Assembly / Adjusting thread dies

Execution of thread dies

We recommend to use HMV machines thread dies (available from your hmv machines supplier or directly from JBL Mekan AB).

HMV Machines thread dies are marked with thread designation (e.g. M20 x 2,5) and are numbered 1 through 4. The thread dies are to be mounted in the corresponding die holders according to the numbering. Die no.1 in die holder no.1, die no. 2 in die holder no. 2 and so forth. The cutting edges of the thread dies are displaced by $\frac{1}{4}$ of the pitch angle of the thread. If the thread dies are mounted in the wrong order, the thread result will not be adequate.

Preparation

The die head can easily be turned by hand to the desired position when mounting and adjusting the thread dies.

Before the thread cutting dies are placed in the die holders, make sure that...

- Semi-automatic drive is turned off.
- The die head is closed.
- They are clean and that the seats of the die holders are free of chips and dirt.

Set the thread diameter by turning the adjustment screw (pos. 7, section 1.3.2) by means of the included socket wrench. Turning the screw clockwise decreases the diameter. The graduated scale on the inner ring of the die head and the index mark on the outer ring serves as a guide.

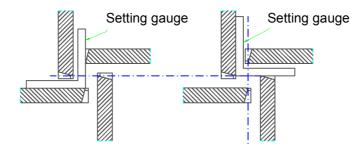
Assembly/Adjustment

Start by mounting die no.1 in die holder no.1. Place the included adjustment template on the die holder with the stop tooth resting on the cutting teeth. The graduated scale on the adjustment template and the index mark on the die holders serves as a guide. Position the die for the correct diameter by means of the adjustment screw (pos. 6, section 1.3.2). Fix the thread die cover.

Repeat these steps for die no.3 in die holder no.3.

Inspect the position of the dies by means of the included setting gauge. Hold one side of the setting gauge against the die with the outer edge in line with the edge of the cutting teeth. The other side of the setting gauge must touch the edge of the cutting teeth of the opposed die. If neccessary, adjust the position of the dies equally by loosening the thread die cover and turning the adjustment screw (pos. 6, section 1.3.2). Inspect the position again by means of the setting gauge. Re-adjust If any dislocation is detected.

Repeat the entire procedure for the remaining thread dies.



Make a short thread in Semi-automatic drive mode and inspect the diameter and quality of the thread. Make sure to check the settings in the menu I before starting. If the thread dies needs to be adjusted, make sure that the Semi-automatic drive is turned off.

Adjusting the position of thread dies according to the above instructions normally results in high quality threads if performed thoroughly.

It is critical that the dies are correctly positioned. Positioning any die too far forwards (above the center) might cause the dies to overheat which in a worst case scenario can result in broken cutting teeth. Positioning any die too far backwards (below the center) might cause the die to dig into the material which will result in an irregular thread.