Constructor

Applications

Due to the exact, parallel motion of the CONS-TRUCTOR, drawing horizontal, vertical and angled lines is simple. Cross-hatching, parallel lines, circles and tangents are drawn more easily than with many types of professional drawing tools.

By means of the stencils incorporated in the body of the tool the drawing of electrical and electronic circuit diagrams plans, layouts, furniture designs, and details in Civil, mechanical, structural and electrical engineering are easily drawn.

By means of the screw-on scales, drawing in scale becomes even easier. More importantly, however, the complete portability of the CONSTRUCTOR makes it possible for theuser to make quick, accurate detail drawings on any flat surface, either in the office, at home or on-site.



The CONSTRUCTOR is manufactured from PMMA plastic, which is shockproof and does not warp in normal use.

The rollers are a nickel-coated brass, knurled to an exactly controlled depth to ensure that the grip on the paper is accurate. ①

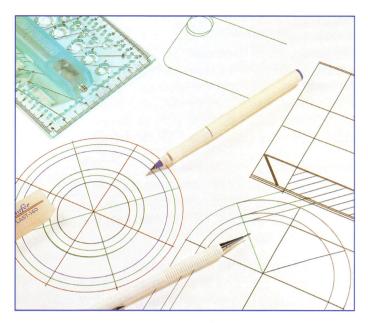
the swivelling, collapsible ruler, attached to the tool by means of a stainlesssteel joint, incorporating a retractable pointer, allows exact measurement of angles and a continuously variable range of circle sizes. ② and ③.

The compass point enables the arm to be used as a compass, either as a part of the CONSTRUCTOR, or detached and used on its own. ④ Guide holes in the body of the CONSTRUCTOR are spaced at a distance of 5 mm.

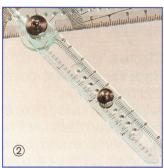
For intermediate distances, it is possible to fix the radial arm at any distance and to use the holes in the arm as guides.

Fittings

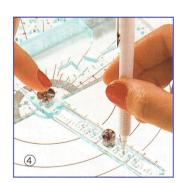
- rulers and scales with inch and 1:20 graduations.
- Stencils.
- Protractor.
- Compasses.











Using the Constructor

The drawing surface must always be smooth and even.

Horizontal lines. (Illustration 5)

Place the CONSTRUCTOR on any straight reference line. When the CONSTRUCTOR is moved from this point, all lines drawn along the top edge of the CONSTRUCTOR will be straight and parallel. For cross-hatching, the distances apart of the lines can be determined by using either the stencil holes in the CONSTRUCTOR, or by using the scale along the side of the CONSTRUCTOR.

Vertical lines. (Illustration ⑤)

Place a clutch pencil into on of the guiding holes along one of the edges of the CONSTRUCTOR. Move the CONSTRUCTOR across the drawing surface. Line spacing 5 mm.

Lines at an angle. (Illustration 6)

The CONSTRUCTOR is placed at an angle to one of the reference lines, and the spring-loaded pointer pressed down. The angle may be adjusted by eye, using the accurate protractor incorporated into the body of the CONSTRUCTOR.

Circles. (Illustration 7)

Place the compass-point to the correct position and press down.

Adjust the moving plate of the compass-point to the required distance. Place a clutch pencil into the correct hole and proceed to draw a circle. For complete circles, it is possible to move the complete instrument in a circle.

Roundedcorners. (Illustration ®)

Draw a horizontal line up to the centre of a circle stencil which corresponds to the diameter of the required circle.

Move the CONSTRUCTOR to the point where the round corner can be drawn with the stencil. Leave the pencil in the stencil corner and draw the stencil across the drawing surface for the required distance.

Complete the second rounded corner.

Move the CONSTRUCTOR to enable the bottom line of the box to be drawn.

Maintenance

A small amount of a light lubrication oil placed on to the roller bar will ensure smooth, trouble-free operation.

For roller adjustment, loosen one of the adjustment screws and carefully set the rollers to free operation and minimum play.

