

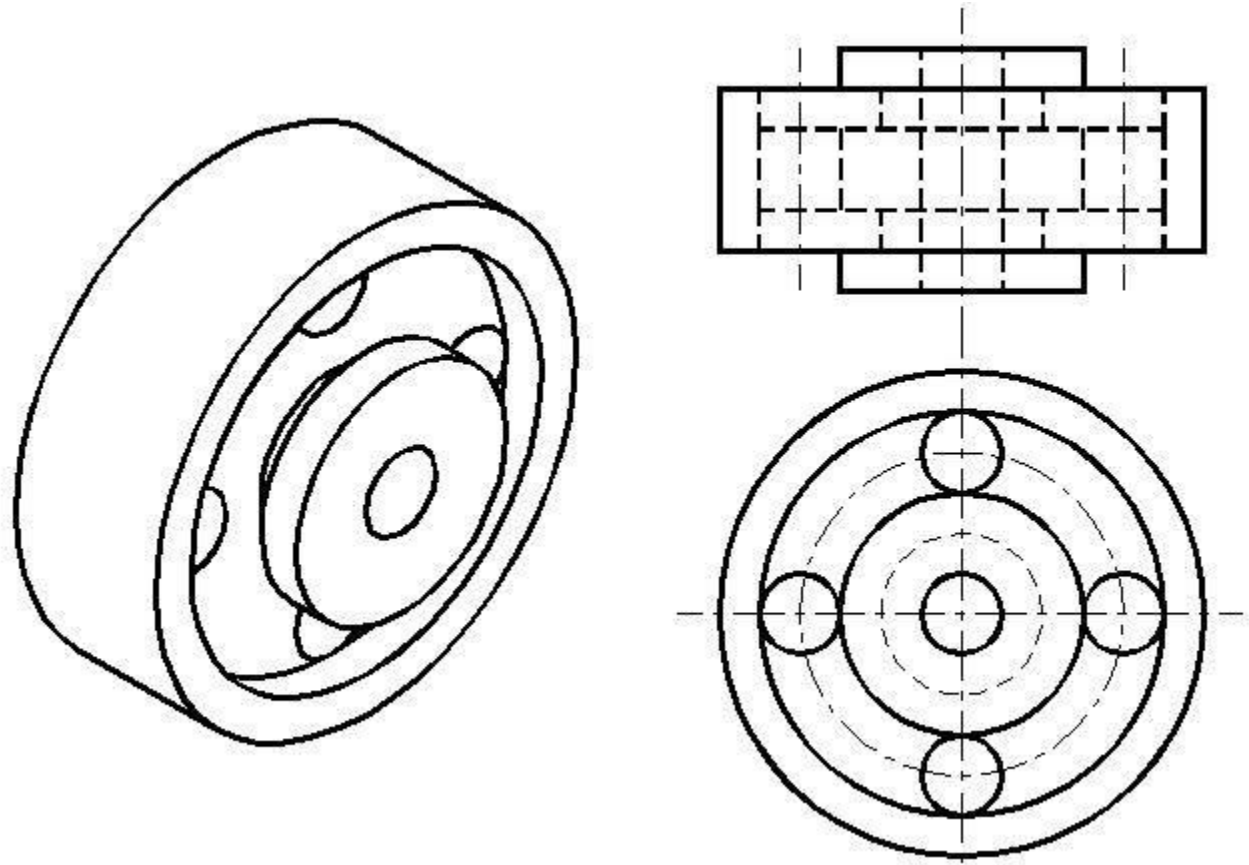
## Capítulo 5 - Cortes e Secções

### OBJECTIVOS

- ☞ Decidir sobre a necessidade ou não de recorrer a cortes ou secções para representar completamente uma peça em projecções ortogonais;
- ☞ Saber optar por um corte ou uma secção;
- ☞ Optando por um corte, escolher de entre os tipos possíveis de cortes;
- ☞ Efectuar correctamente a sua representação gráfica numa folha de papel, respeitando as representações convencionais.

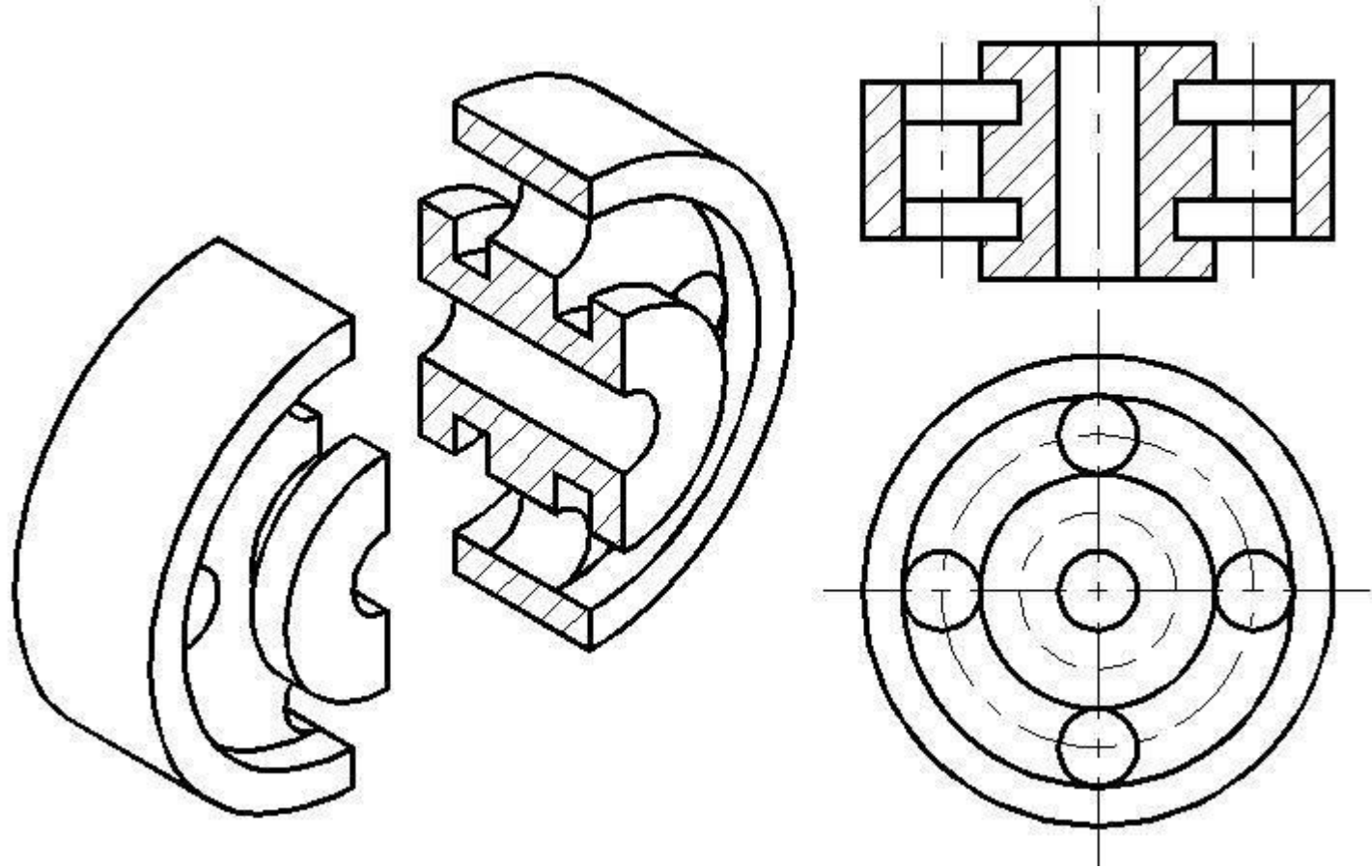
# CORTES E SECÇÕES

## NECESSIDADE DE UTILIZAÇÃO DE CORTES



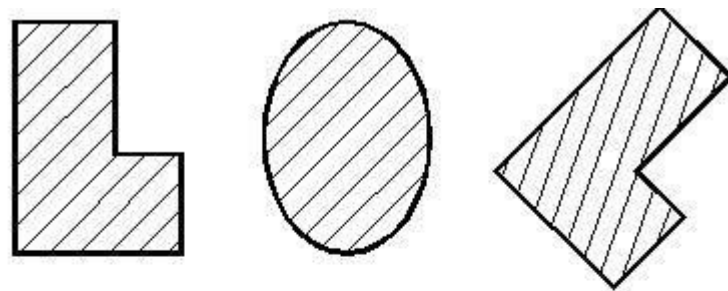
# CORTES E SECÇÕES

## NECESSIDADE DE UTILIZAÇÃO DE CORTES

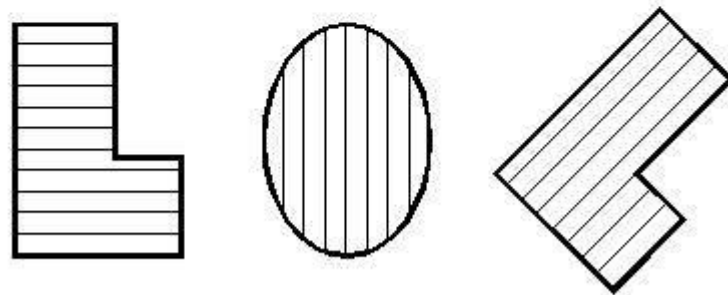


Corte da peça anterior, para evitar a representação em invisíveis, demasiado confusa

## Modos de efectuar tracejados



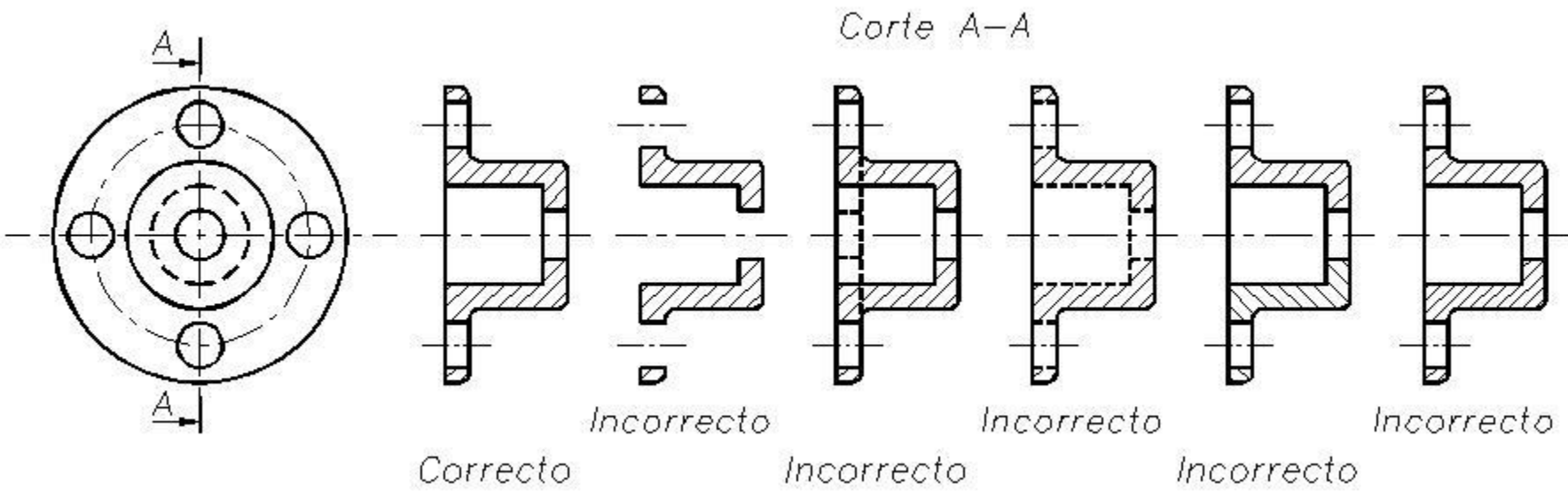
CORRECTO



INCORRECTO

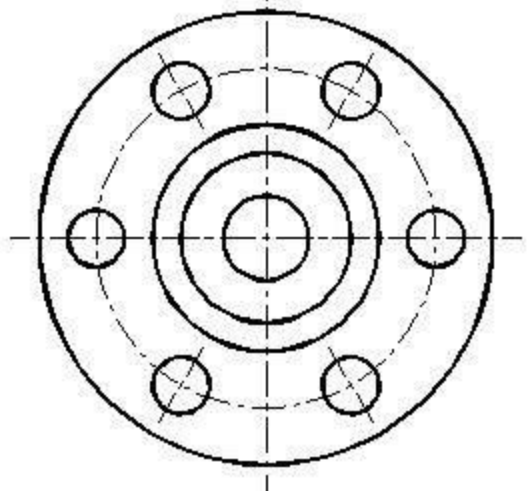
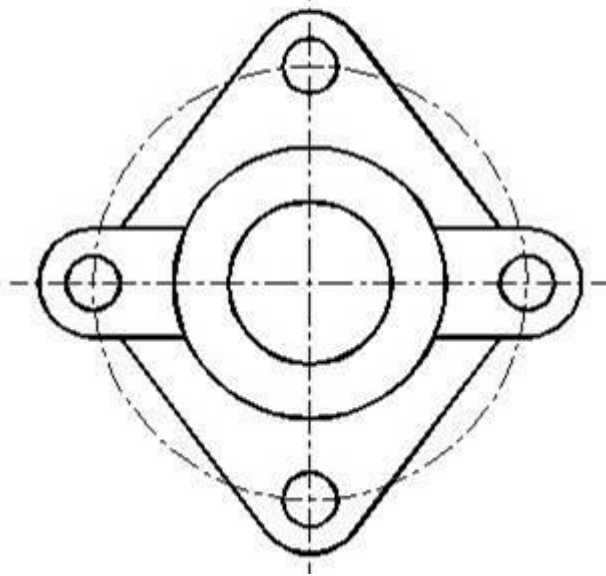
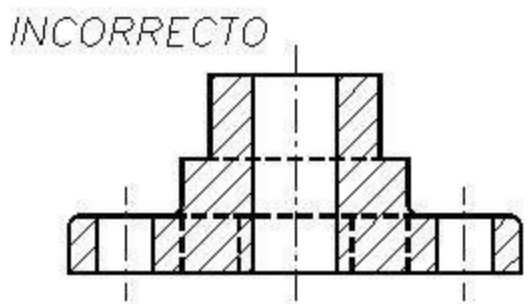
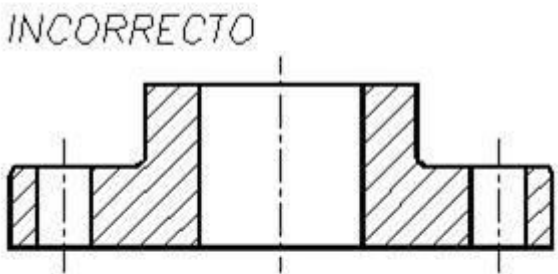
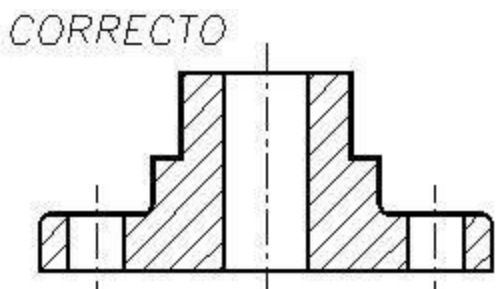
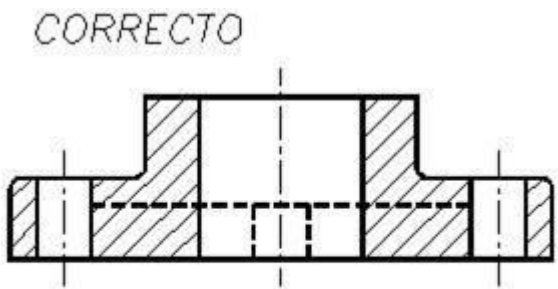
# CORTES E SECÇÕES

## Representação correcta de cortes



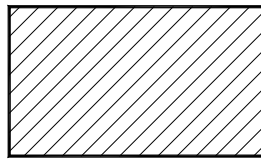
# CORTES E SECÇÕES

- Redundância na representação de invisíveis

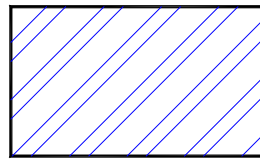


# CORTES E SECÇÕES

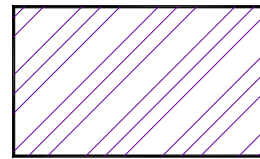
## Figuração de diferentes materiais em corte



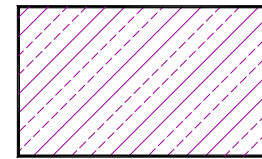
*Metal em geral  
(cinzento)*



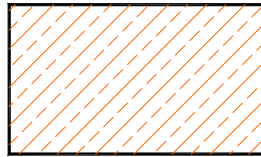
*Ferro fundido  
(azul)*



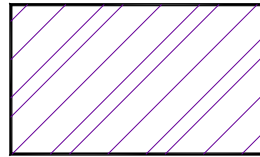
*Ferro forjado  
(lilás)*



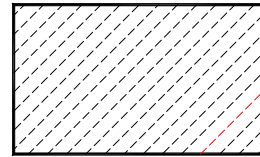
*Metal branco  
(lilás claro)*



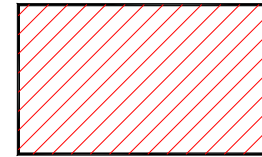
*Cobre e ligas  
(laranja)*



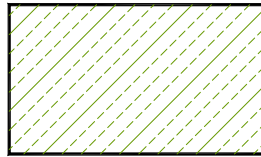
*Aço inox  
(lilás)*



*Pedra artificial  
(cinzento)*



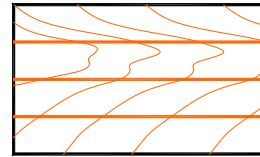
*Cerâmicos resist.  
(vermelho)*



*Alumínio, Magnésio  
(verde)*



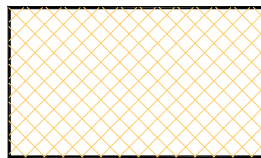
*Madeira  
(laranja)*



*Contraplacado  
(laranja)*



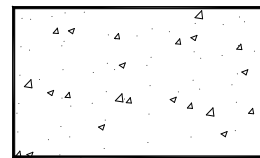
*Aglomerados madeira  
(laranja)*



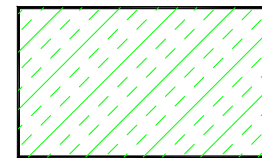
*Cortiça, Couro  
(sêpia)*



*Plásticos, borrachas  
e betuminosos  
(verde claro)*



*Betão  
(cinzento)*

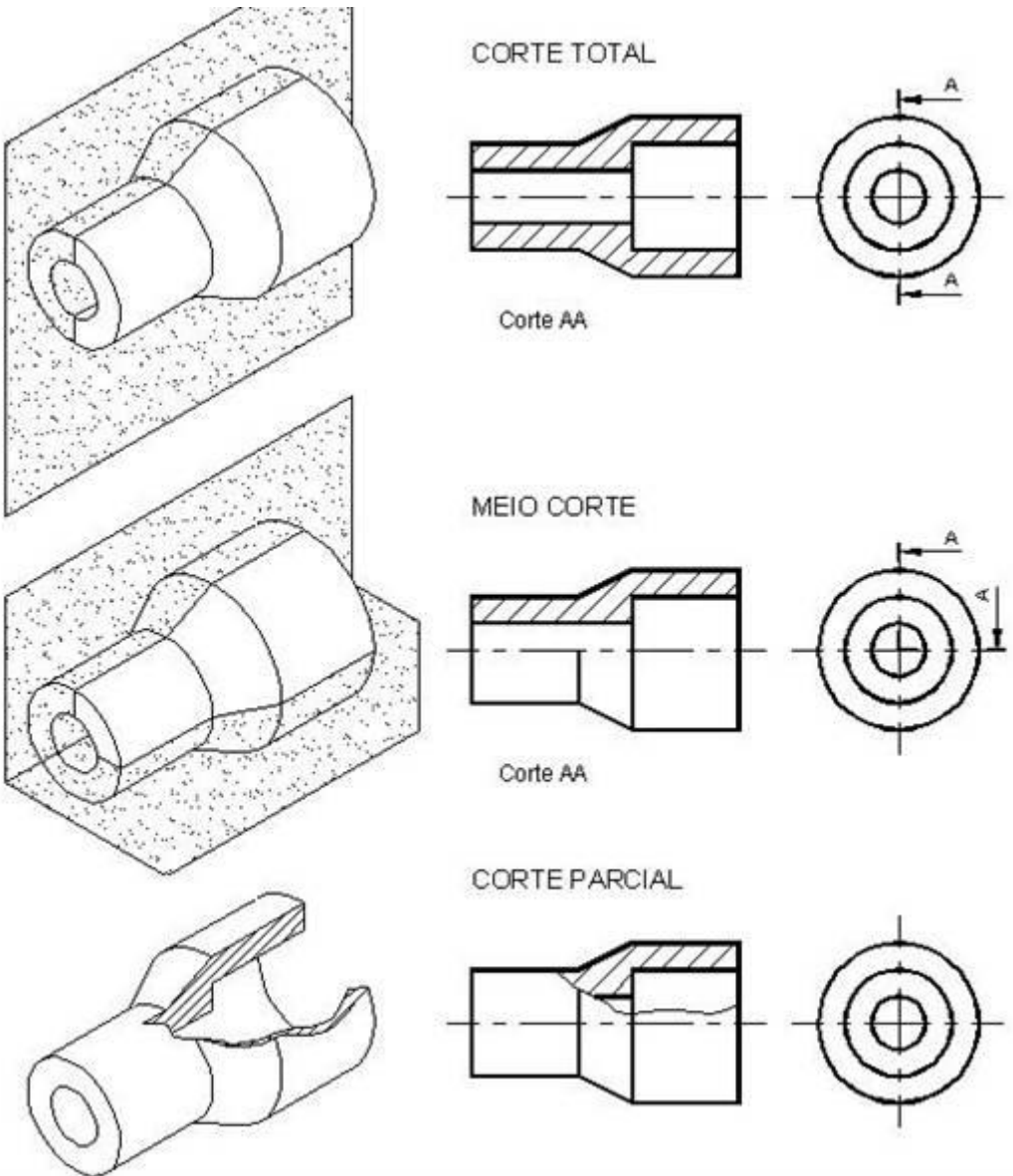


*Estanho, chumbo  
e zinco  
(verde claro)*



# CORTES E SECÇÕES

- Corte total
- Meio corte
- Corte parcial

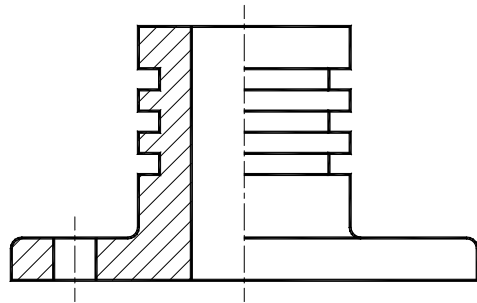




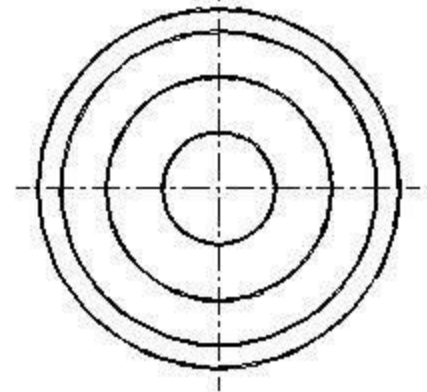
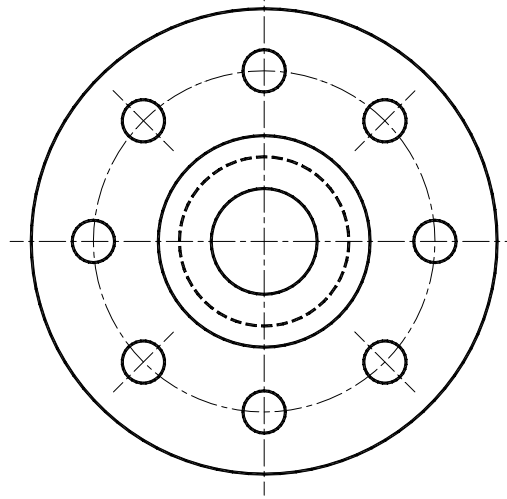
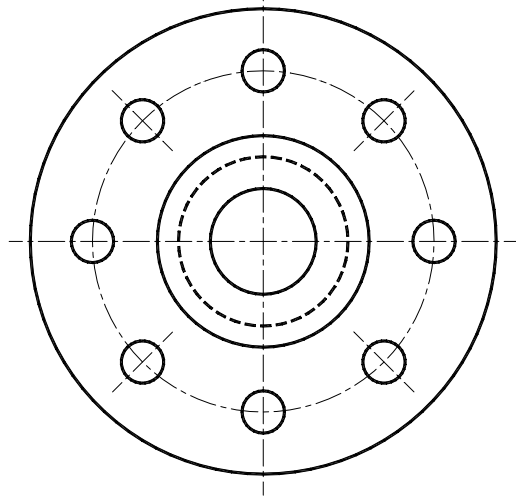
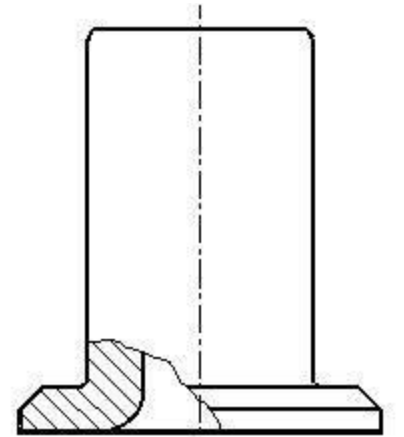
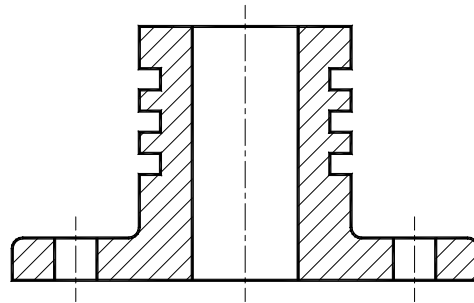
# CORTES E SECÇÕES

Escolha entre corte total, meio corte e corte parcial

*Meio corte (preferível)*

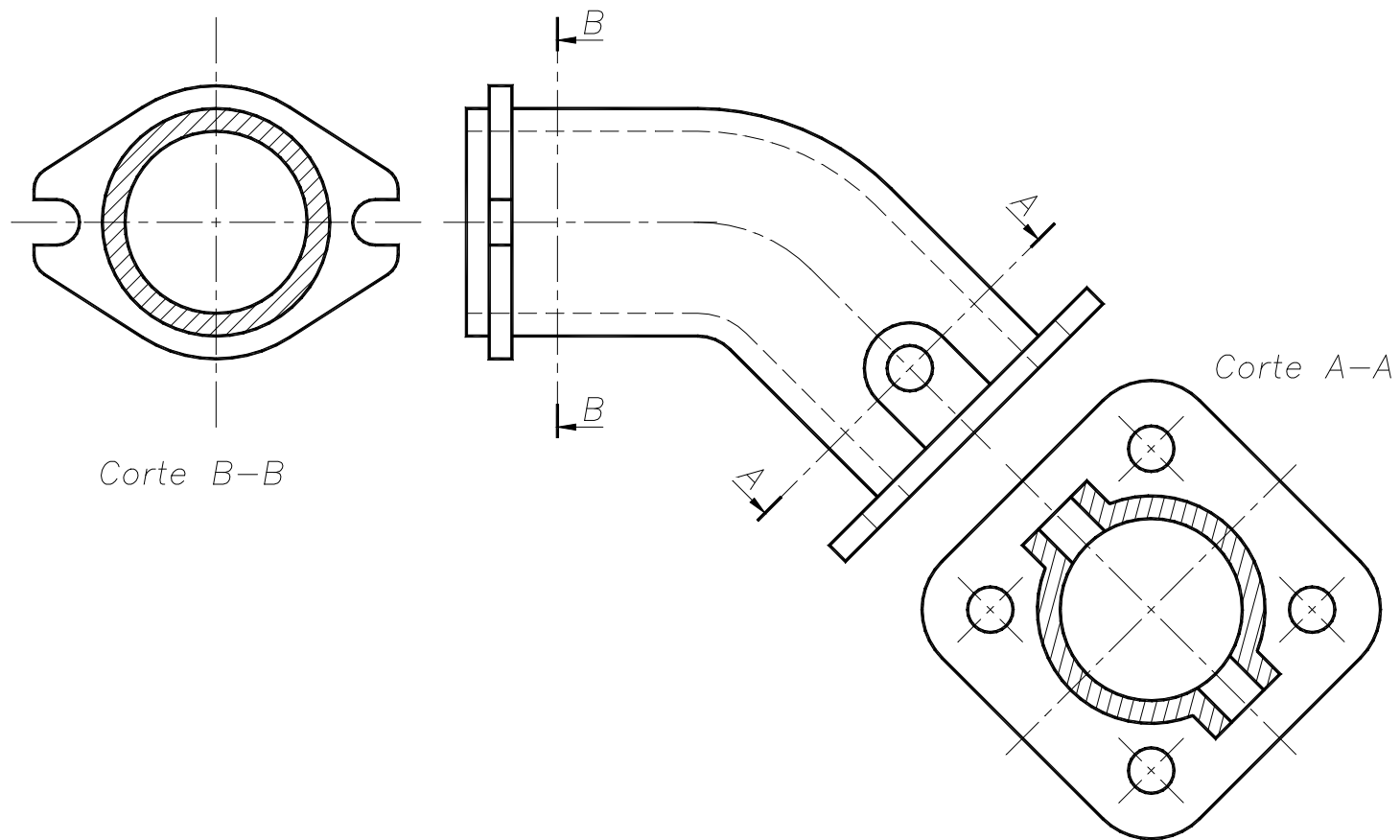


*Corte total*



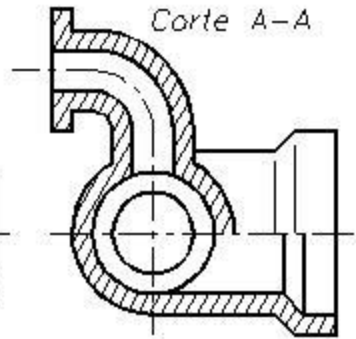
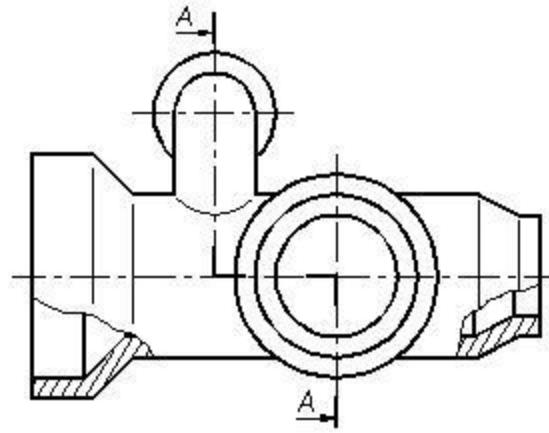
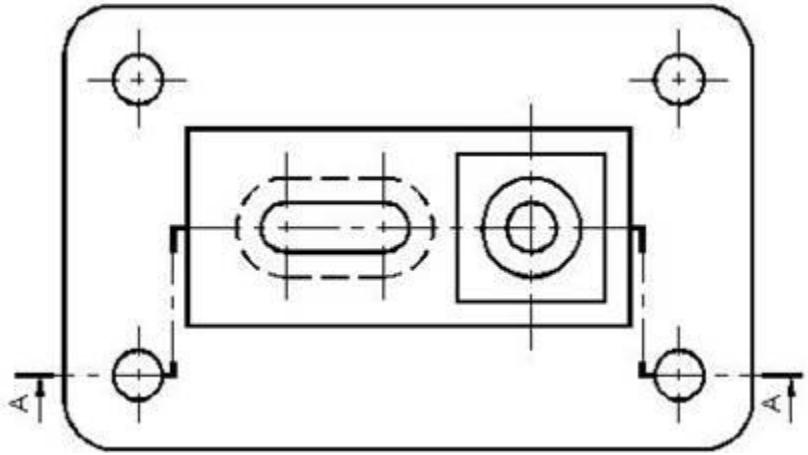
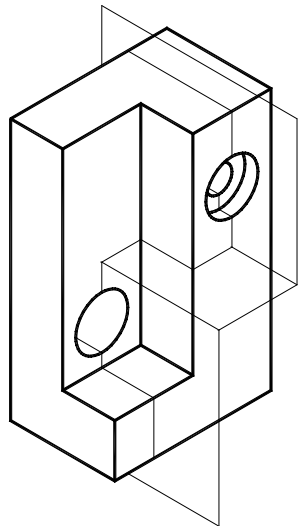
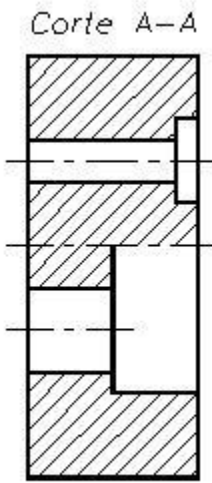
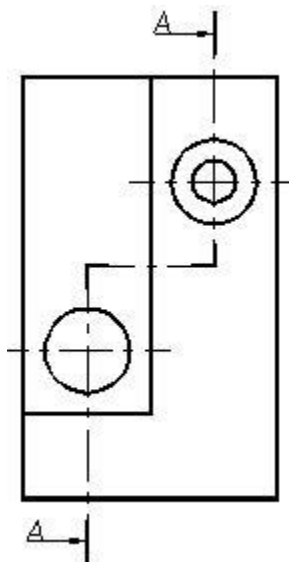
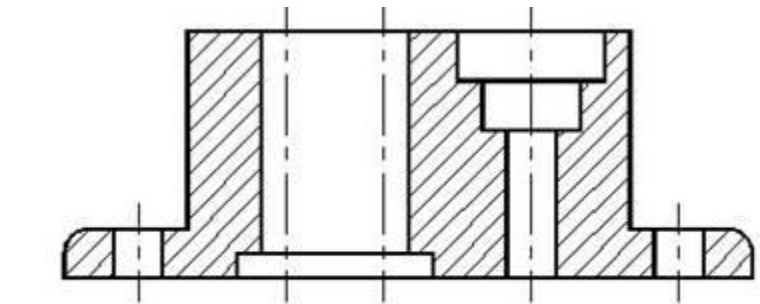
# CORTES E SECÇÕES

## Cortes múltiplos numa peça



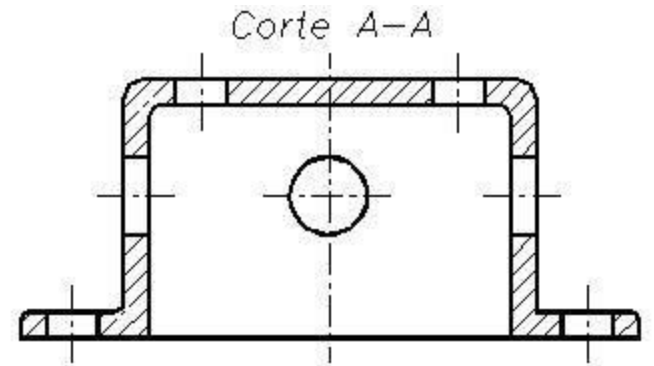
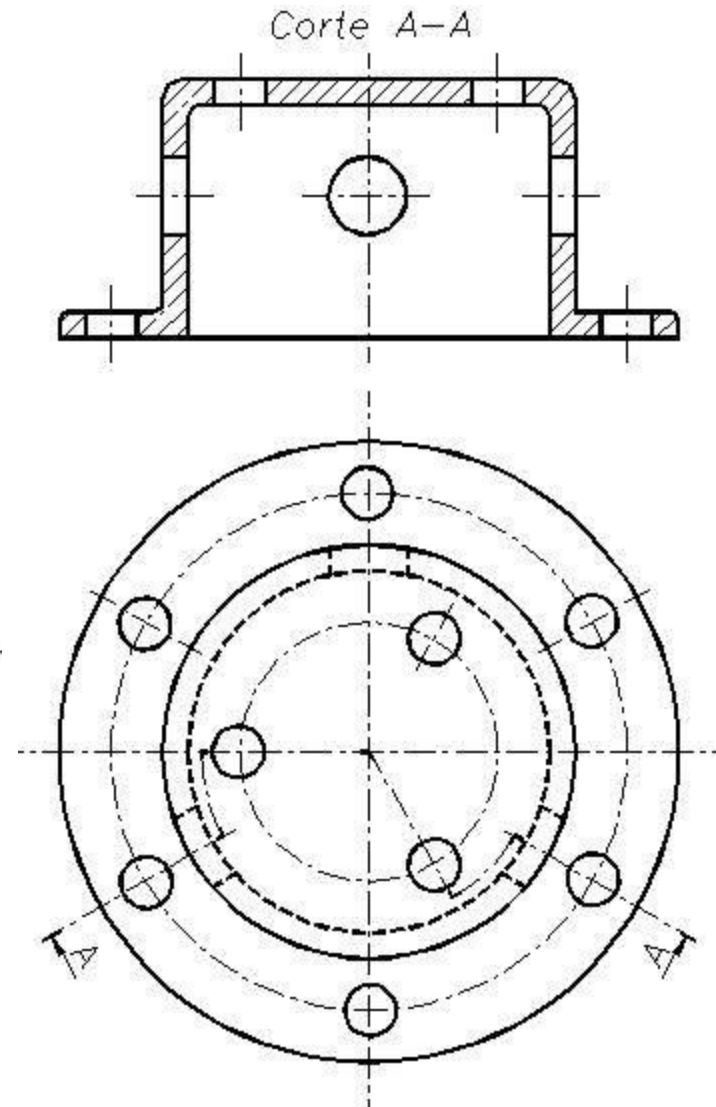
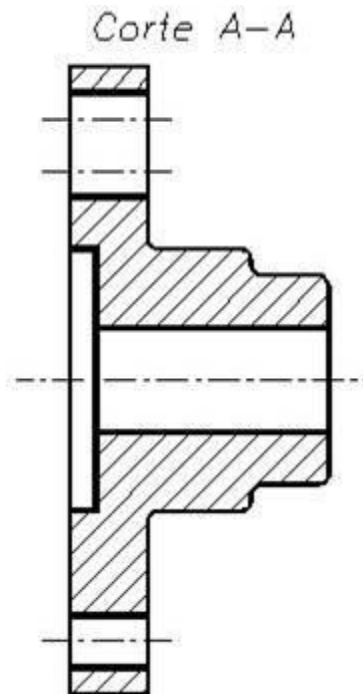
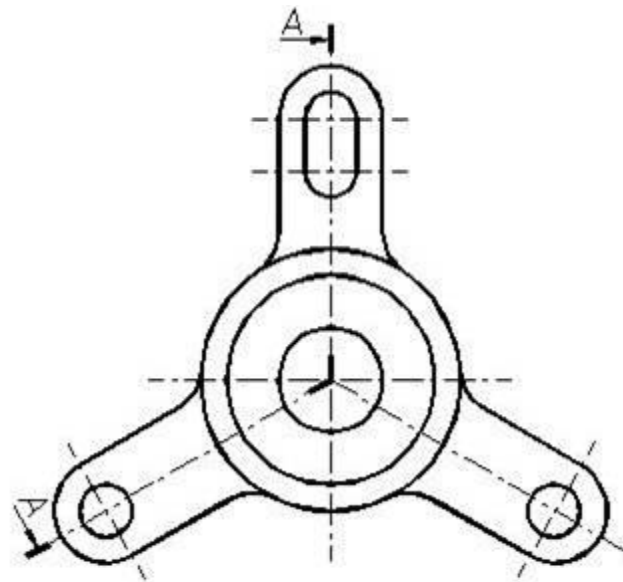
# CORTES E SECÇÕES

- Corte por planos paralelos



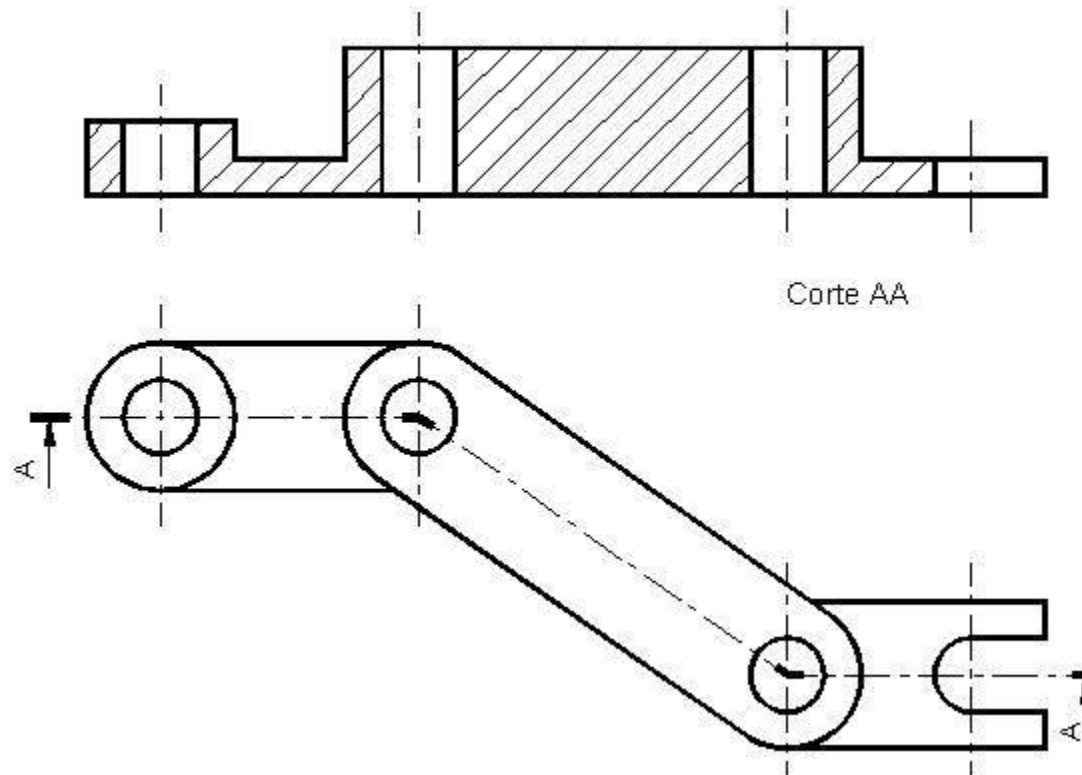
# CORTES E SECÇÕES

- Corte por planos concorrentes



# CORTES E SECÇÕES

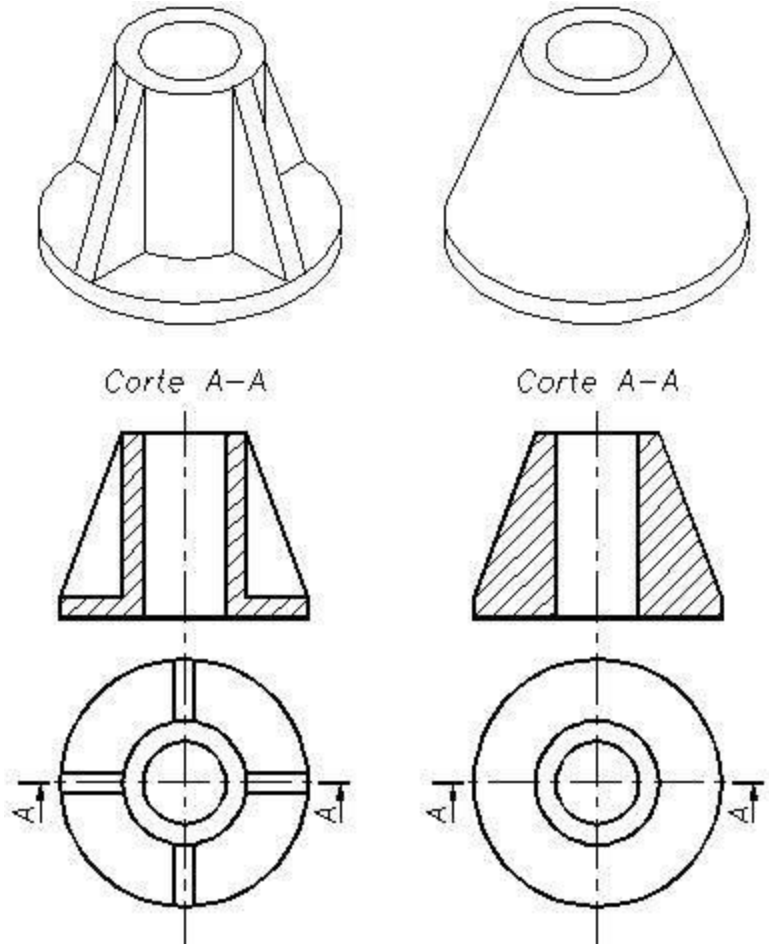
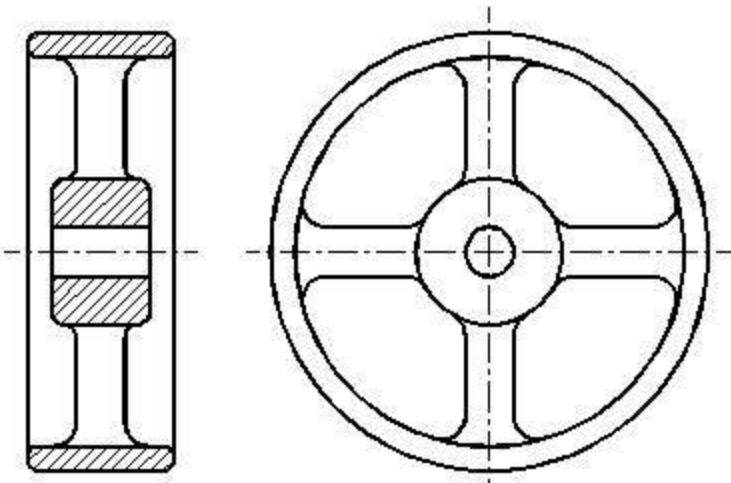
- Corte por planos sucessivos



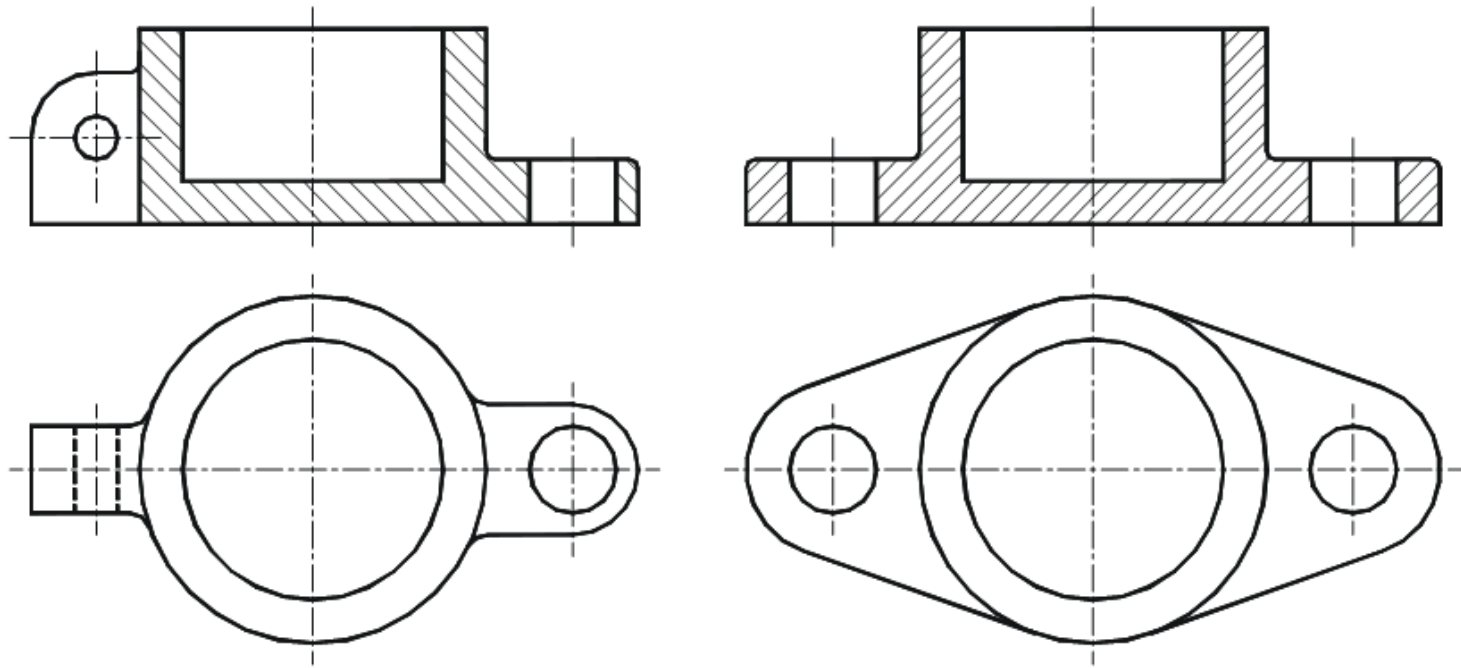
# CORTES E SECÇÕES

## Elementos que não se cortam

- Braços de tambores
- Nervuras



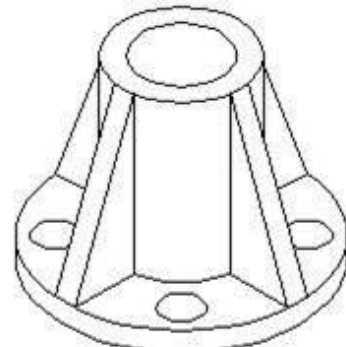
## Nervuras duvidosas



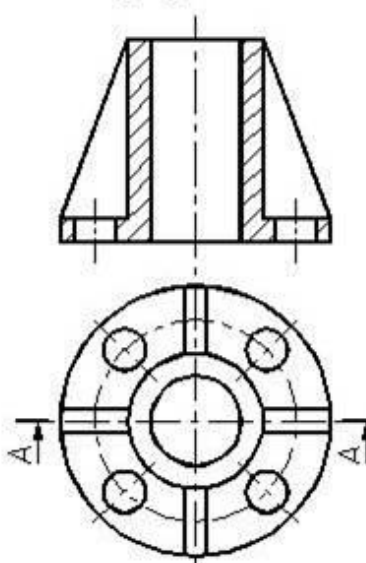


# CORTES E SECÇÕES

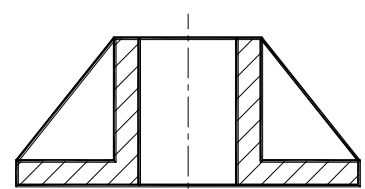
## Rebatimento de pormenores não intersectados pelo plano de corte



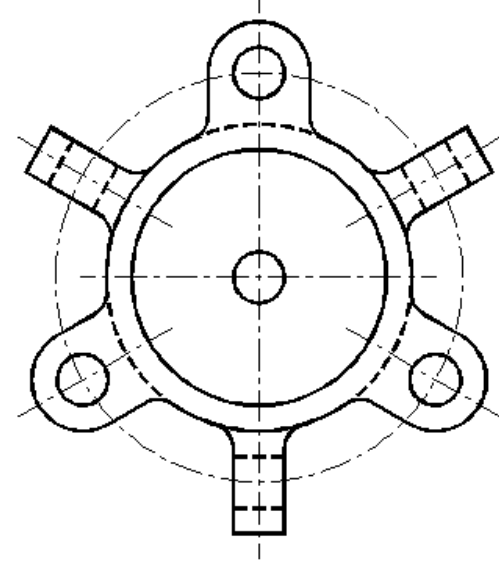
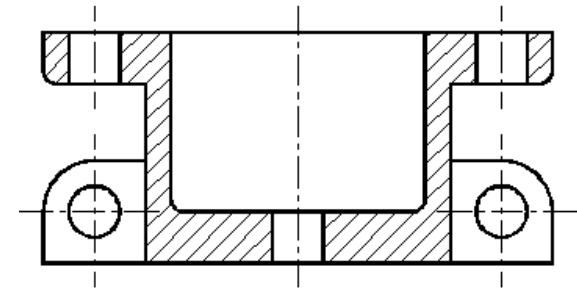
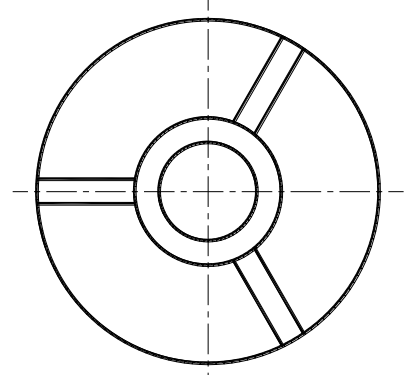
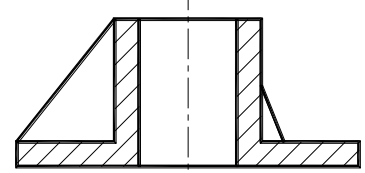
Corte A-A



CORRECTO

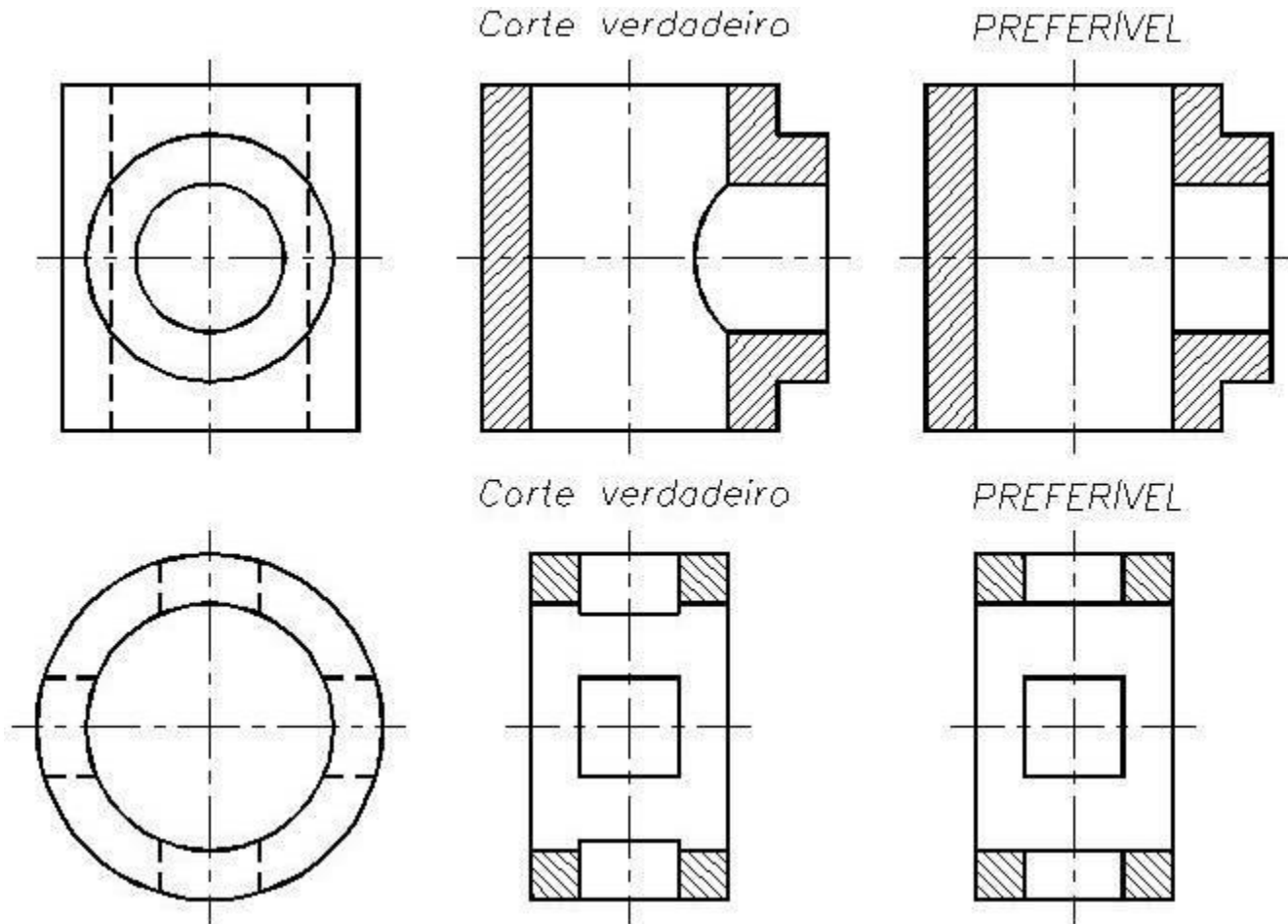


INCORRECTO

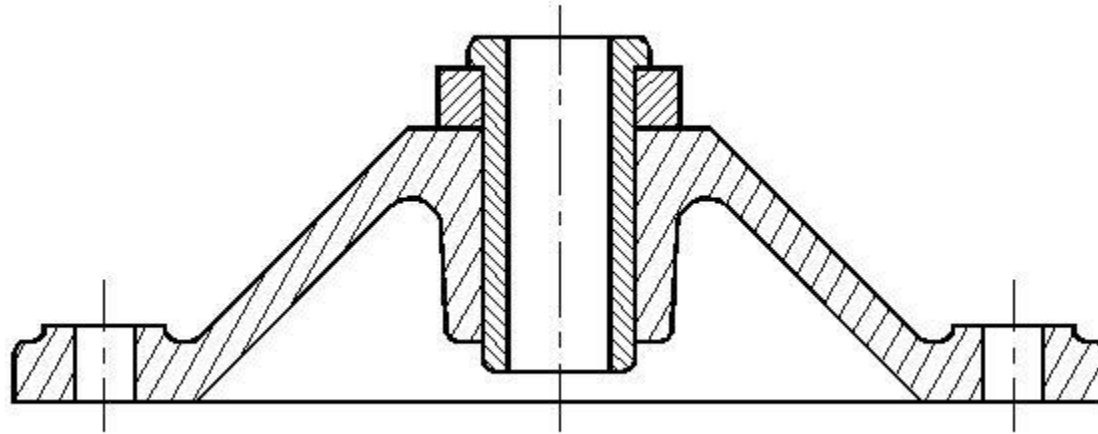


# CORTES E SECÇÕES

## Representações convencionais em cortes



## Tracejados em conjuntos de peças

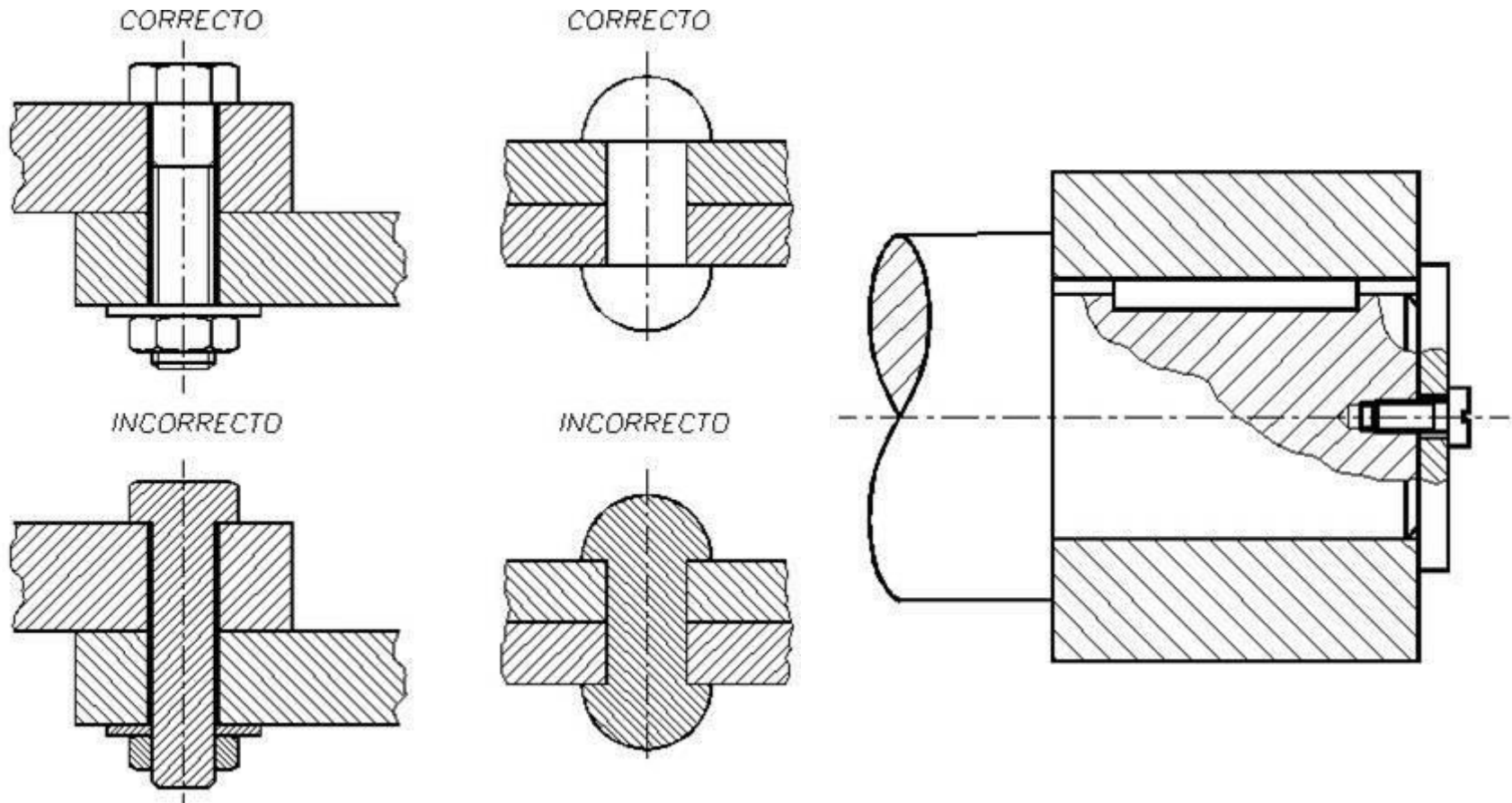


- Corte de perfis delgados



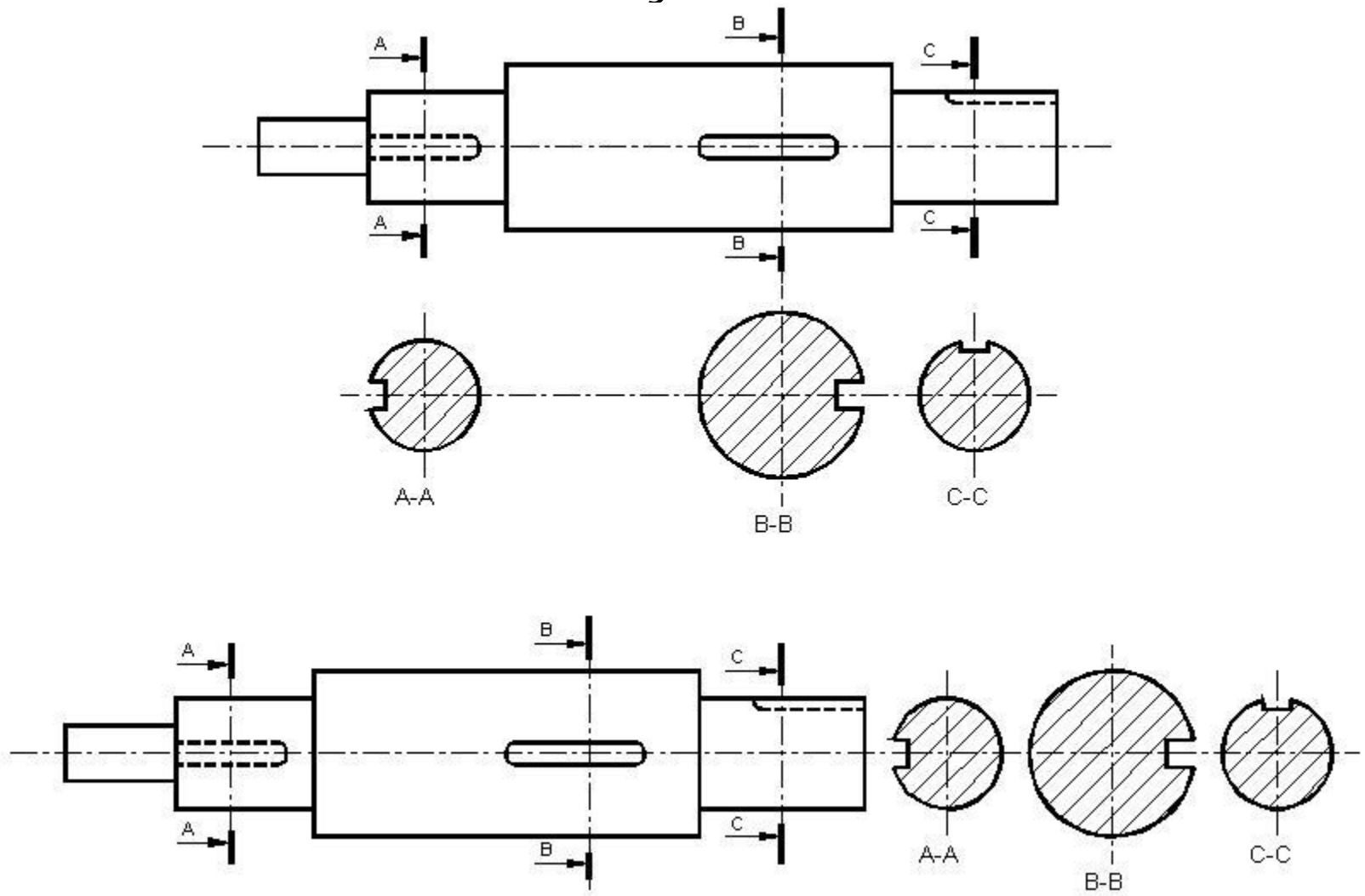
# CORTES E SECÇÕES

- Corte de conjuntos, atingindo longitudinalmente um dos elementos



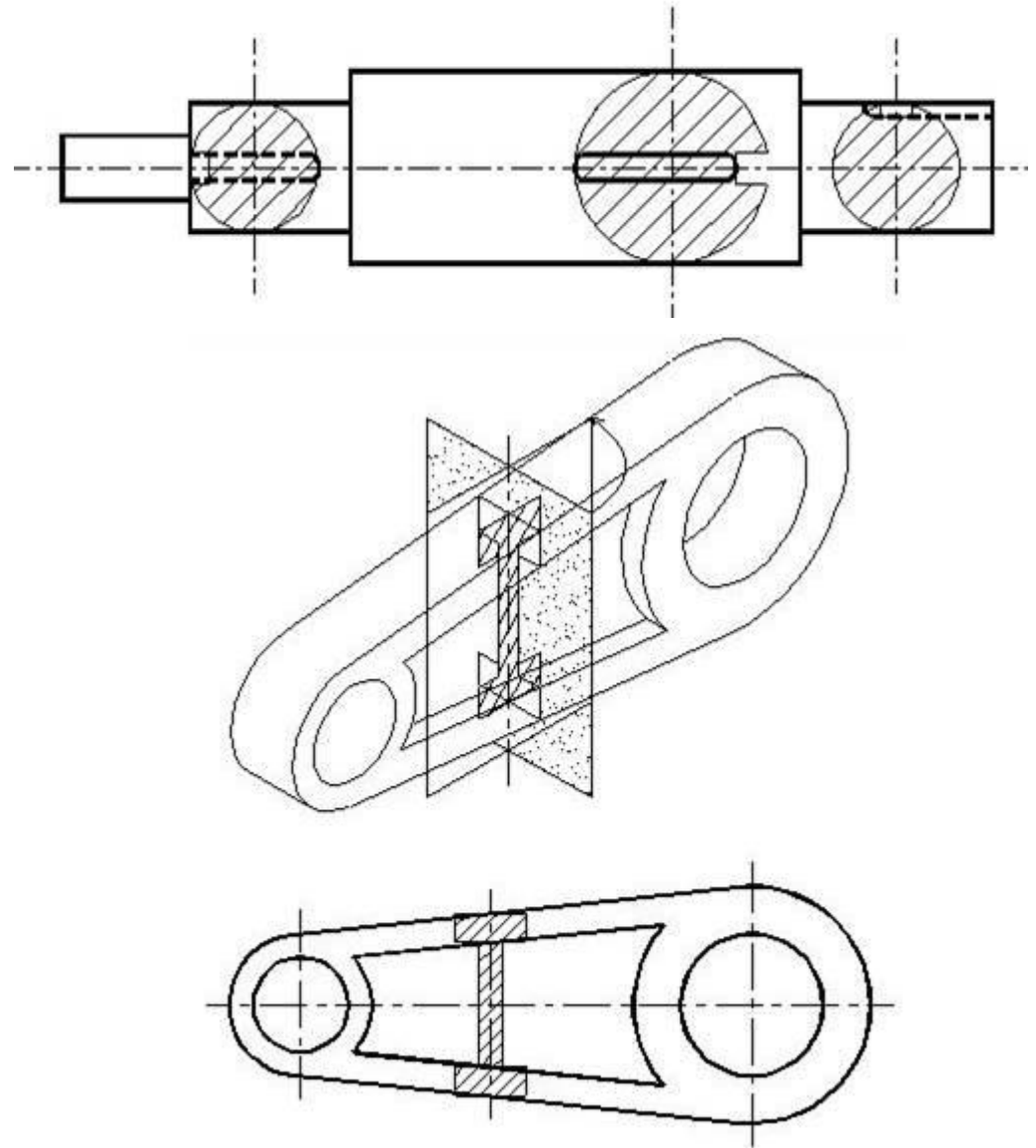
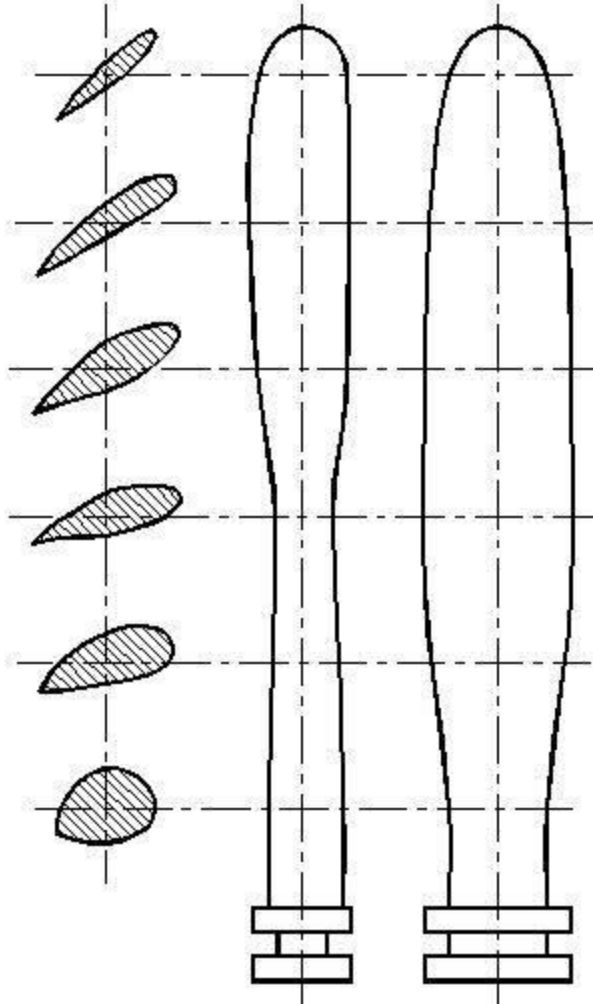
# CORTES E SECÇÕES

## Secções



# CORTES E SECÇÕES

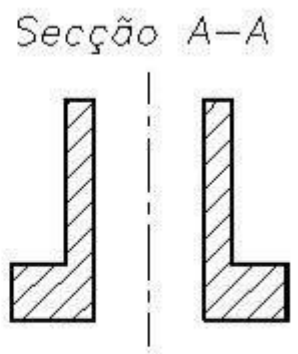
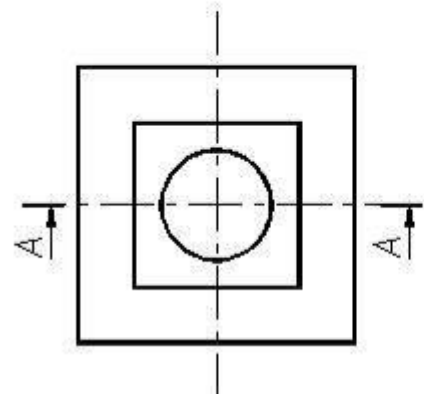
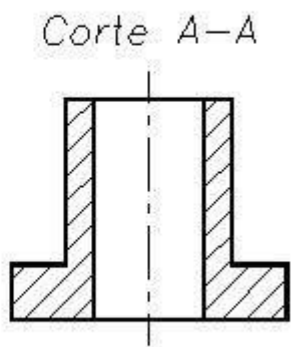
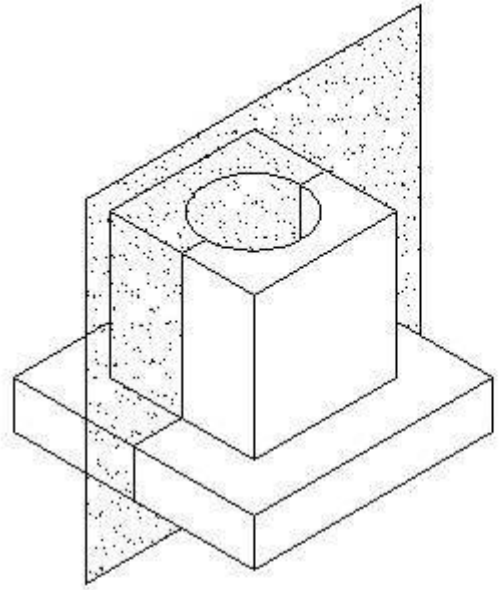
- Secções rebatidas





# CORTES E SECÇÕES

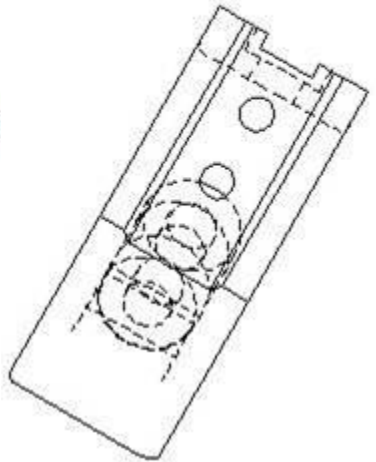
## Diferenças entre um corte e uma secção



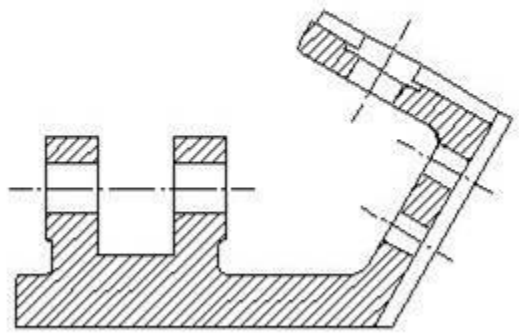


# CORTES E SECÇÕES

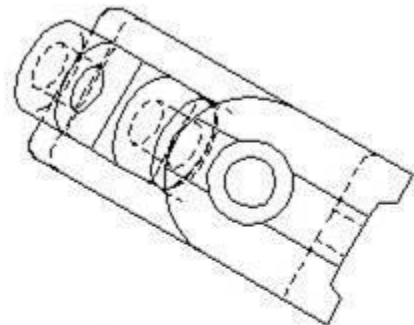
- Aplicações em CAD



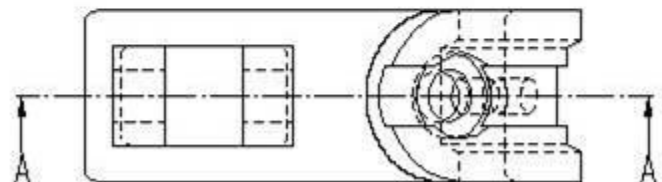
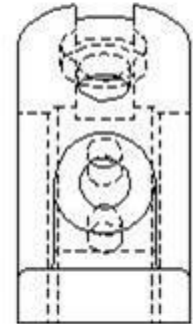
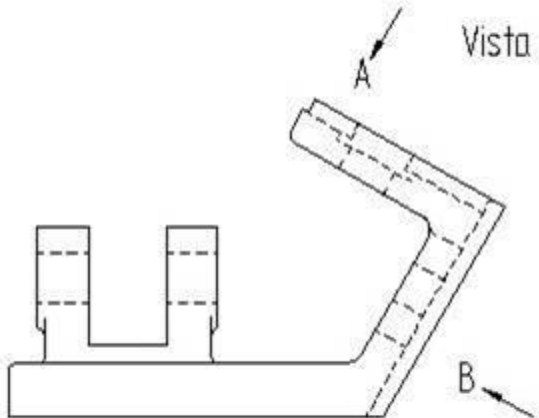
Vista B



Corte A-A

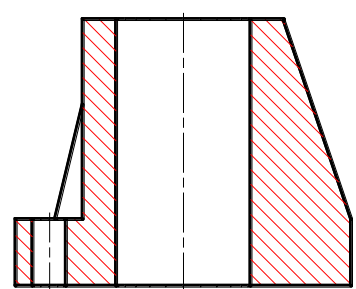


Vista A

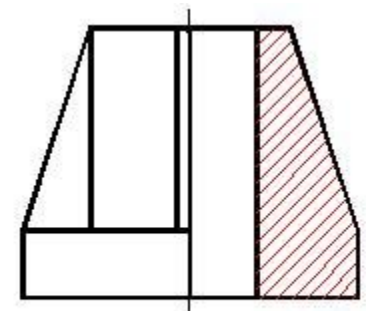
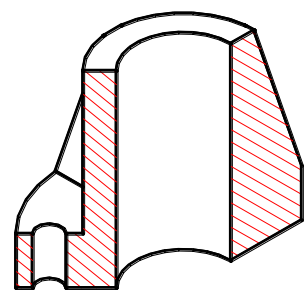


# CORTES E SECÇÕES

- Erros mais frequentes nas representações de cortes automáticas em CAD 3D



CORTE A-A



CORTE A-A

