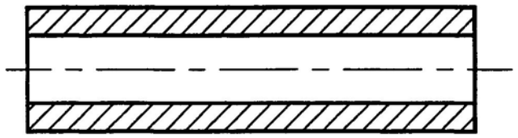
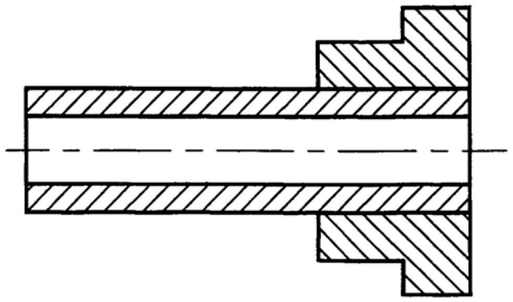
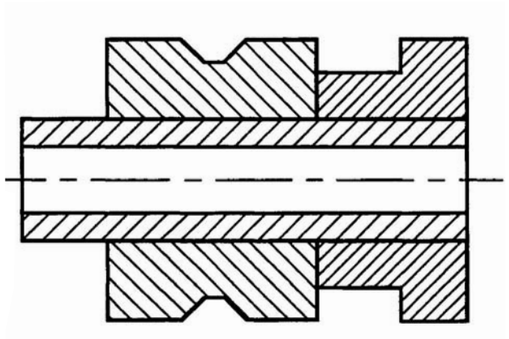
Orthographic Sectional Drawing 3



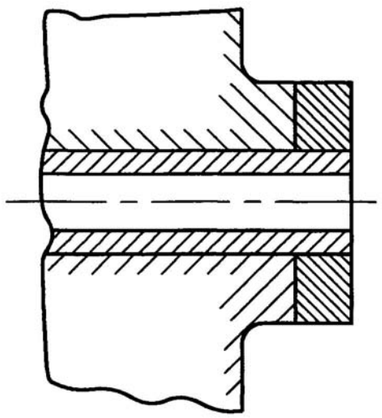
(a) Hatching separate areas of the same part.



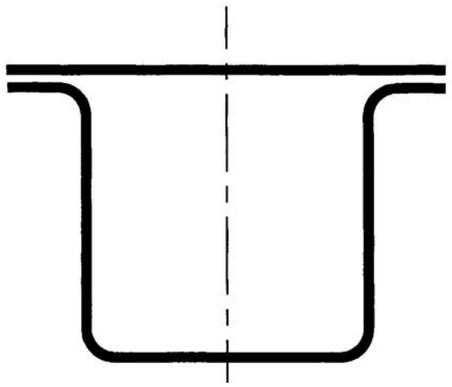
(b) Hatching adjacent areas.



(c) Hatching separate areas and adjacent areas.



(d) Hatching large areas.



(e) Section through thin material.

Hatching

In general, sections and sectional views should be hatched but hatching is often omitted in industry to save time and money. It is normal to use hatching in British Standards so it is used throughout this course. Hatching is drawn using continuous narrow lines of type 1.1.5 **see Table 1 page 11 - from British Standards PP 8888-1:2007**. The lines should be equally spaced at a well defined angle. In this course the angle of hatching lines is 45°.

Spacing between hatching lines should preferably be not less than 4mm apart. However, when hatching very small areas this spacing should be reduced but never less than 1mm.

When hatching separated areas of a single component the hatching lines should be in the same direction and with the same spacing - see **example (a)**.

Where different sectioned parts meet on an assembly drawing, the direction of hatching should normally be reversed and staggered -see **example (b)**. In cases where hatching on adjacent parts must be at the same angle the lines should be staggered and may be more closely spaced - see **example (c)**.

Hatching of large areas may be limited to that part of the area which touch adjacent parts, or the outline of the large part see **example (d)**.

Thin material in section may be filled in, in preference to showing the material thickness out of scale and hatched.
When adjacent parts are thus shown a clear space of not less than 1mm should be left between them - see **example (e)**.

You should normally **not show** hidden detail when drawing sectional views, as sectional views are often created to clarify complicated hidden detail on the orthographic views. However always read the question carefully to make sure hidden detail is not asked for.