
3. Turn the wheel anti-clockwise so that the wheel is positioned about 16 mm off the body.
4. Check the blade is clean after prior use as metal chips left between the blade and tube may damage the surface.
5. Open the collet, either by turning the cap anti-clockwise or by using the ratchet. The direction of rotation may be adjusted with the little lever at the front side of the ratchet.
6. Insert the tube into the collet so that the end of the tube is about 1 mm off the blade.
7. Tighten the collet by turning the ratchet.
8. Apply a good amount of threading paste.
9. Continuously turn the crank handle clock-wise. It is important to keep the blade moving all the time whilst in contact with the tube.
10. Slowly turn the wheel clock-wise so that the blade starts cutting the cone.
11. In case you need to interrupt cutting the cone, e.g. to remove chips, keep on turning the crank handle clock-wise whilst moving the blade off the tube by turning the wheel anti-clockwise. Doing so you will avoid chatter marks on the surface.
12. When the blade was moved far enough to cut the end surface of the tube keep on turning the crank handle clock-wise while moving the blade off the tube by turning the wheel anti-clockwise.
13. Untighten the collet by turning the ratchet.
14. Remove the tube and clean the blade as preparation for the next cutting.



1 baromax coning tool

Threading of High Pressure Tubing

High pressure connections consist of a 58° cone that acts as the sealing surface and a left hand thread to accept a mating threaded collar on the tubing.

When preparing high pressure tubing it is important to first prepare the cone before cutting the thread as otherwise the coning tool may damage the first pitches.

Procedure for threading the tubing is as follows:

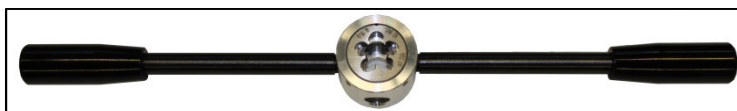
1. Cut the tubing to the favoured length e.g. by using a hacksaw.
2. Cone the tube using baromax tool.
3. Fix the tubing securely.
 - a. The baromax coning tool can be used for fixing the tube. Just fully loosen the knurled wheel (C) and pull out the assembly of blade, wheel and crank handle. The collet then works as an ideal securing point.
 - b. When using a different method to secure the tube e.g. a bench vice, always use soft jaws (padding) like aluminum not to damage the tubing.
4. Apply a good amount of threading paste.
5. Place the tool onto the tubing, guiding bore first.
6. Press the tool firmly against the tubing by positioning the palm of your hand centered over the threading die.
7. Move your hand anti-clockwise until you feel that the die gets grip on the tubing.
8. Continue cutting the thread by moving the tool anti-clockwise using the handles. The number of revolutions needed is as follows:

Tubing size	Revolutions
1/4"	13
3/8"	16
9/16"	15

9. Remove the tool and clean it as preparation for the next cutting.



2 threading tool - guiding bore



3 threading tool - die side