

Cortes e Seções

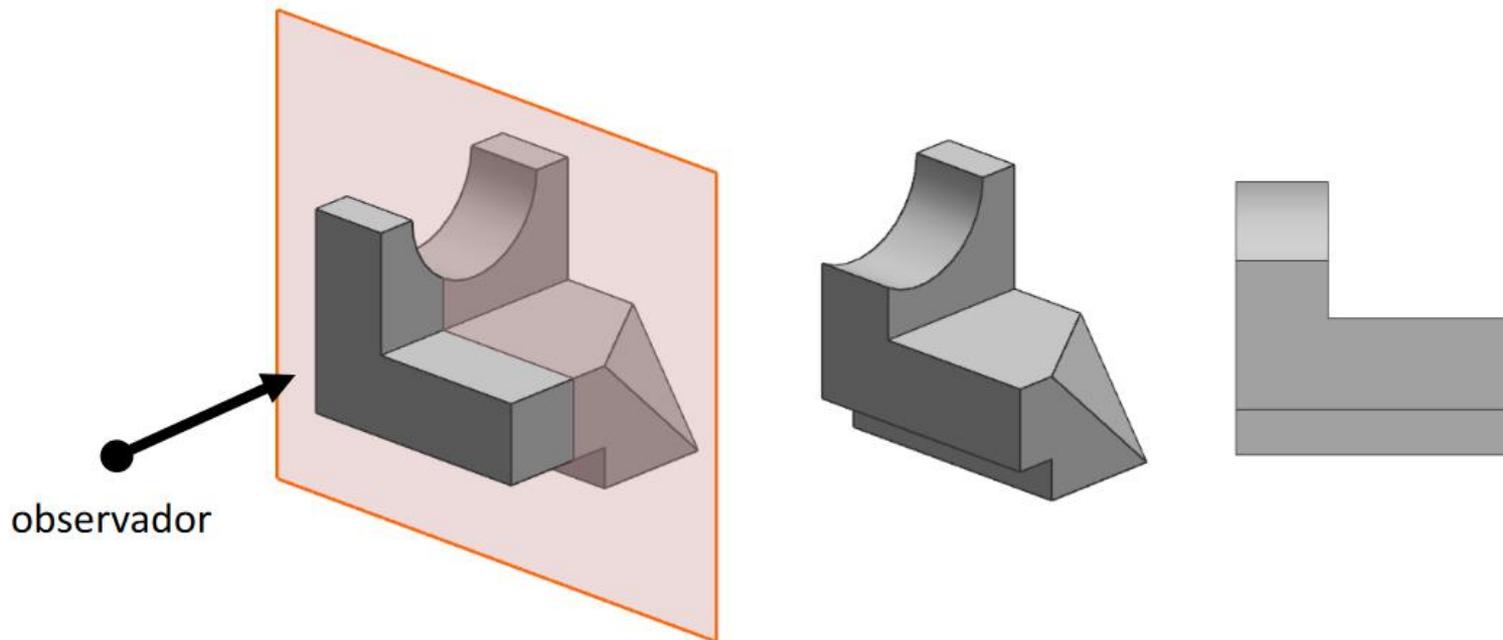
PCC3100 Mecatrônica – Representação Gráfica para
Projeto



Vistas seccionais

- A **Vista Ortográfica Seccional** é o desenho do que se vê como resultado do desmembramento de uma peça feito segundo um Plano Secante (determinado pelo Desenhista), retirando a parte da peça mais próxima do observador.

Vistas seccionais



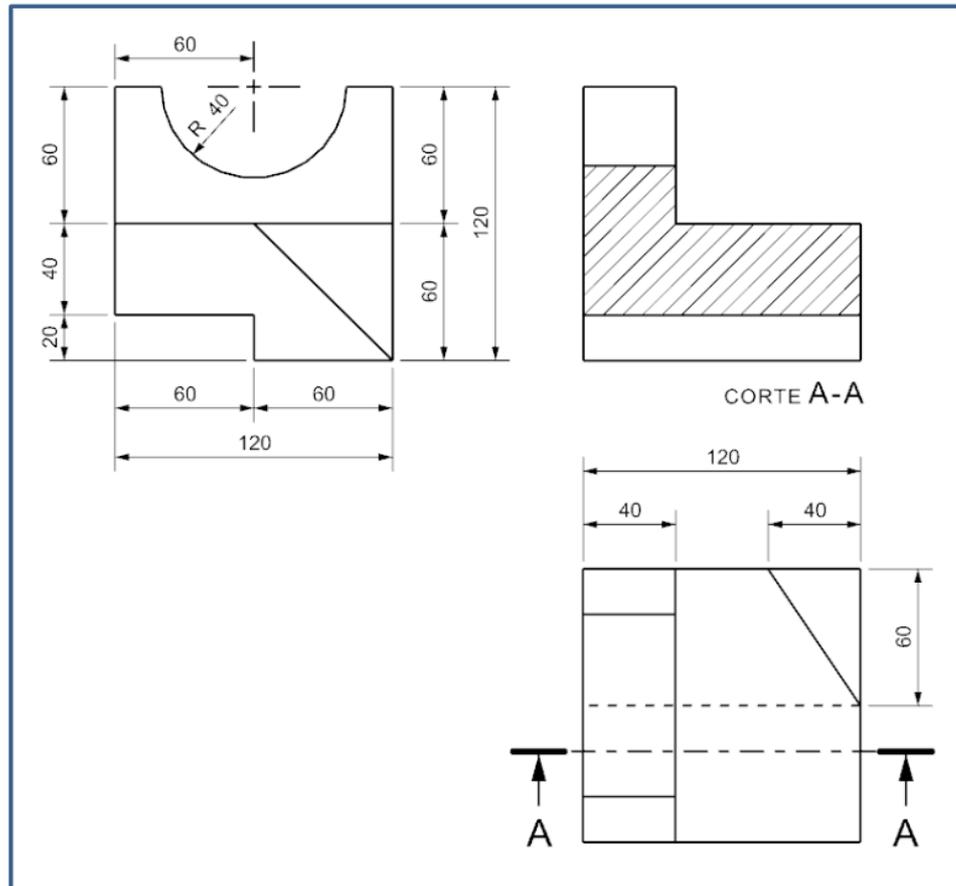
Vistas em Corte

Na distribuição das vistas ortográficas, a vista em corte substitui a vista primária correspondente.

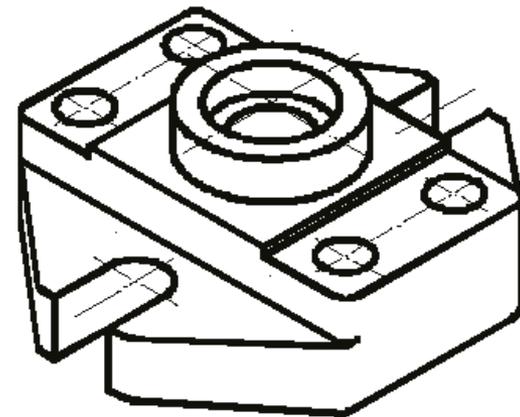
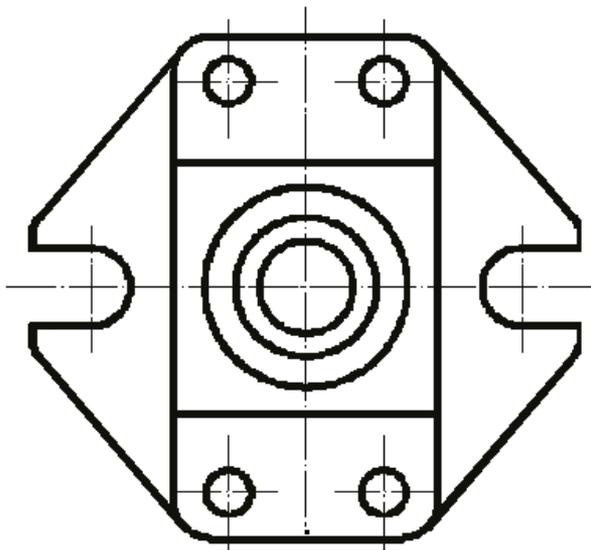
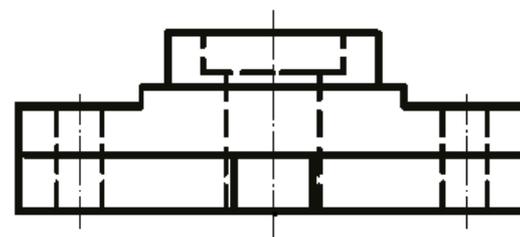
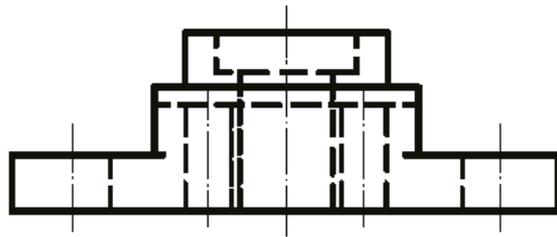
- Marcação do plano secante – linha e setas
- Nome da vista
- Hachuras
- Linhas tracejadas

NBR 10067/1995:

4.7.2.2.1 Quando a localização não for clara, ou quando for necessário distinguir entre vários planos de corte, a posição do plano de corte deve ser indicada por meio de linha estreita-traço-ponto, larga nas extremidades e na mudança de direção, conforme a NBR 8403. O plano de corte deve ser identificado por letra maiúscula e o sentido de observação por meio de setas



Melhora a compreensão....



Melhora a compreensão....

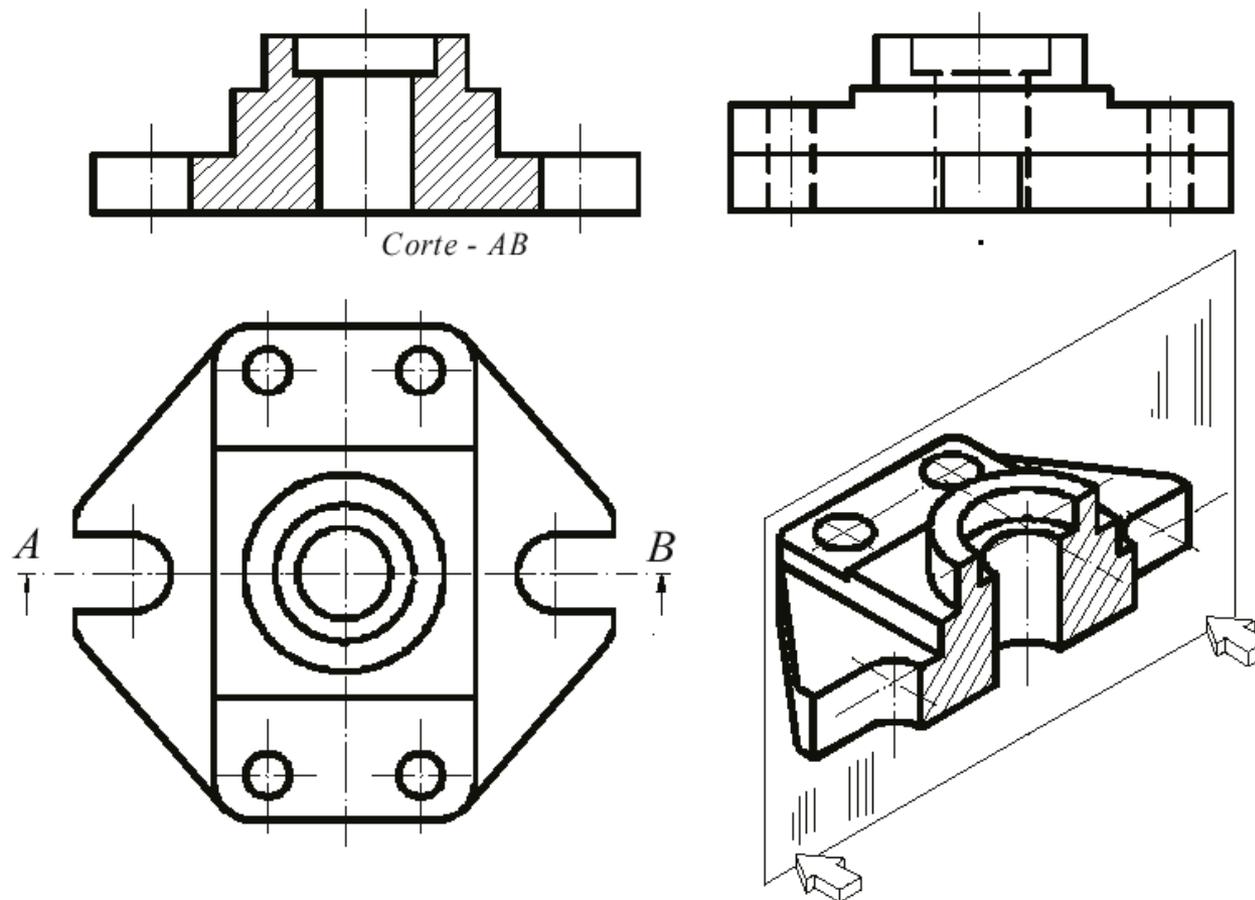
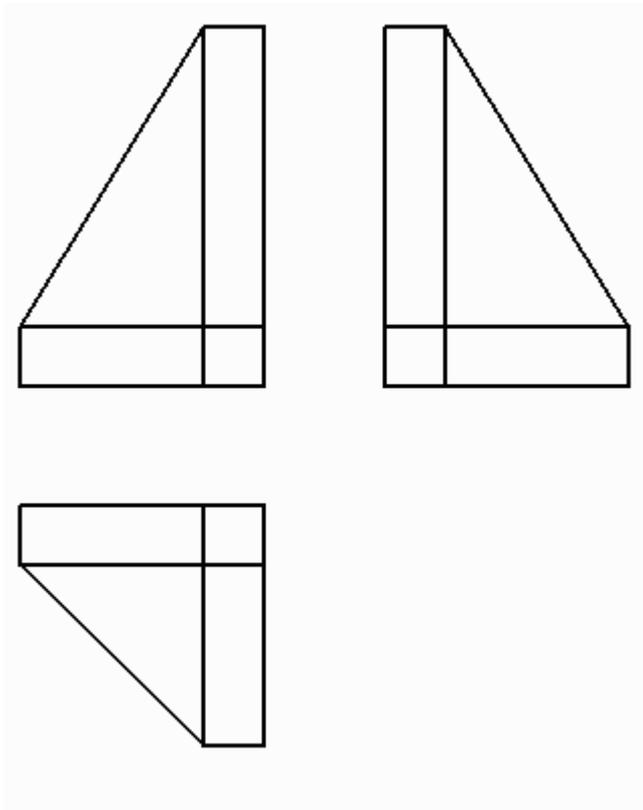


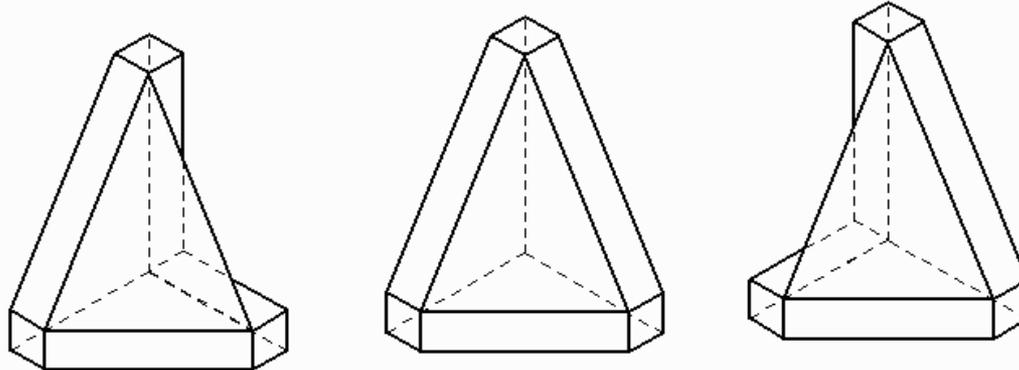
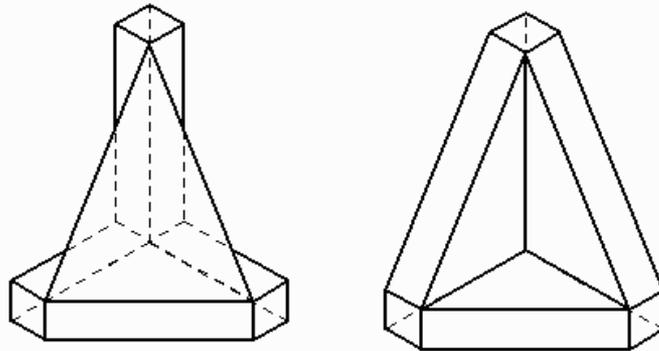
Figure 5.2

Necessidade da vista seccional



Que peça está representada pelas vistas ao lado ?

Necessidade da vista seccional

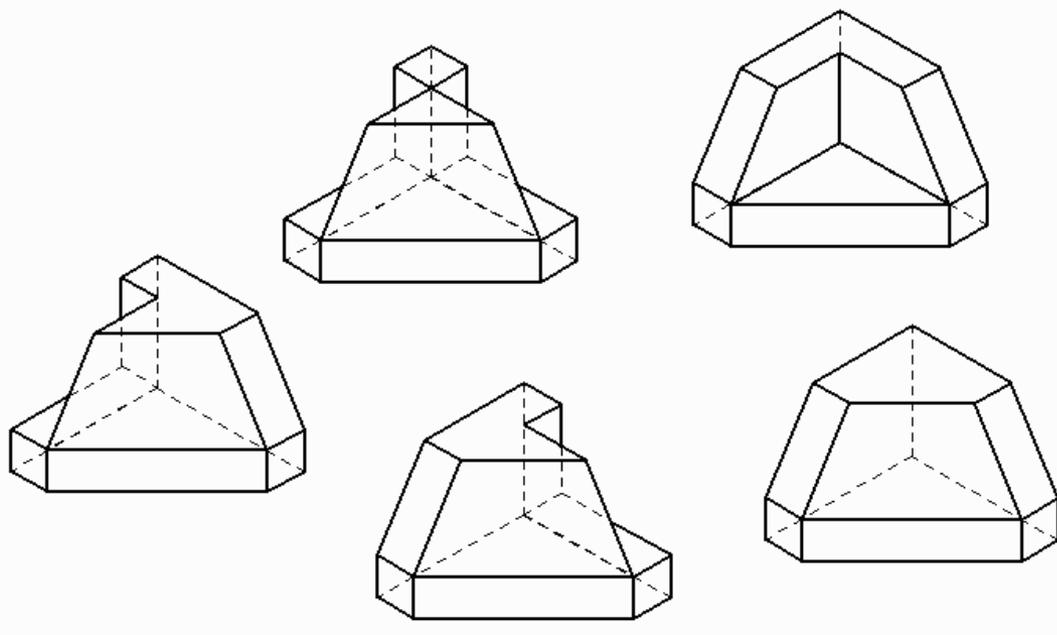


Em qual destas
5 peças você
pensou ?

TODAS estão
corretas !

**∴ Estas 3 (ou
mesmo 6)
vistas
produzem
ambigüidade**

Necessidade da vista seccional

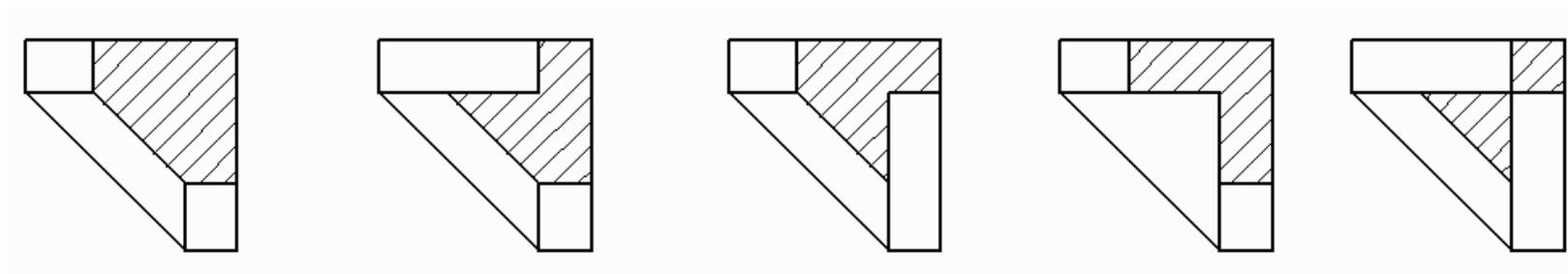


A secção de cada uma das peças é única...



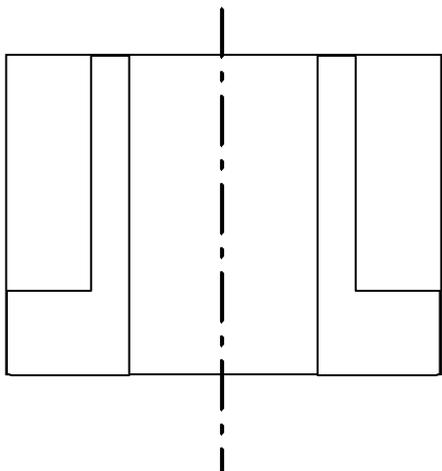
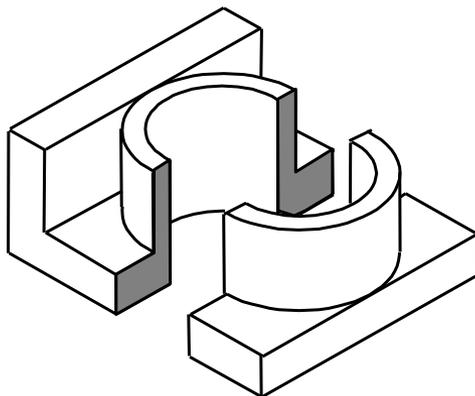
Necessidade da vista seccional

∴ a representação da vista superior em corte elimina a ambigüidade:

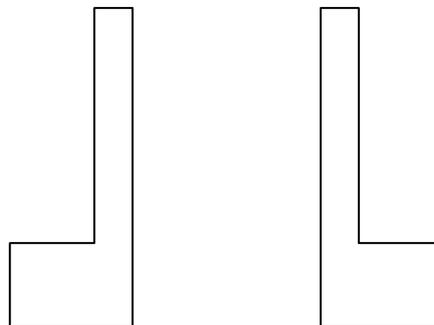




Corte x Seção

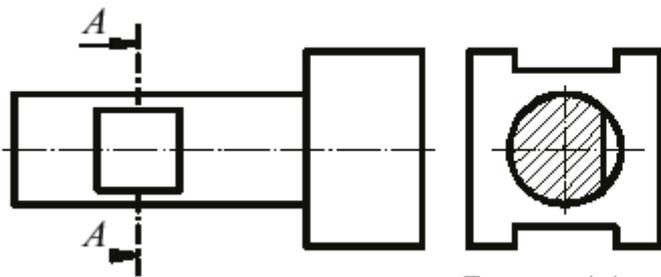


CORTE

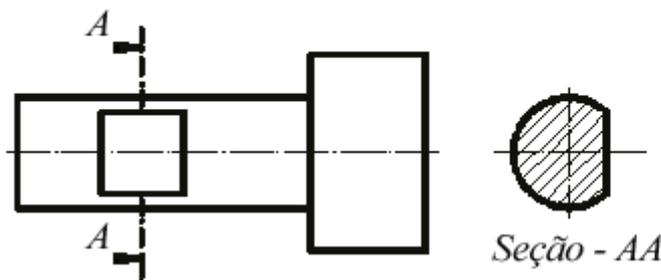


SEÇÃO

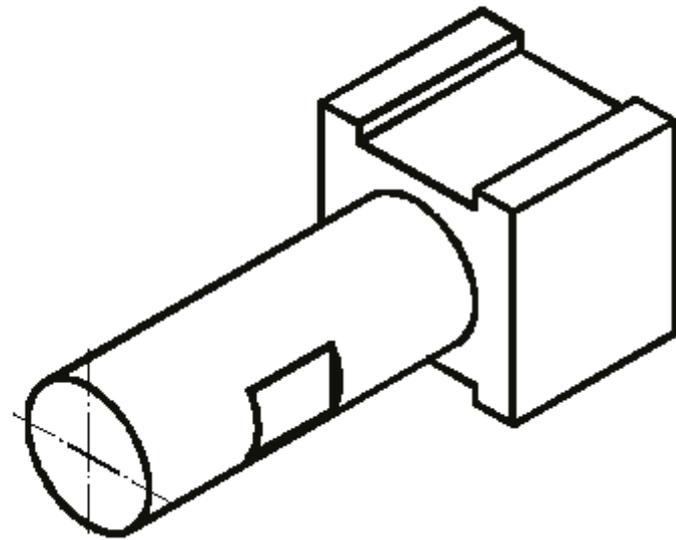
Corte x Seção



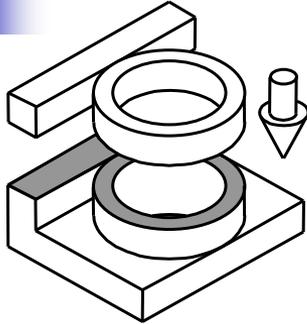
Corte - AA



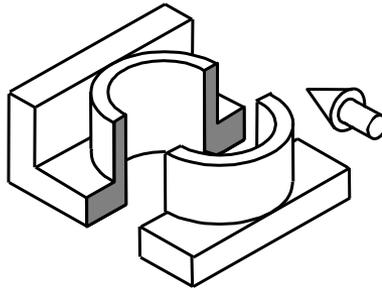
Seção - AA



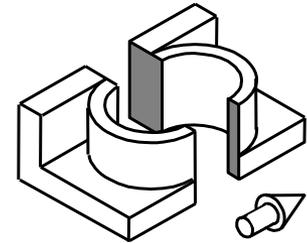
Cortes



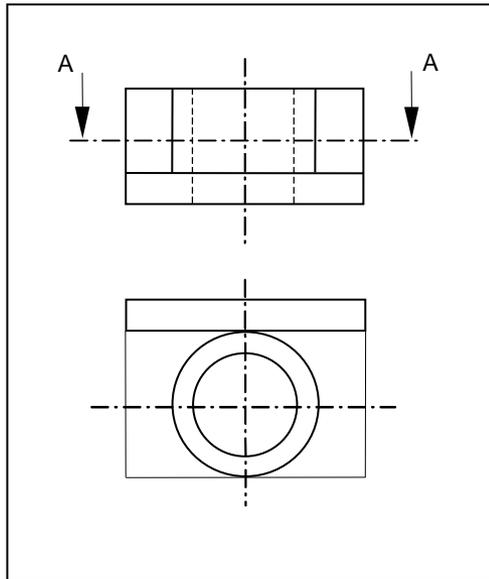
Superior



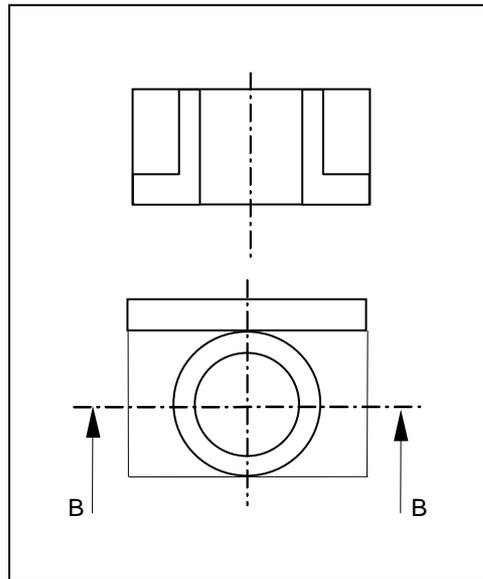
Frontal



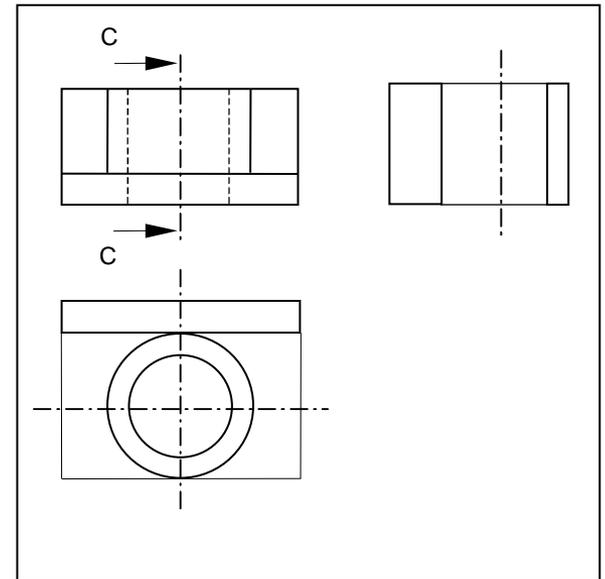
Lateral



Corte AA

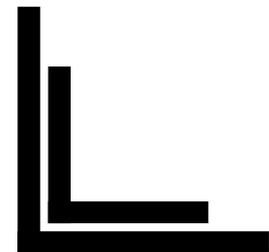
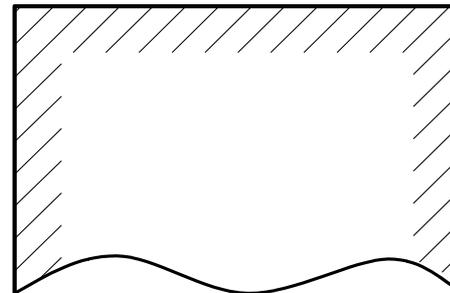
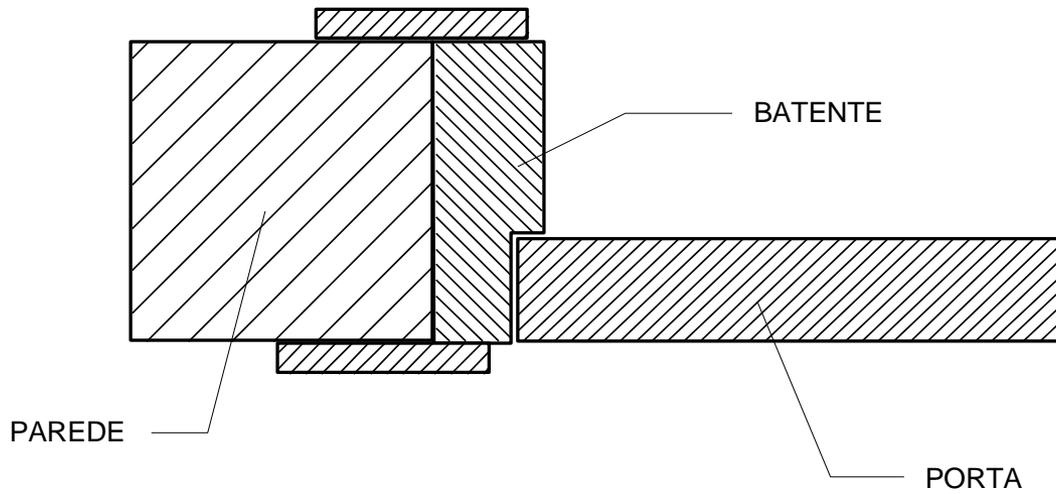


Corte BB



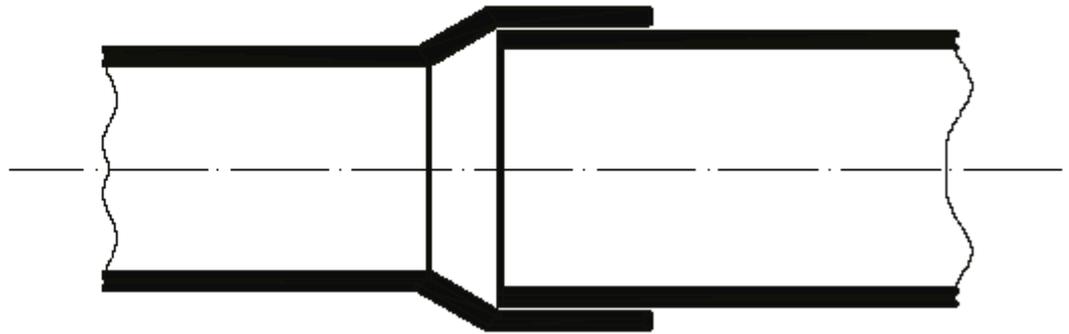
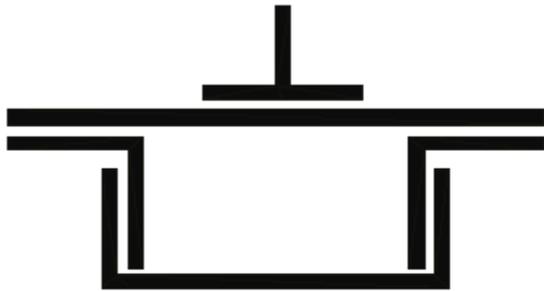
Corte CC

Hachuras



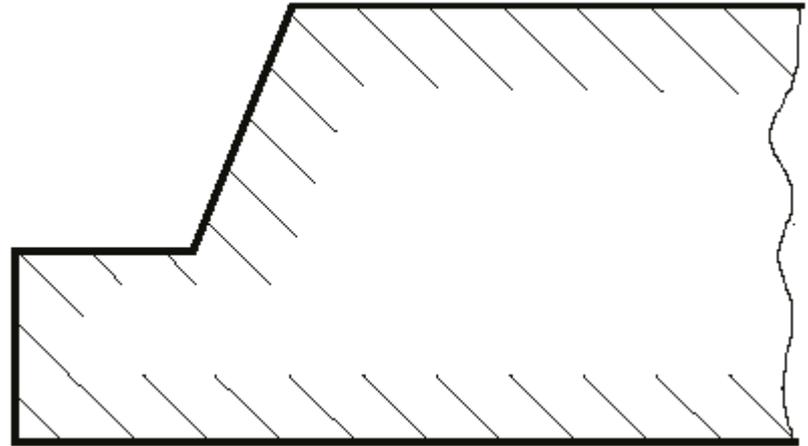
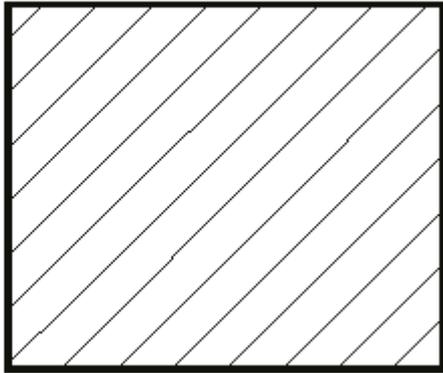


Hachuras





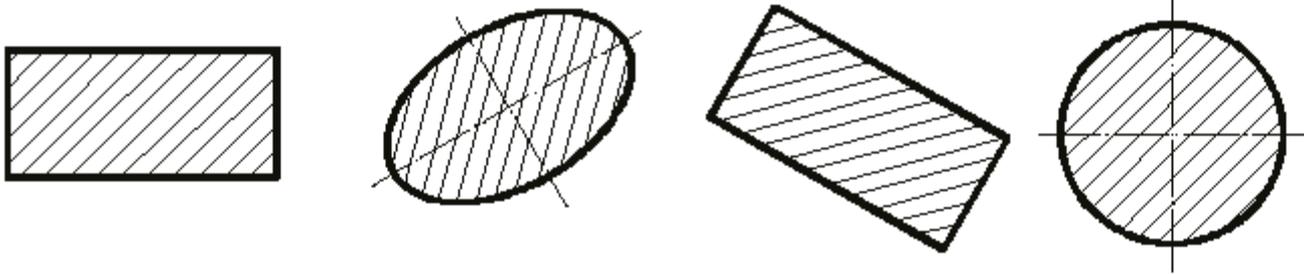
Hachuras



- Espaçamento varia com o tamanho da área a ser hachurada.

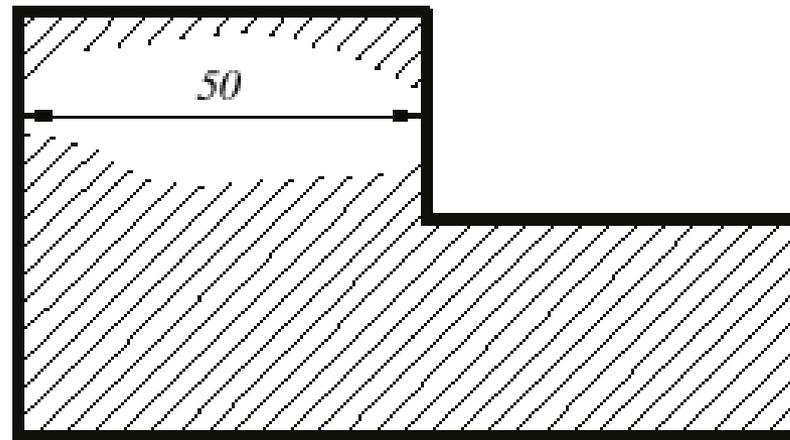


Hachuras



- As hachuras devem formar ângulo de 45° com o eixo principal da peça.

Hachuras



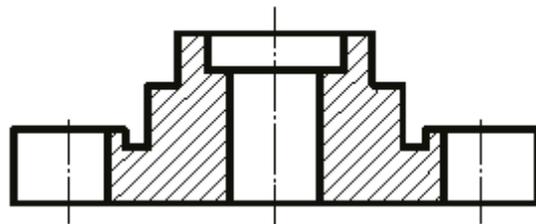
- Se necessário, interrompa a hachura.



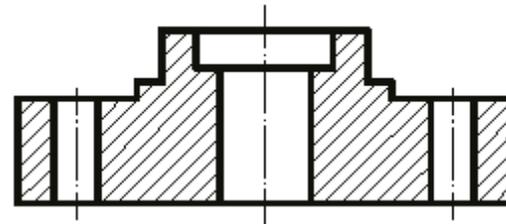
Plano secante



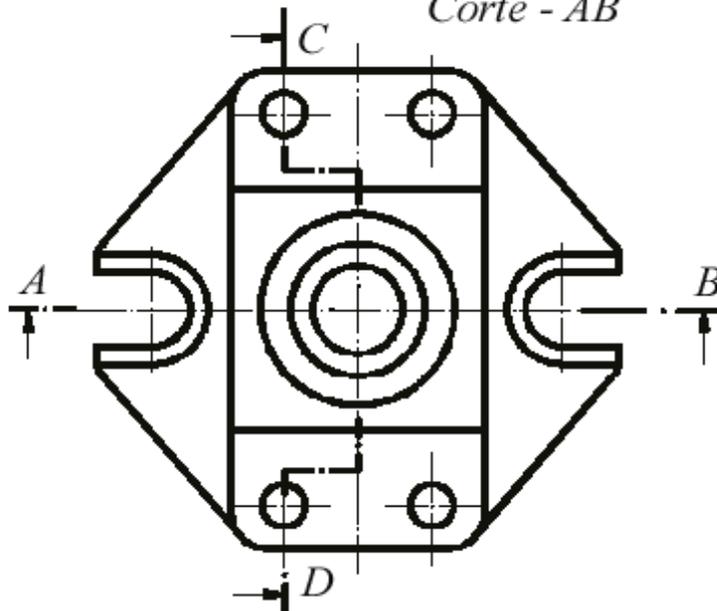
Plano secante



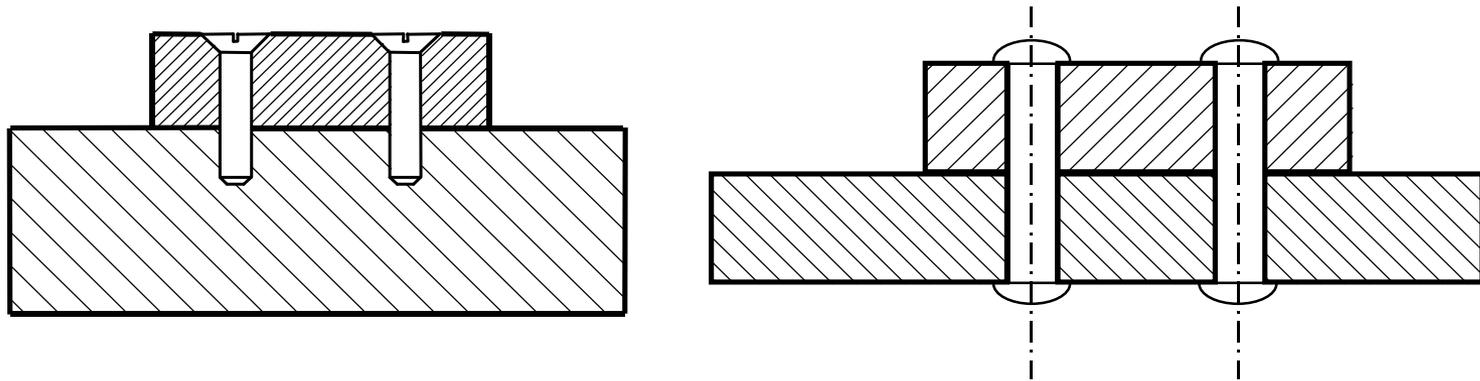
Corte - AB



Corte - CD

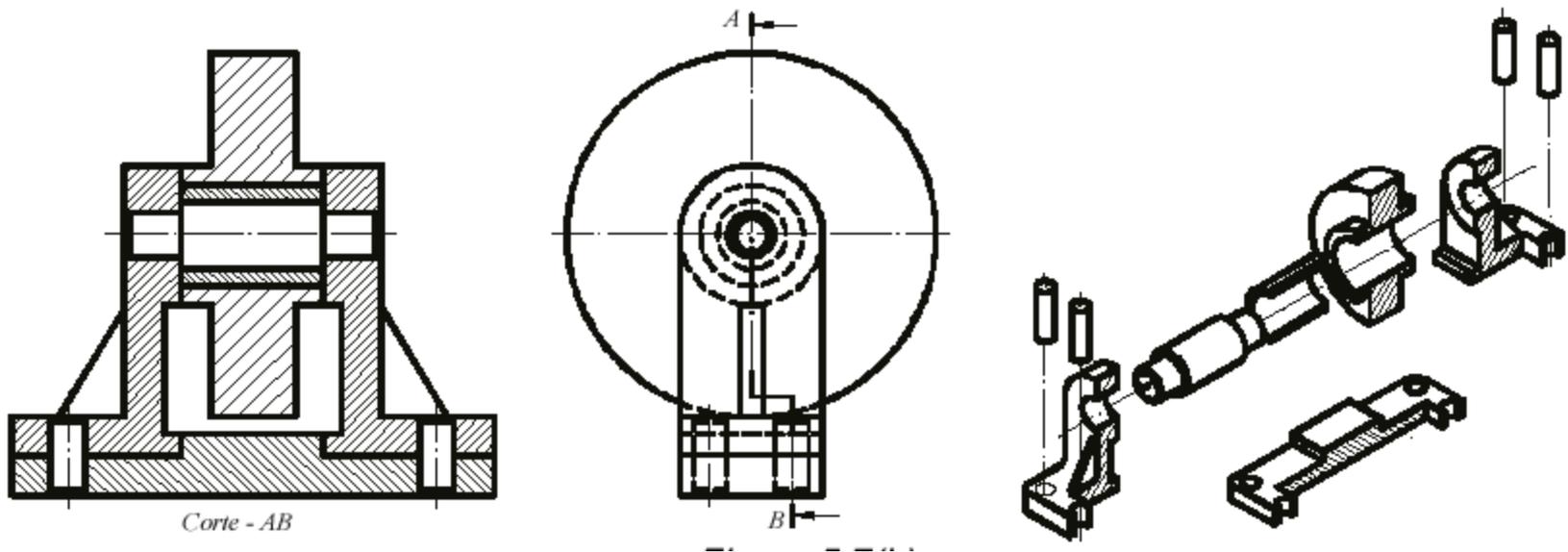


Omissão de hachuras

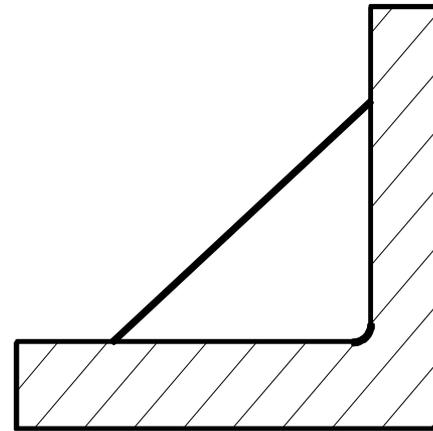
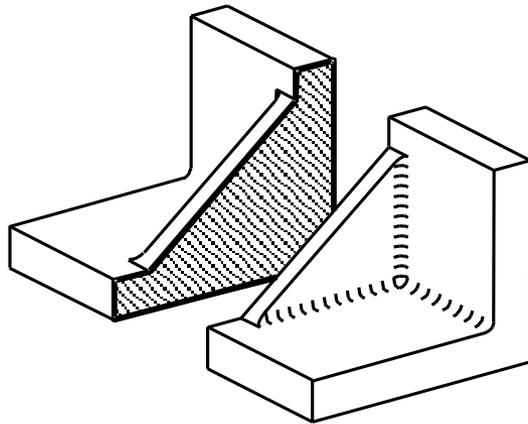


- Pinos, rebites, parafusos, porcas, arruelas, chavetas, eixos, nervuras, etc.
- Somente em corte longitudinal!

Omissão de hachuras



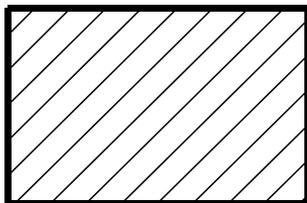
Omissão de hachuras



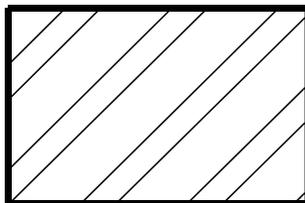
- Nervuras



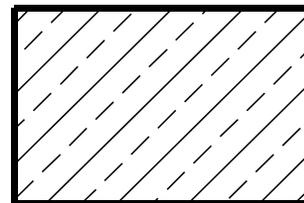
Padrões de hachuras (1)



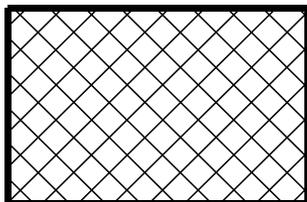
FERRO



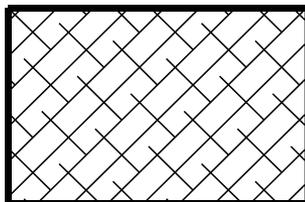
AÇO



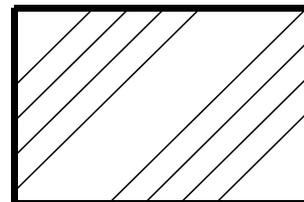
COBRE, BRONZE,
LATÃO. ETC.



CHUMBO, ZINCO,
LIGAS ANTI-FRICÇÃO

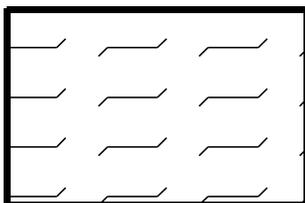


ALUMÍNIO, MAGNÉSIO,
LIGAS LEVES

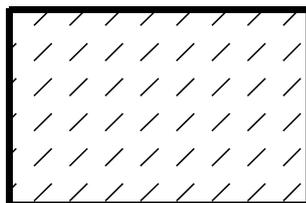


BORRACHA, PLÁSTI-
COS E ISOLANTES

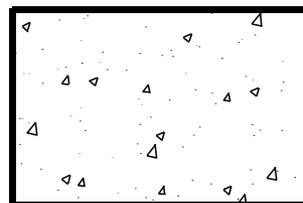
Padrões de hachuras (2)



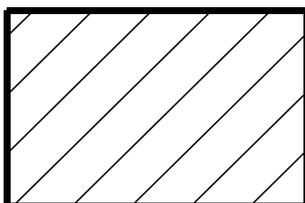
CORTIÇA, FELTRO,
COURO, FIBRA,
TECIDOS, ETC.



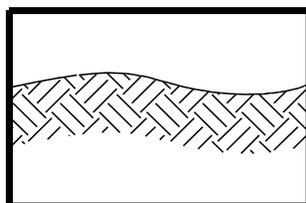
MÁRMORE, ARDÓSIA,
PORCELANA, VIDRO,
MATERIAL CERÂMICO



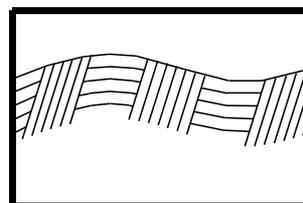
CONCRETO



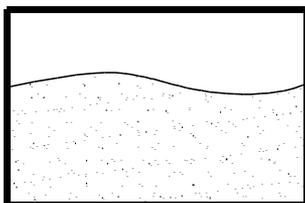
ALVENARIA



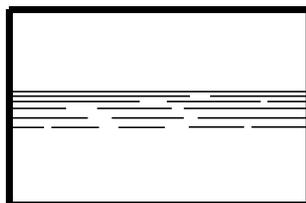
TERRA



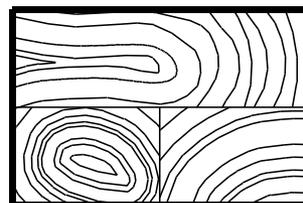
ROCHA



AREIA



LÍQUIDOS



LONGITUDINAL

TRANSVERSAL

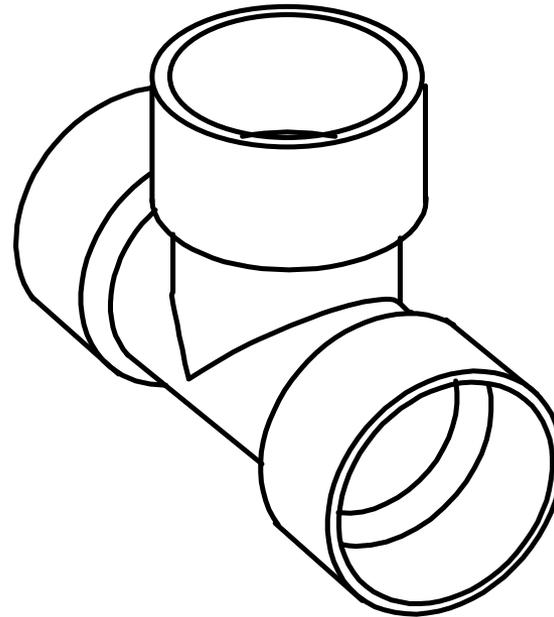
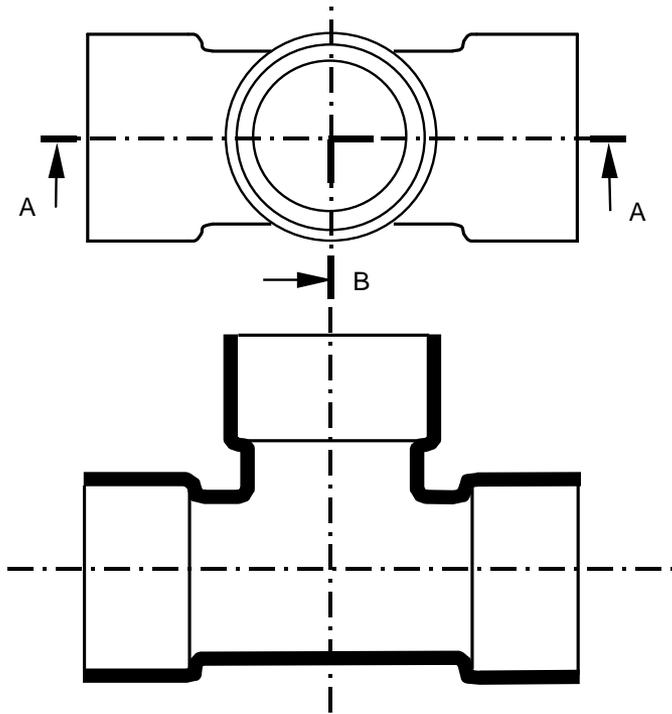


Tipos de Corte (1)

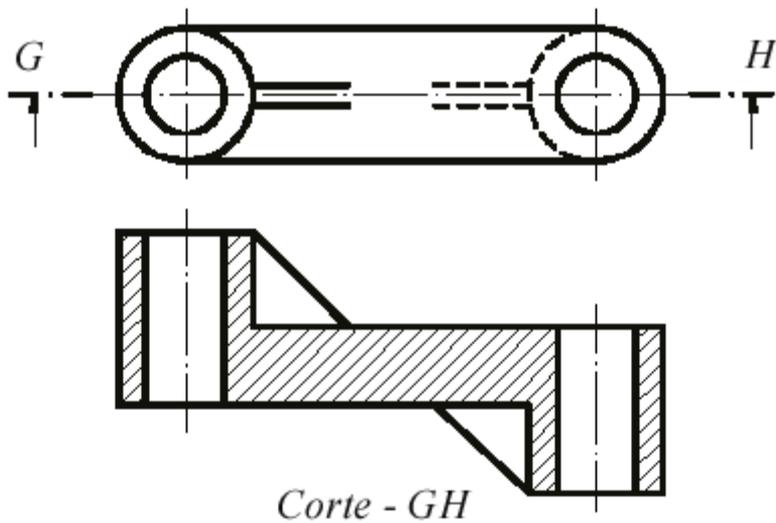
- Pleno ou Total;
- Meio Corte;
- Corte Composto;
- Corte Rebatido;
- Corte Parcial;
- Corte Auxiliar;
- Corte Fantasma.



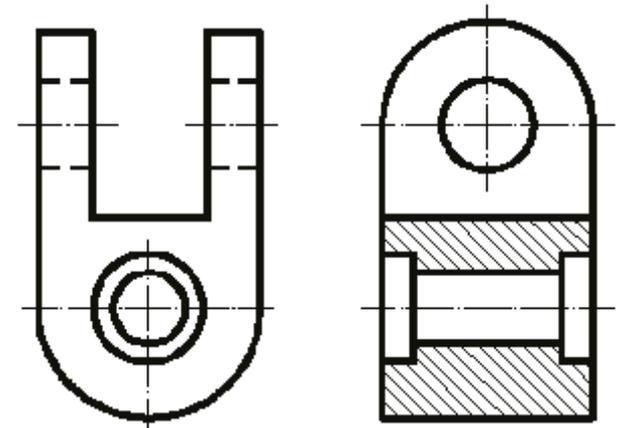
Corte Pleno



Corte Pleno



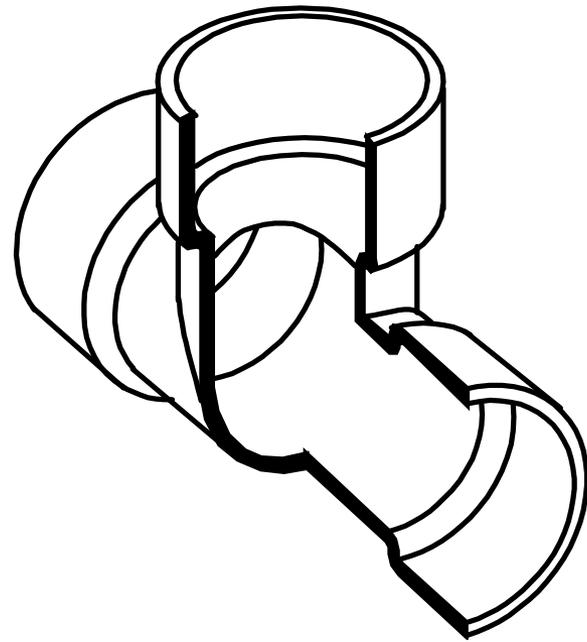
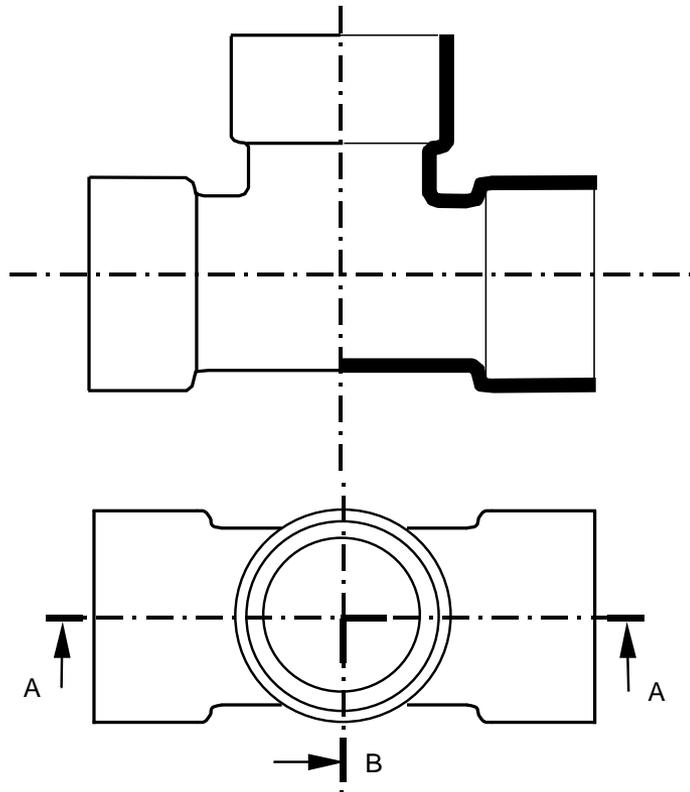
3º Diedro



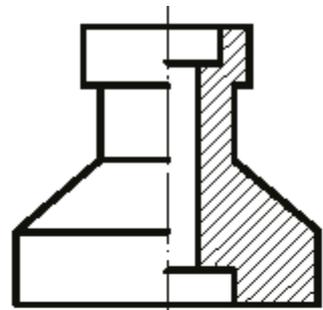
Omissão de linha de corte
(quando é óbvia)



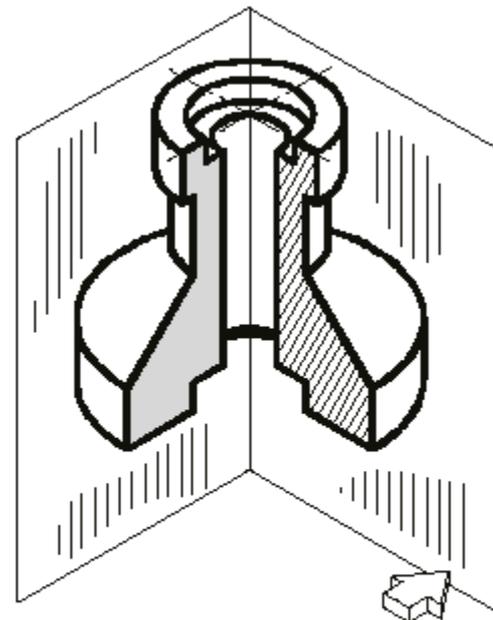
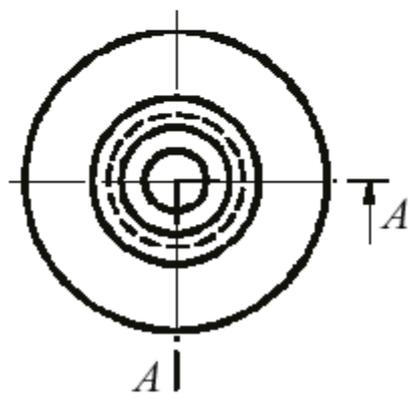
Meio Corte



Meio Corte

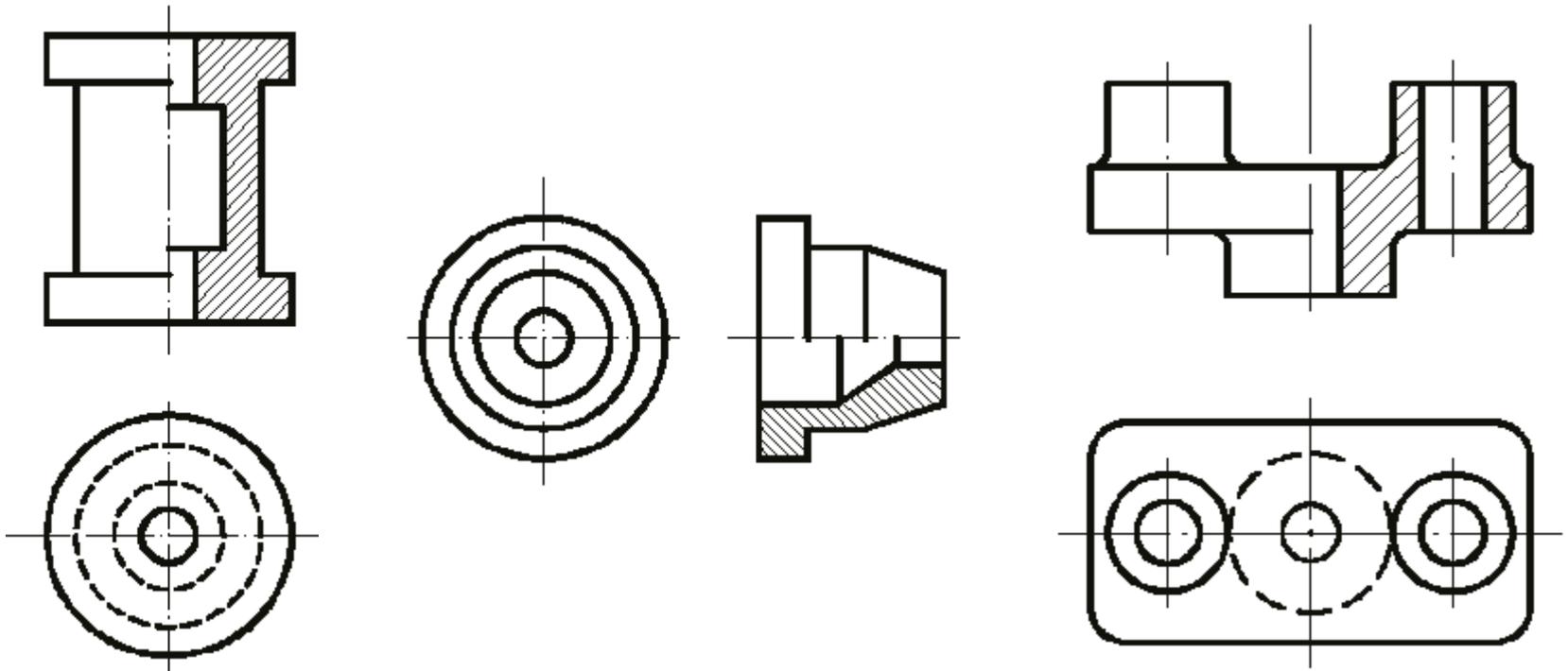


Corte - AA



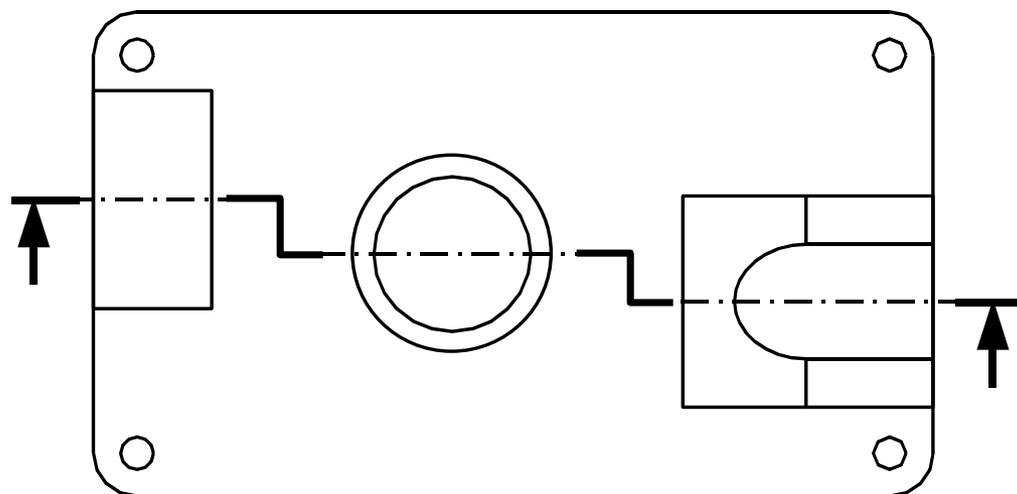
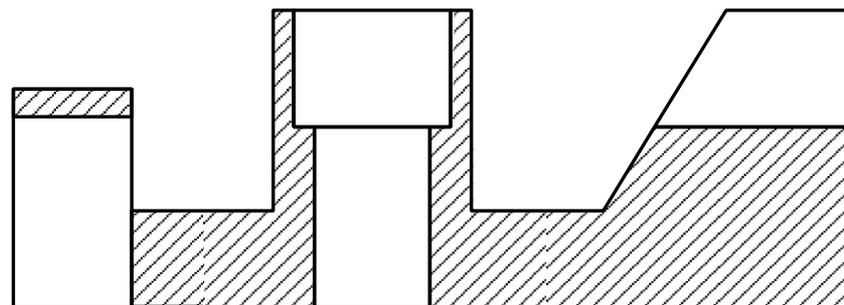
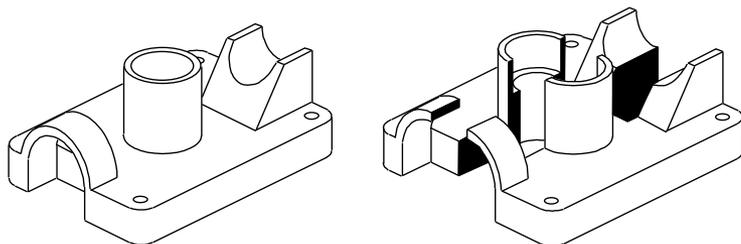


Meio Corte



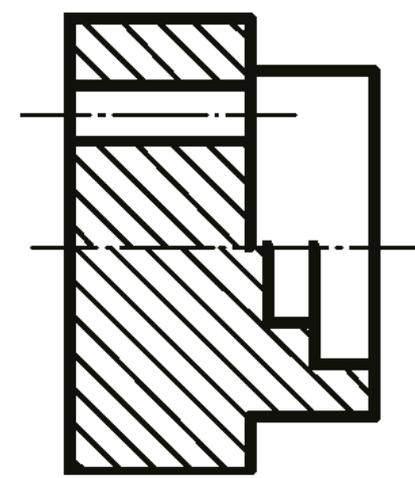
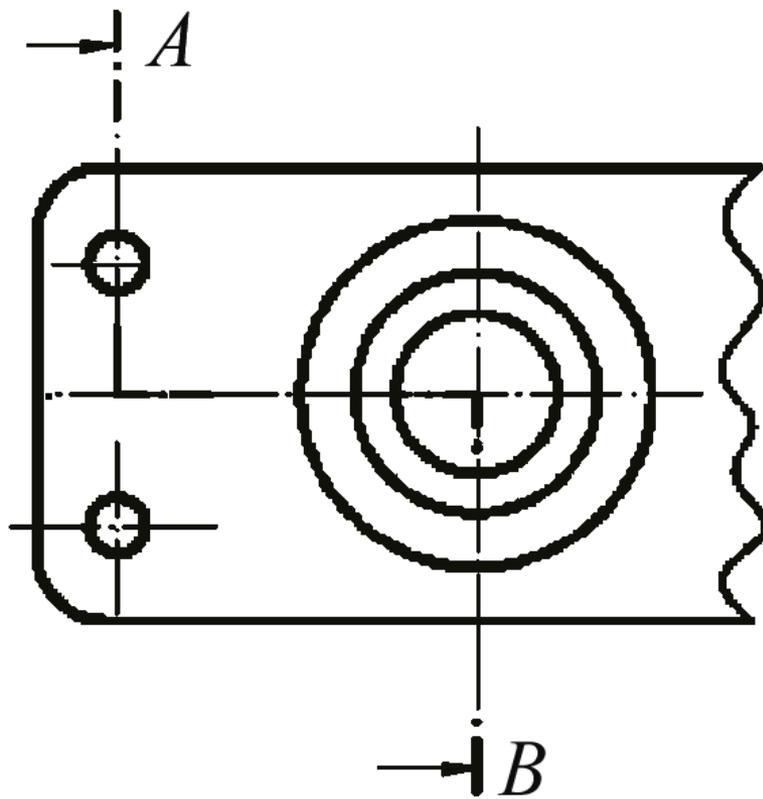
Metade em corte sempre no lado direito / inferior

Corte Composto



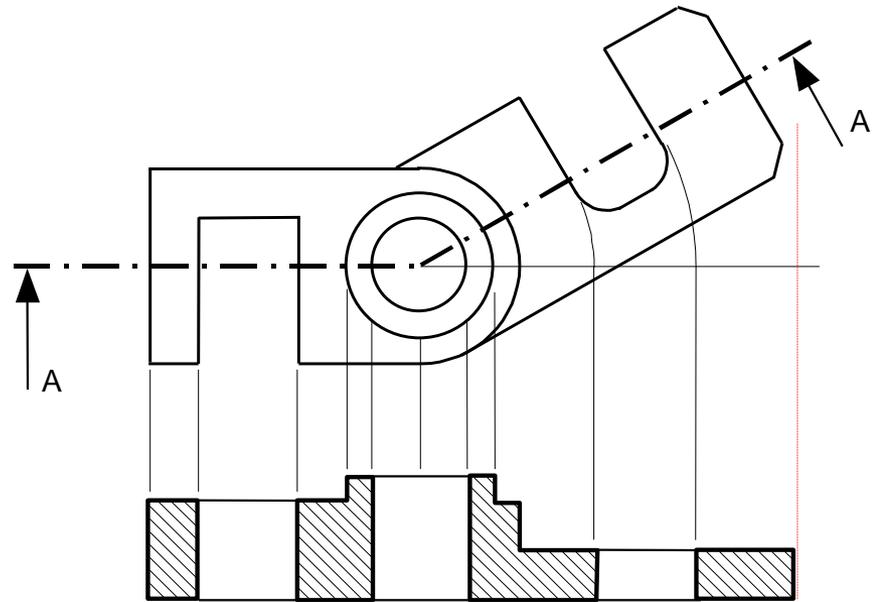
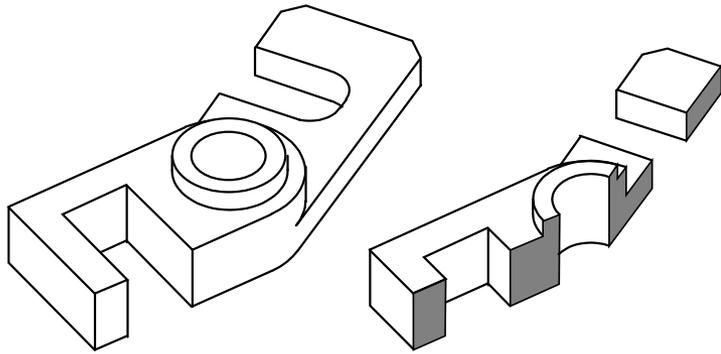


Corte Composto

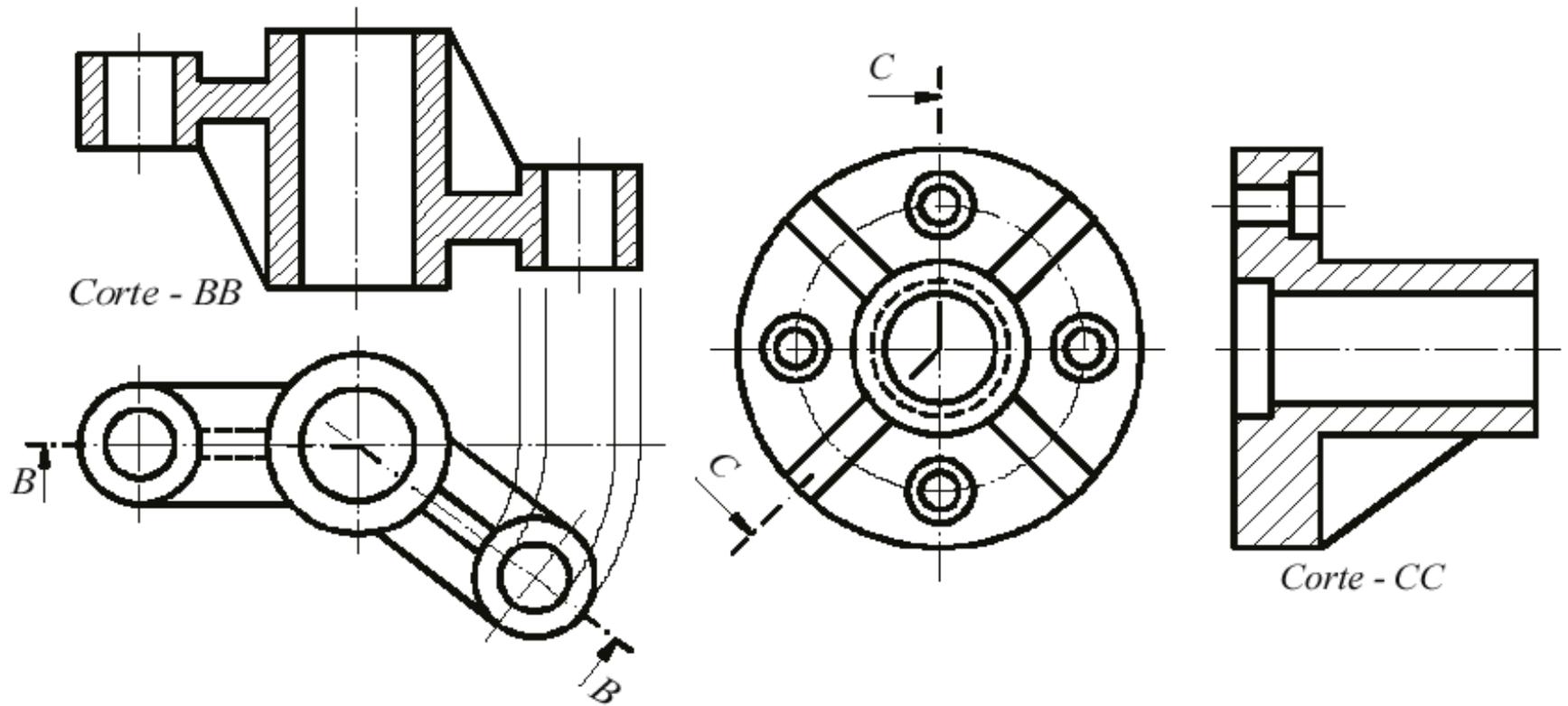


Corte - AB

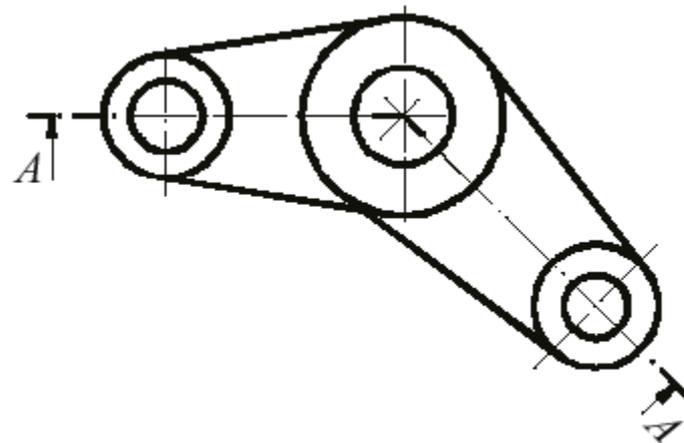
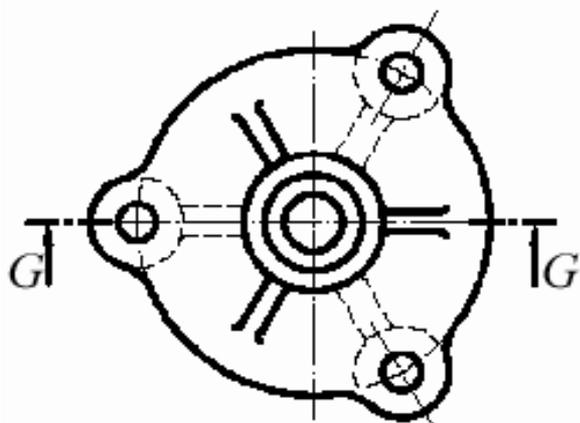
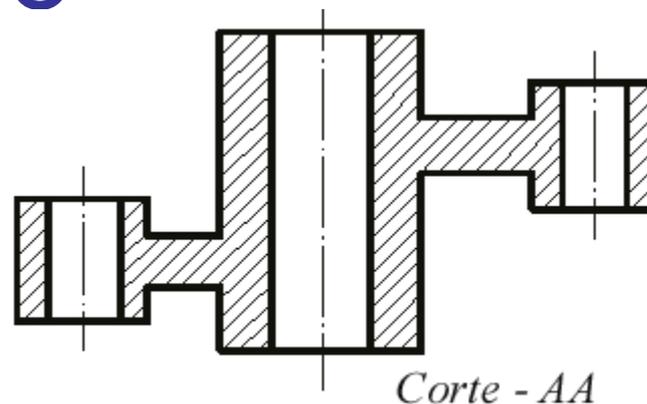
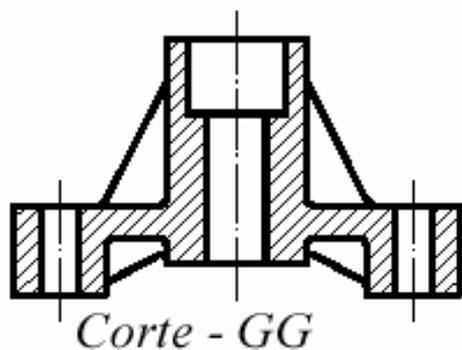
Corte Rebatido



Corte Rebatido

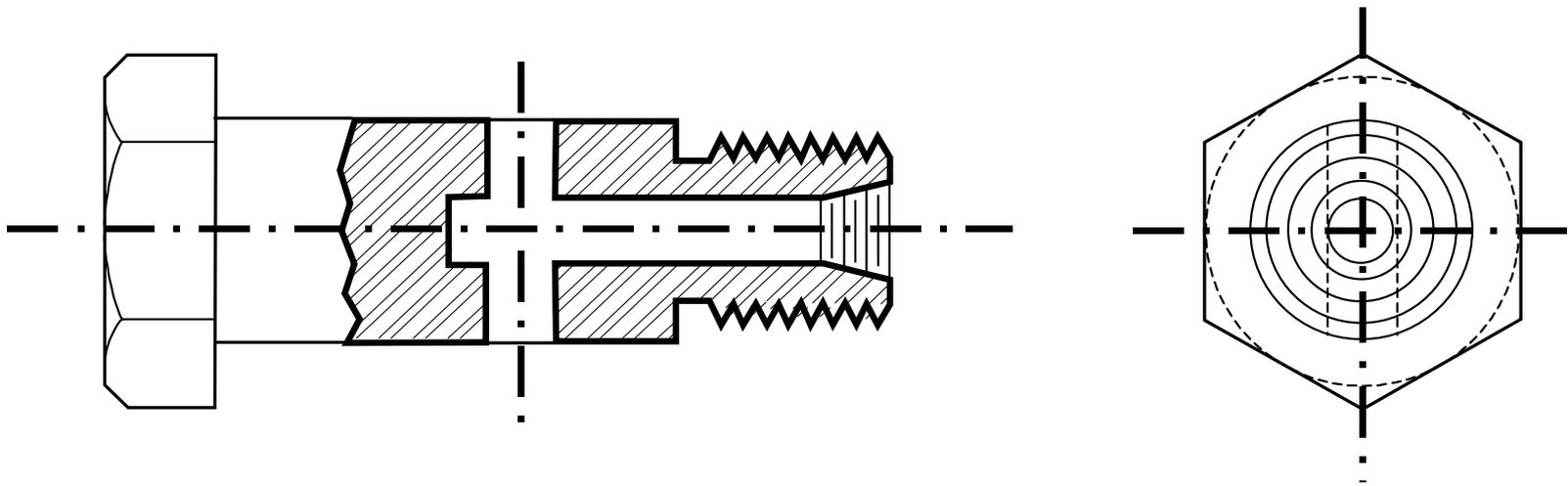


Corte Rebatido

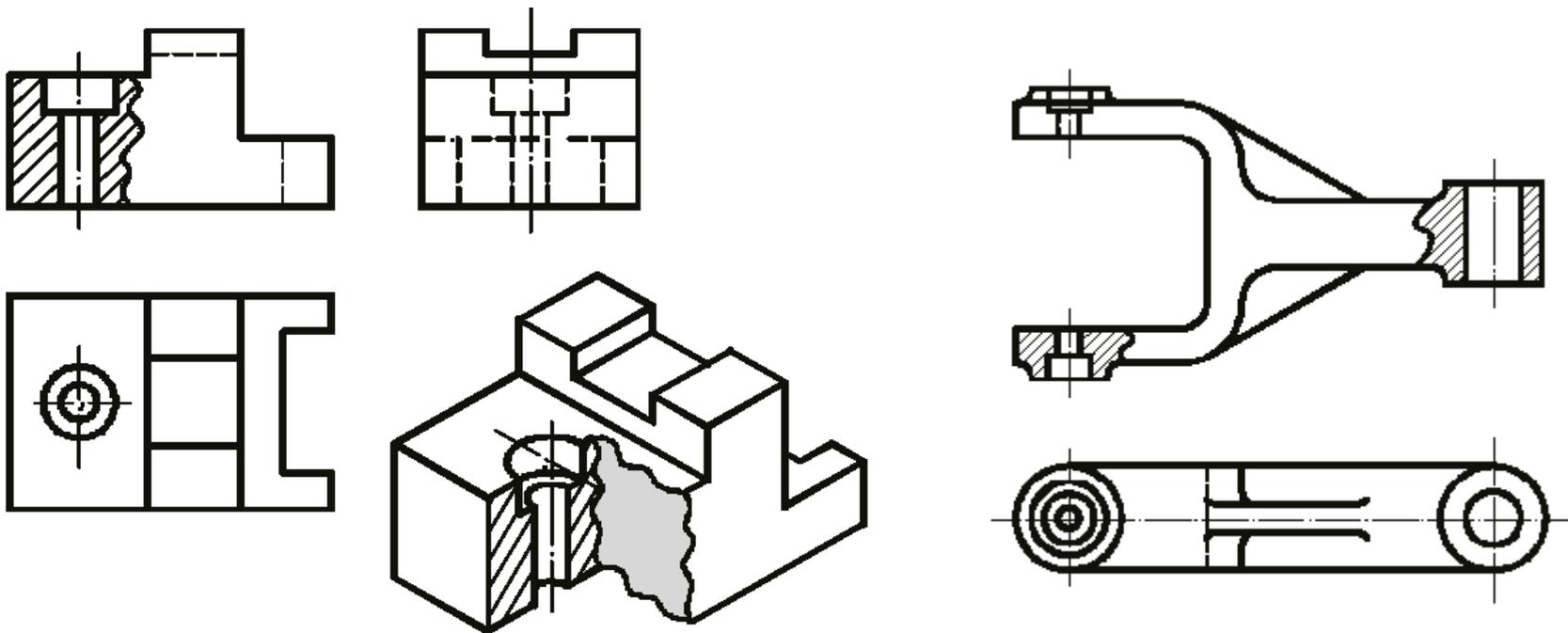


Não se coloca nenhuma indicação explícita do rebatimento

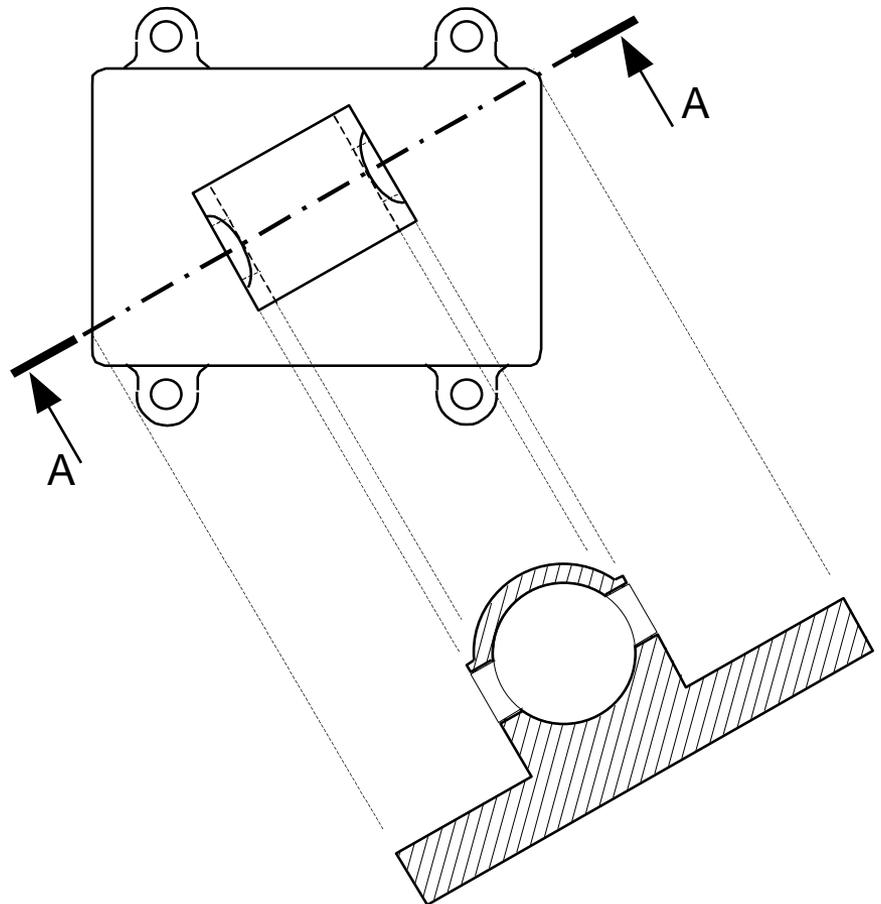
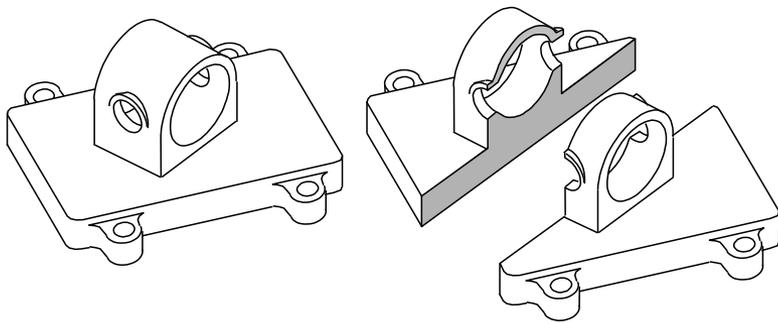
Corte Parcial



Corte Parcial

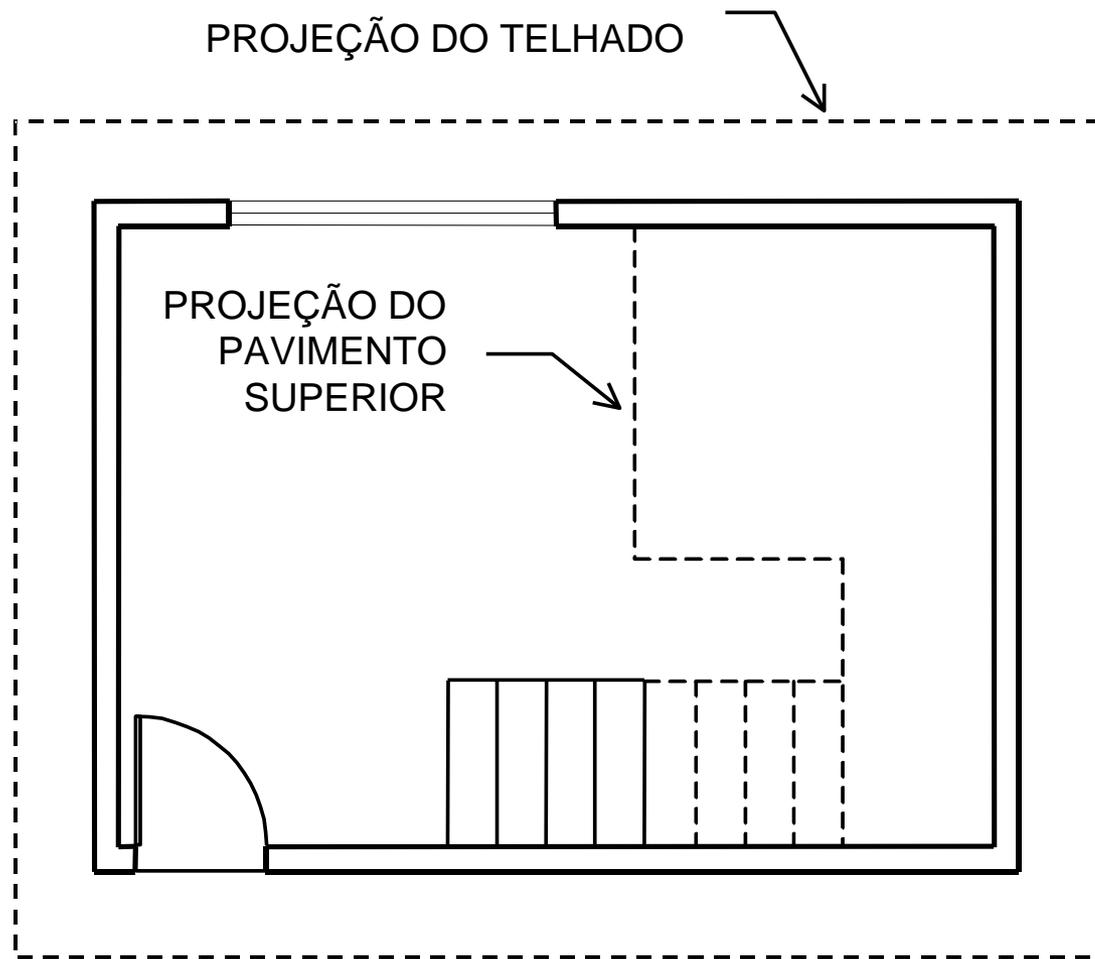


Corte Auxiliar

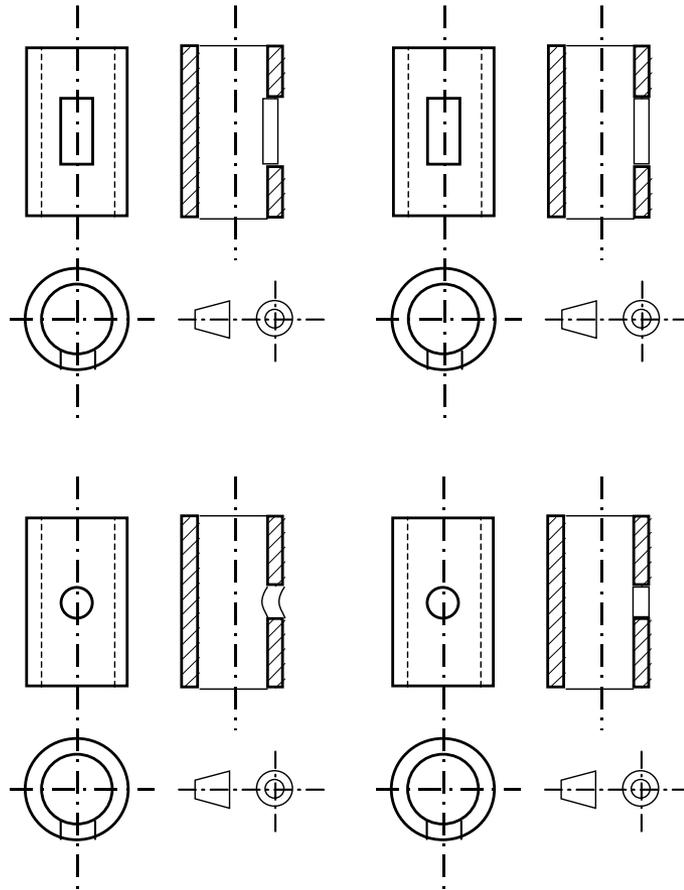




Corte Fantasma

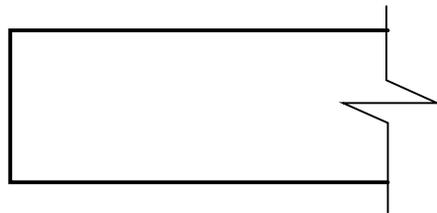


Representação simplificada

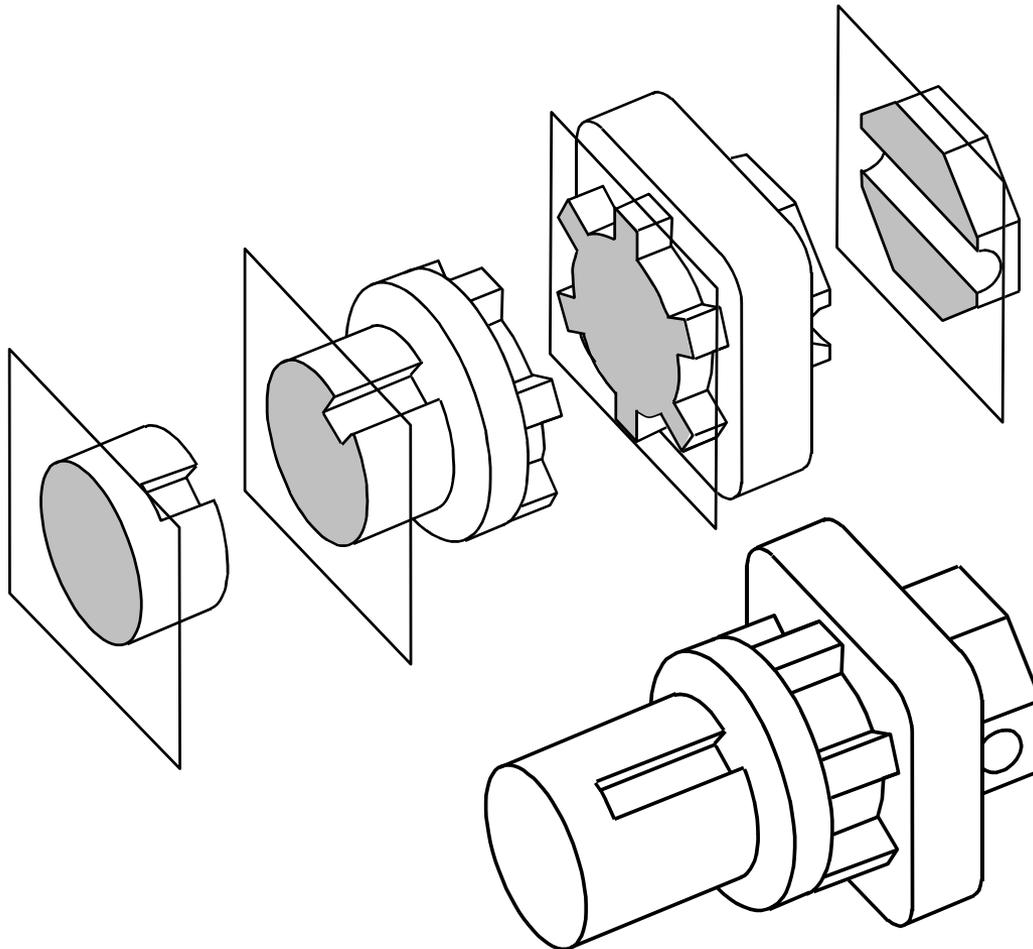




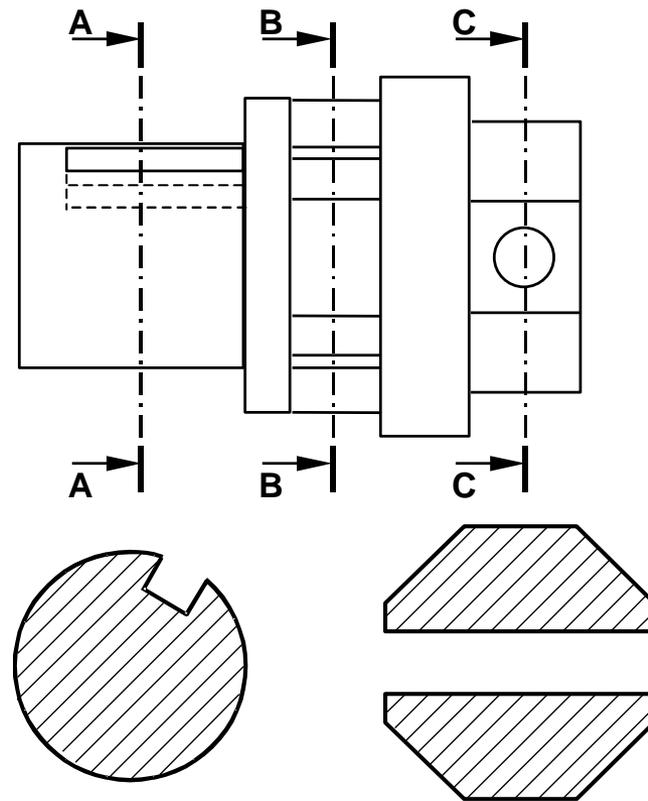
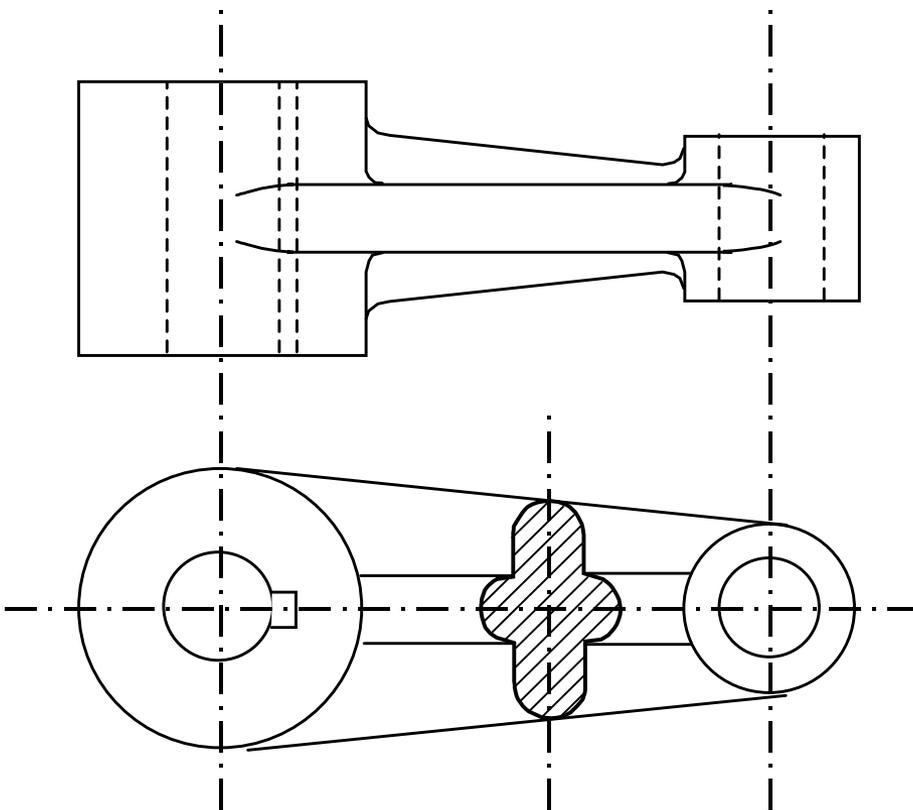
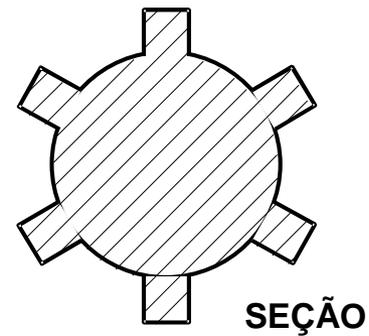
Peças Interrompidas



Seções



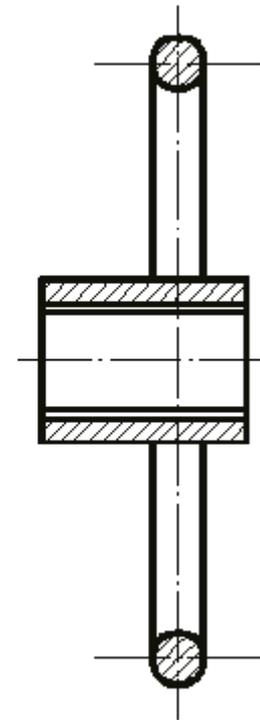
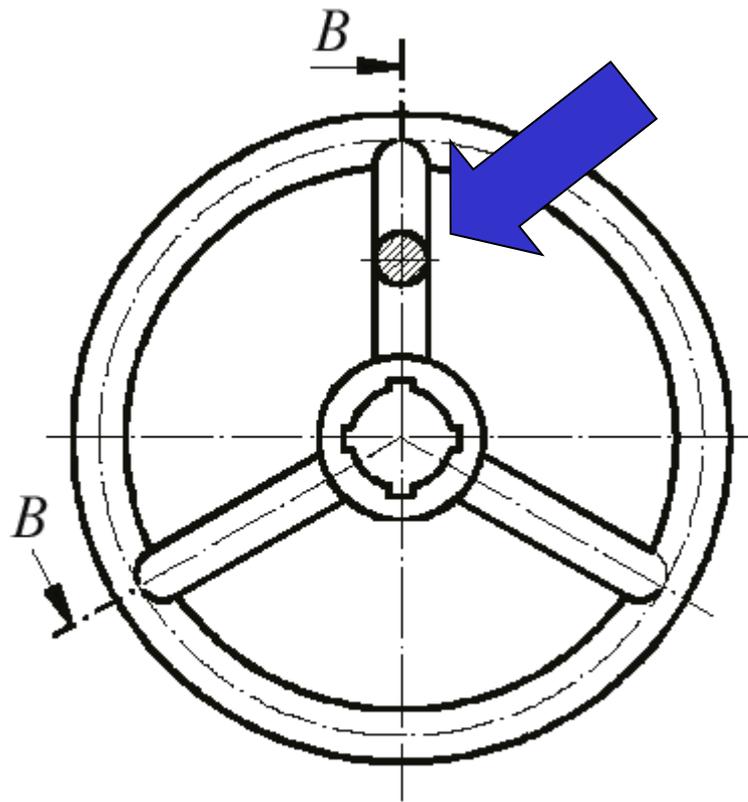
Seções



SEÇÃO

SEÇÃO

Seções



Corte - BB

Seções

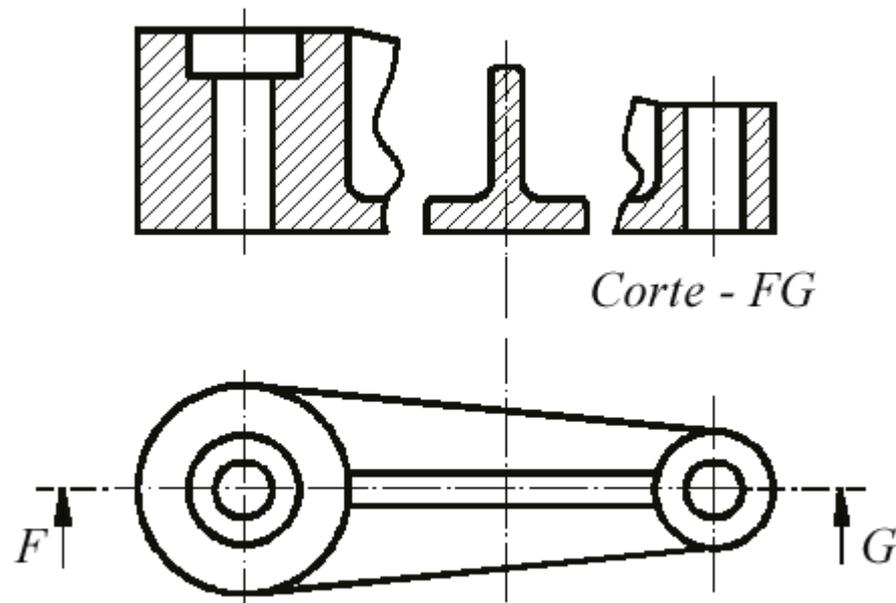
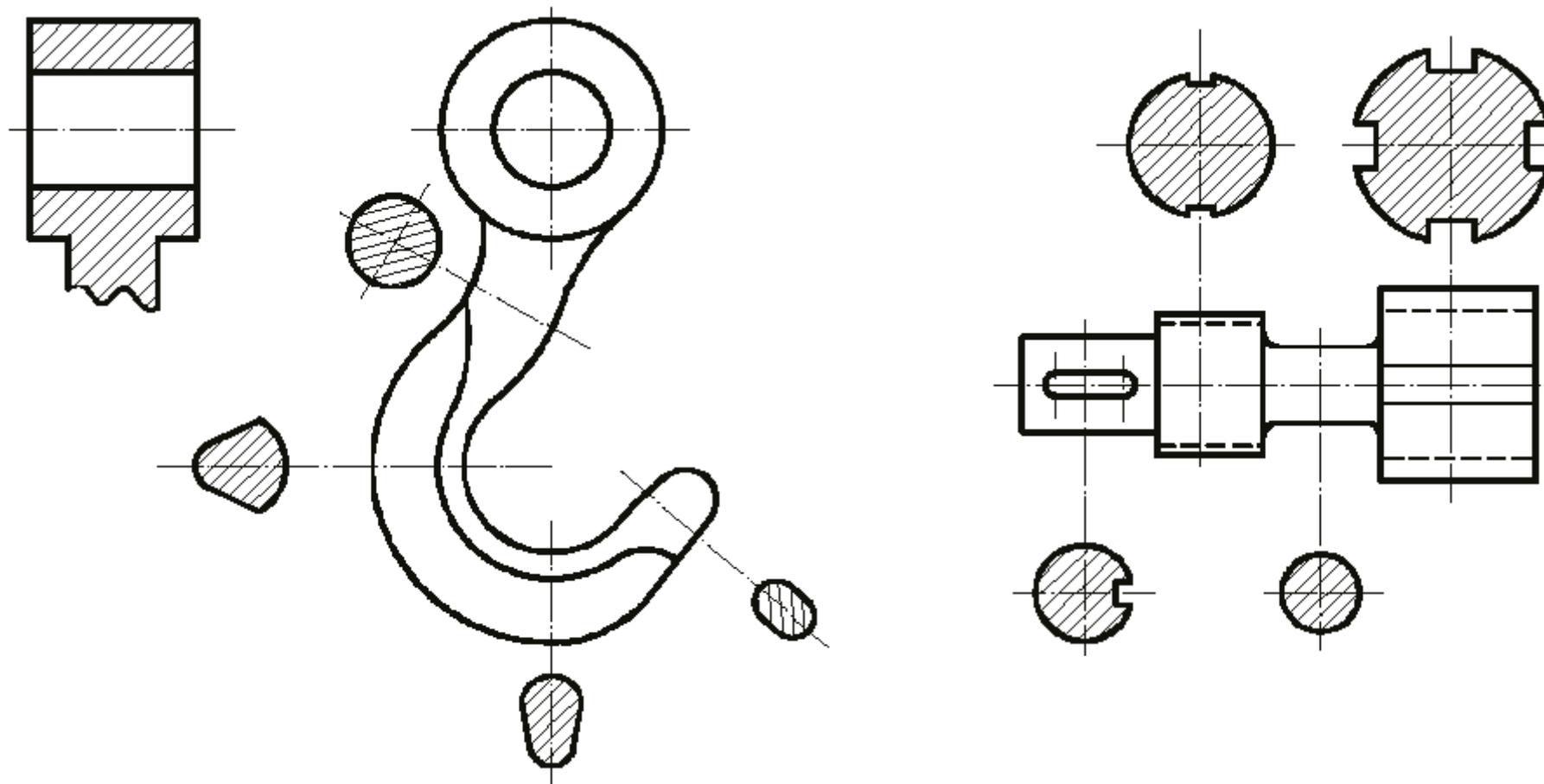


Figura 5.24

Seções



Seções

