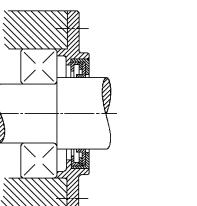
Sealing arrangements

Ensure that lubricant is adequately retained and that the bearings are suitably protected from the ingress of dirt, dust, moisture and any other harmful substances. Figure 22.7 gives typical sealing methods to suit a variety of conditions.

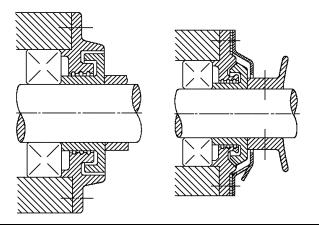
Sealing arrangement (a) (b) (c)

Description

- Shielded bearing metal shields have running clearance on bearing inner ring. Shields nondetachable; bearing 'sealed for life'
- Sealed bearing synthetic rubber seals give rubbing contact on bearing inner ring, and therefore improved sealing against the ingress of foreign matter. Sealed for life.
- (c) Felt sealed bearing gives good protection in extremely dirty conditions.



Proprietary brand rubbing seals are commonly used where oil is required to be retained, or where liquids have to be prevented from entering the bearing housing. Attention must be given to lubrication on the seal, and the surface finish of the rubbing surface.



Labyrinth closures of varying degrees of complexity can be designed to exclude dirt and dust, and splashing water. The diagram shown on the left is suitable for dusty atmospheres, the one on the right has a splash guard and thrower to prevent water ingress. The running clearances should be in the region of 0.2 mm and the gap filled with a stiff grease to improve the seal effectiveness

Fig. 22.7. Methods of sealing bearing housing