

## **Squaring Drafting Machine Scales**

The objective of squaring the scales is to achieve a parallel line (horizontal scale) and a line at 90 degrees (vertical scale). The horizontal scale must run parallel with the horizontal track.

## The preferred method for squaring the scales is as follows:

Tape a sheet of paper (A2 size minimum) to the drawing board. Place the drafting head at the left hand edge of the paper about half way up. Lock the vertical brake lever. Place a fine pencil at the start of the horizontal scale rule and while keeping it in this position slide the machine to the right. Providing you maintain the position of the pencil the line you will draw must be parallel to the horizontal track. (It must be parallel because with the brake on the distance can't change between the two points).

Push the machine back to the left. You will find that your scale rule will not be parallel to this line. The way to adjust this scale so that it is parallel is to loosen the outer screw on the chuck plate (dome head screw). Only loosen this screw and no others. There is a slot in the chuck plate under this screw that allows adjustment. Move the scale until it is lined up with the line you have drawn. Tighten the screw. You now need the vertical scale to be at 90 degrees to this line. Press the indexing button and rotate the drafting head clockwise until it clicks in at 90 degrees. Repeat the process with the short scale until it is also parallel to the drawn line.

Once you return the drafting head to the normal zero position you will have achieved the objective of the horizontal scale being parallel to the drafting machine track and the vertical scale at 90 degrees to it.