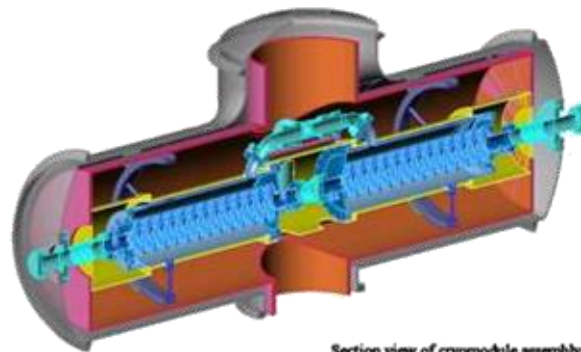


Chapter 10

Conventional Practice in Section View



Section view of cryomodule assembly.



TOPICS

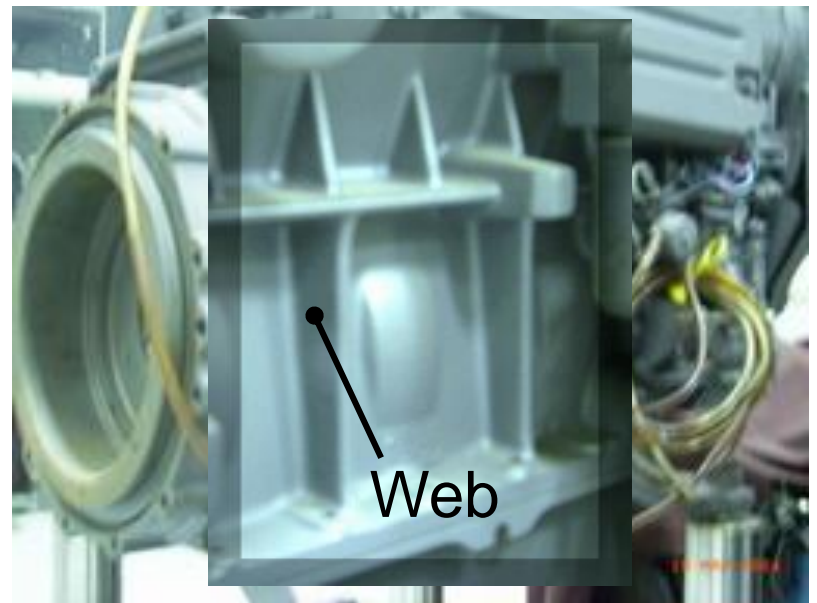
- Section view representation of *rib*, *web*, *spoke* and *lug*.
- Aligned section
- Conventional break

Section view
representation of
rib, *web*, *spoke* and *lug*



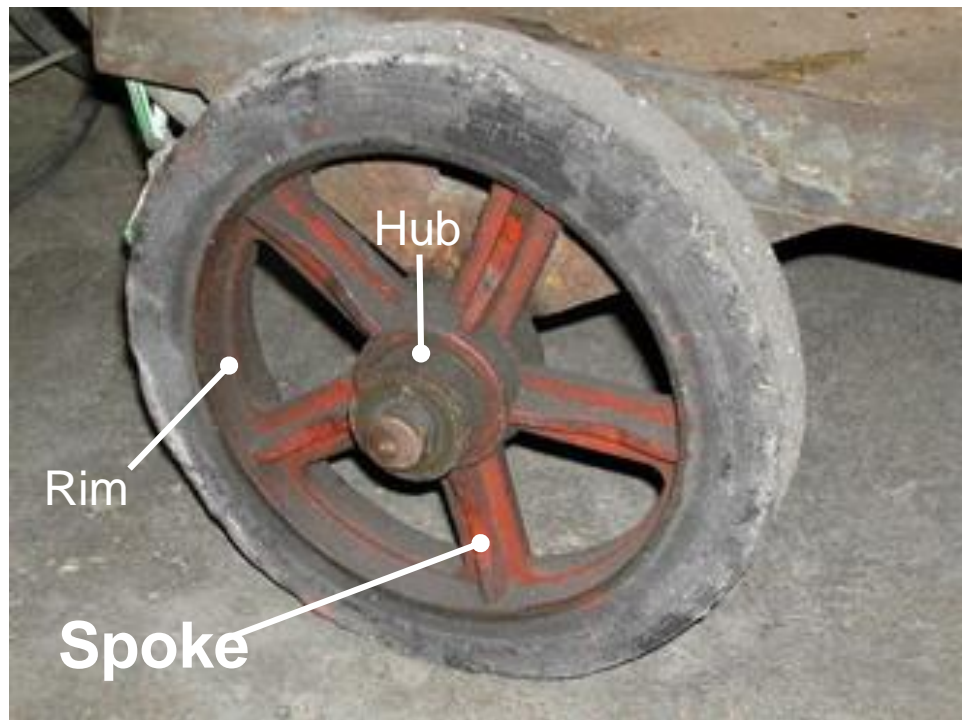
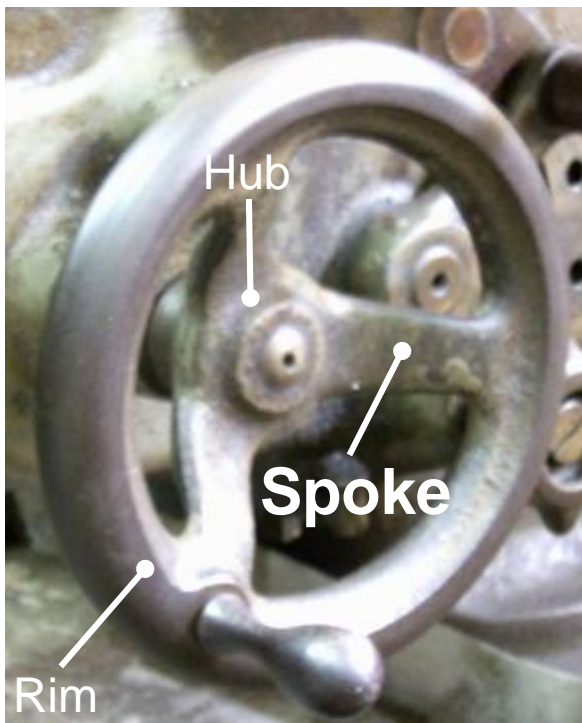
TERMINOLOGY

Rib and **Web** are thin, flat feature of an object that acts as a structural support.



TERMINOLOGY

Spoke is the rod radiating from the **hub** to the **rim** of a wheel.



TERMINOLOGY

Lug is an ear which is built as portion of an object for attachment.



TERMINOLOGY

Lug is an ear which is built as portion of an object for attachment.

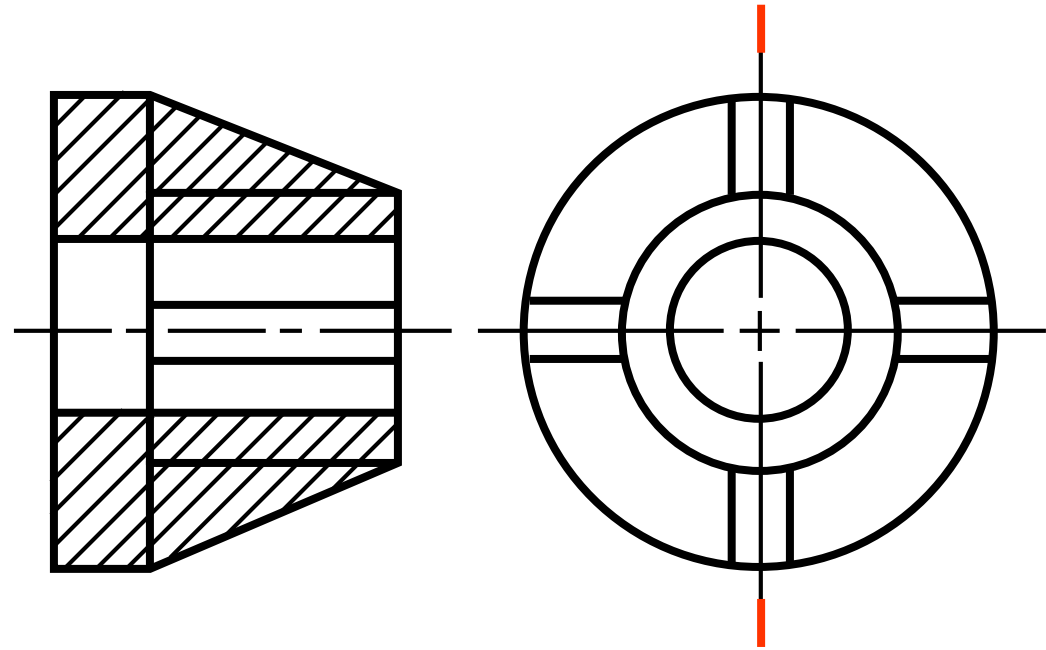
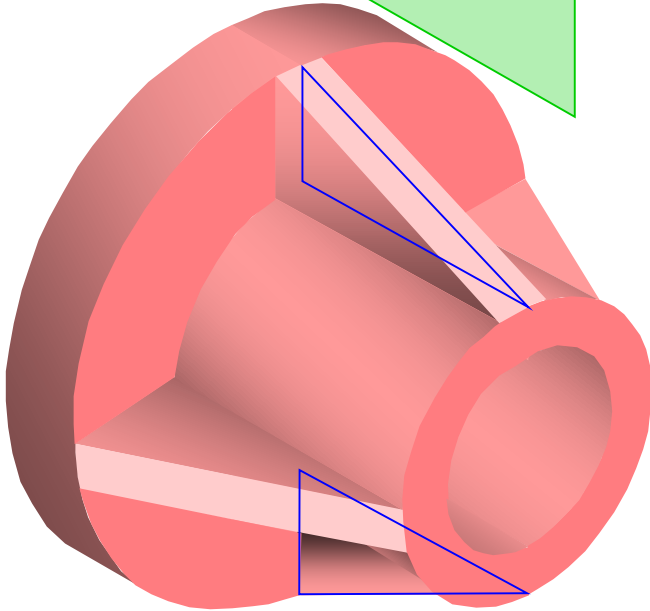


CONVENTIONAL PRACTICE

Omit the section lines on the section view of

- ❖ **Rib**, **Web** and **Lug**, if the cutting plane is passed *flatwise* through.
- ❖ **Spoke**, if the cutting plane is passed *longwise* through.

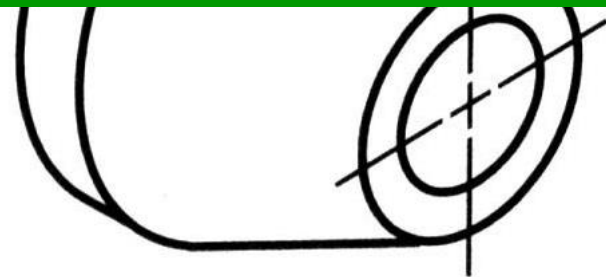
EXAMPLE : *RIB*



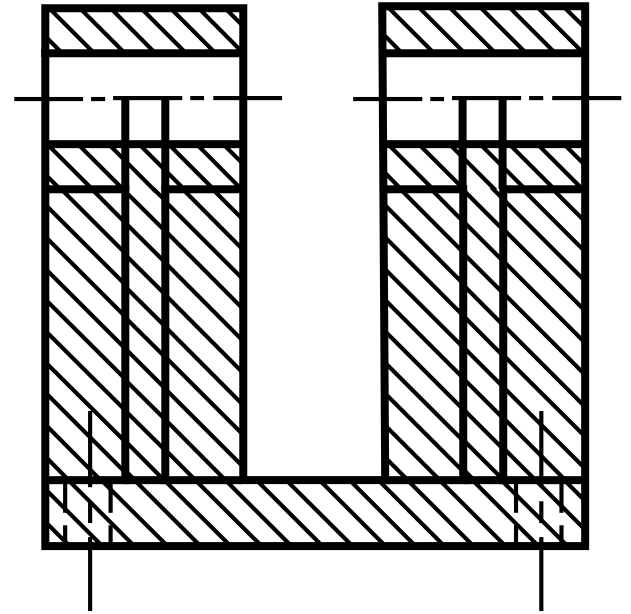
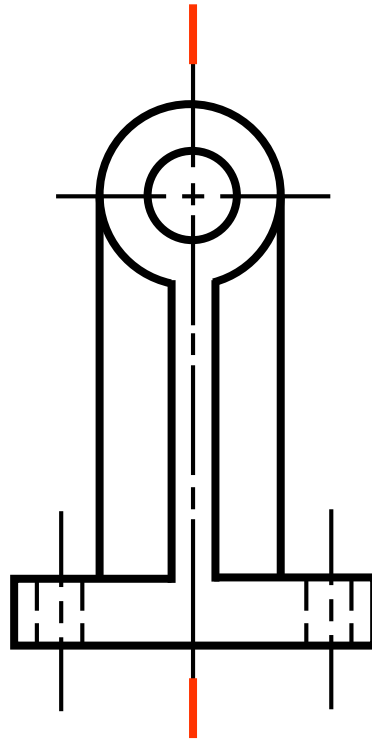
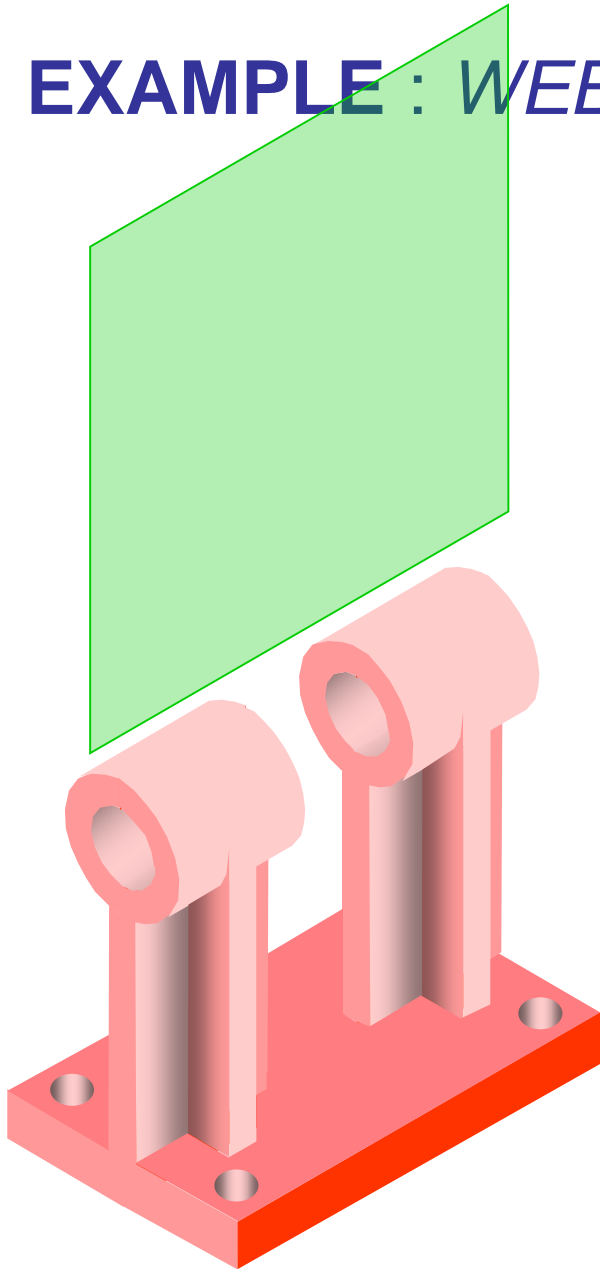
Normal multiview drawing

Normal section view

Section view drawing with convention



EXAMPLE : WEB : flatwise cut

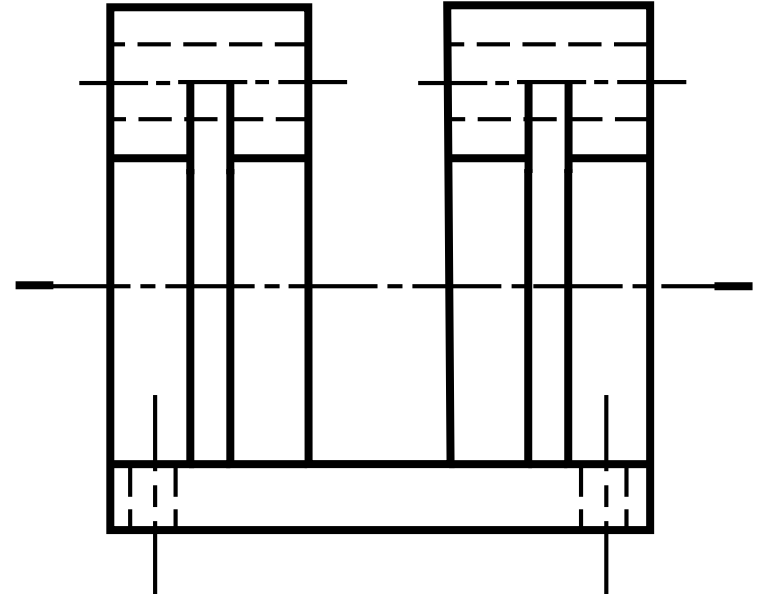
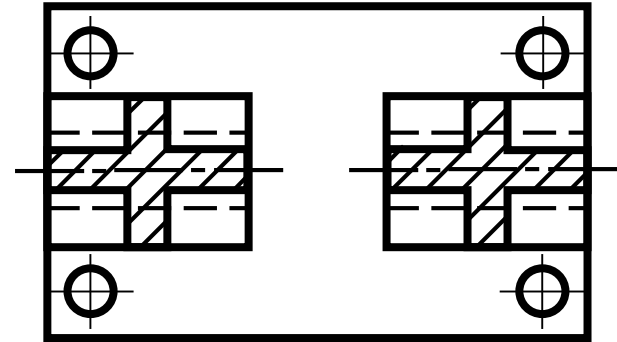
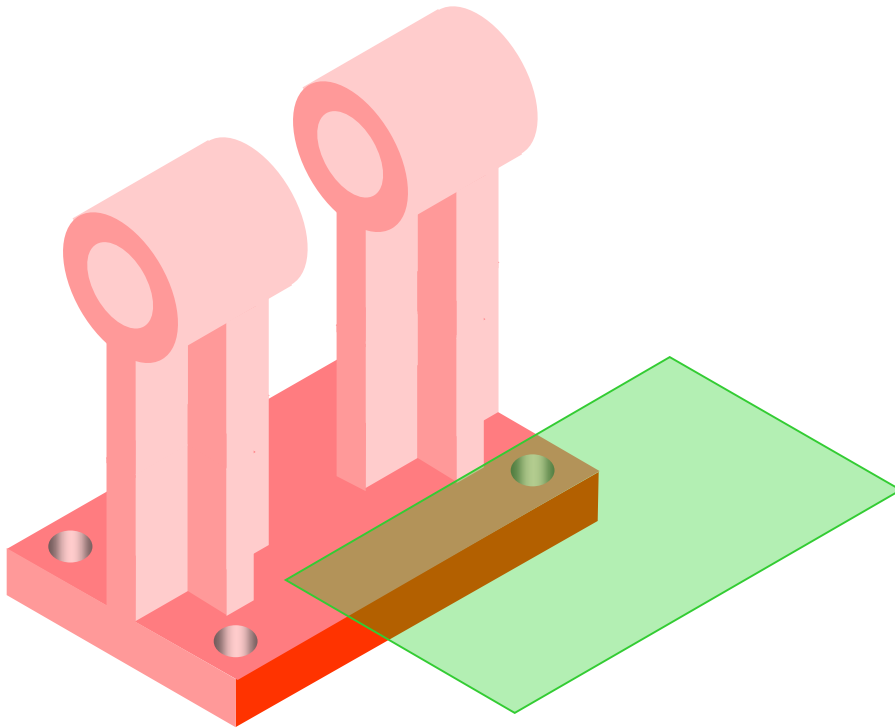


Normal multiview drawing

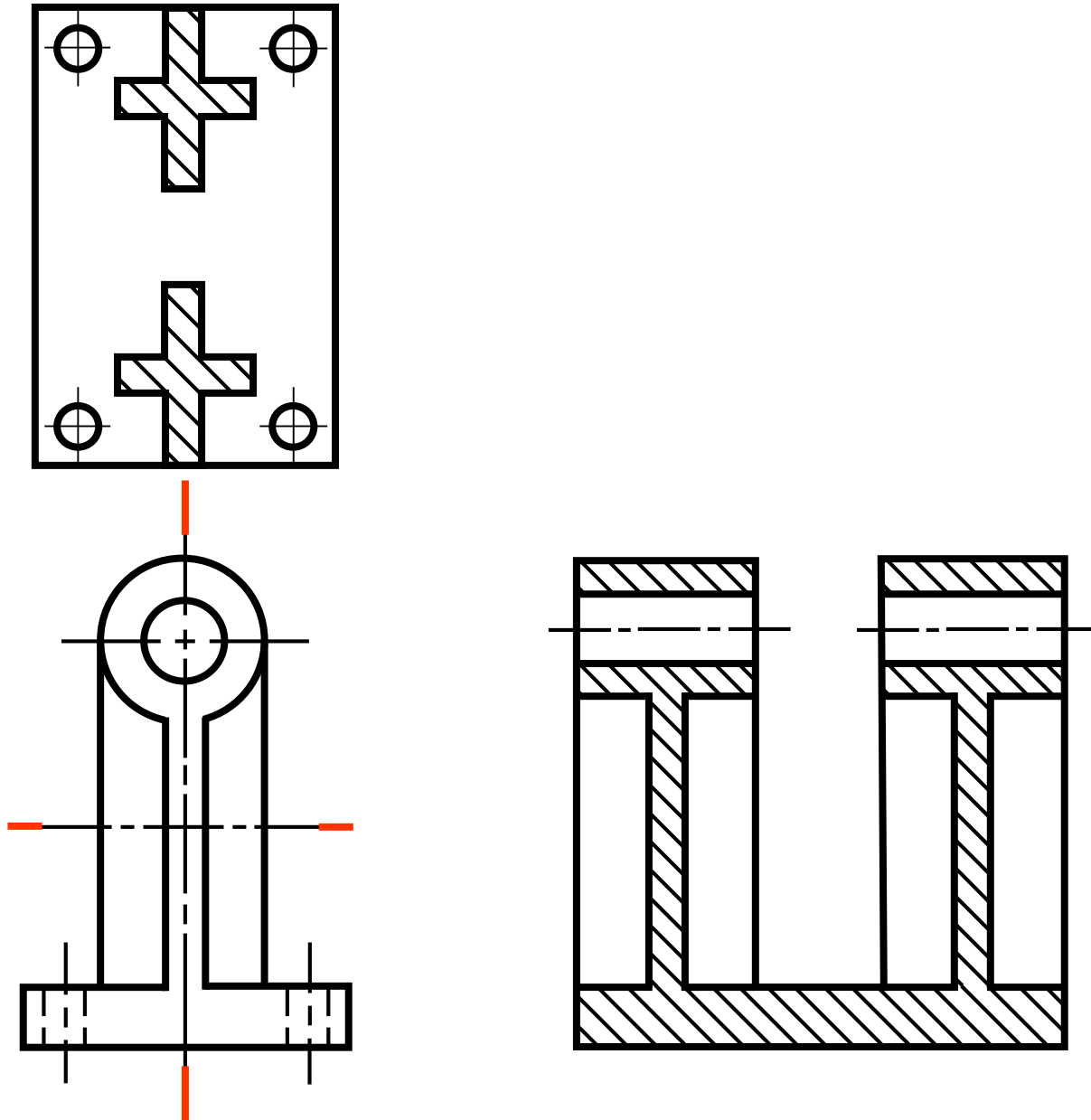
Normal section view

Section view drawing with convention

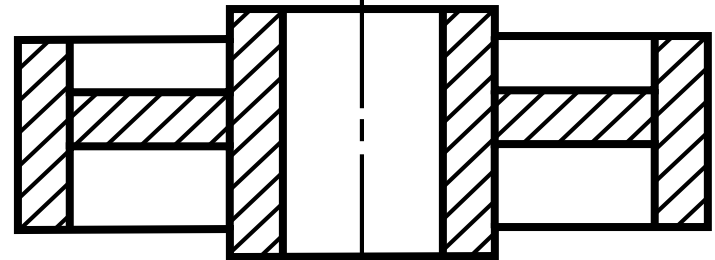
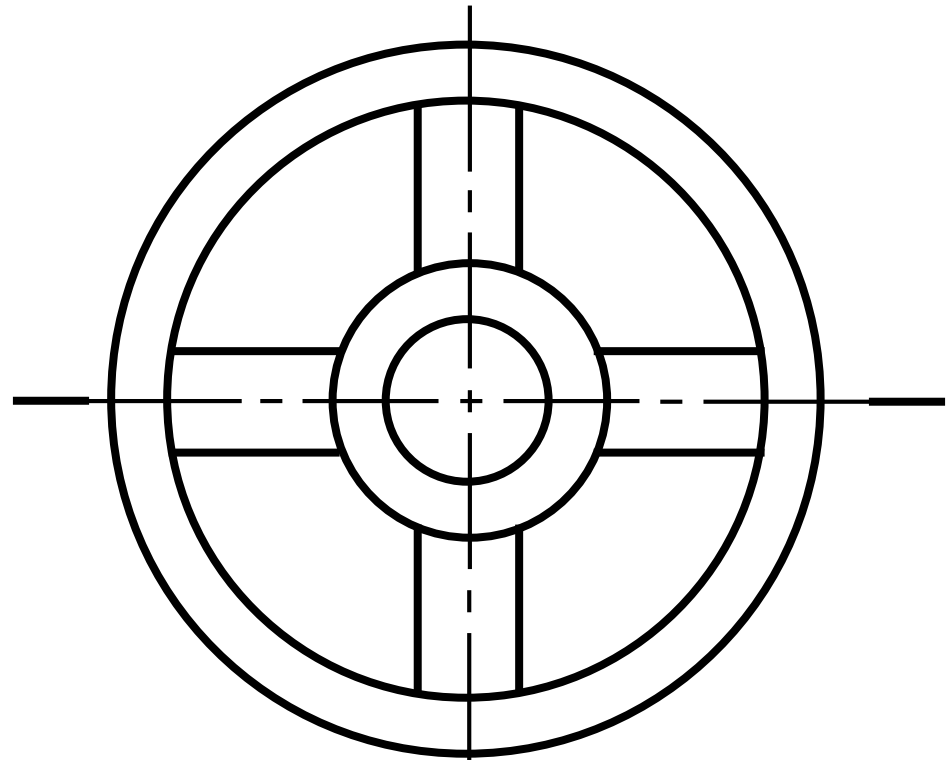
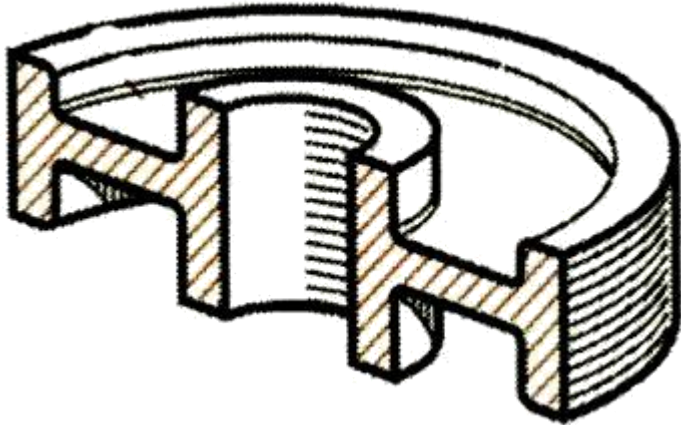
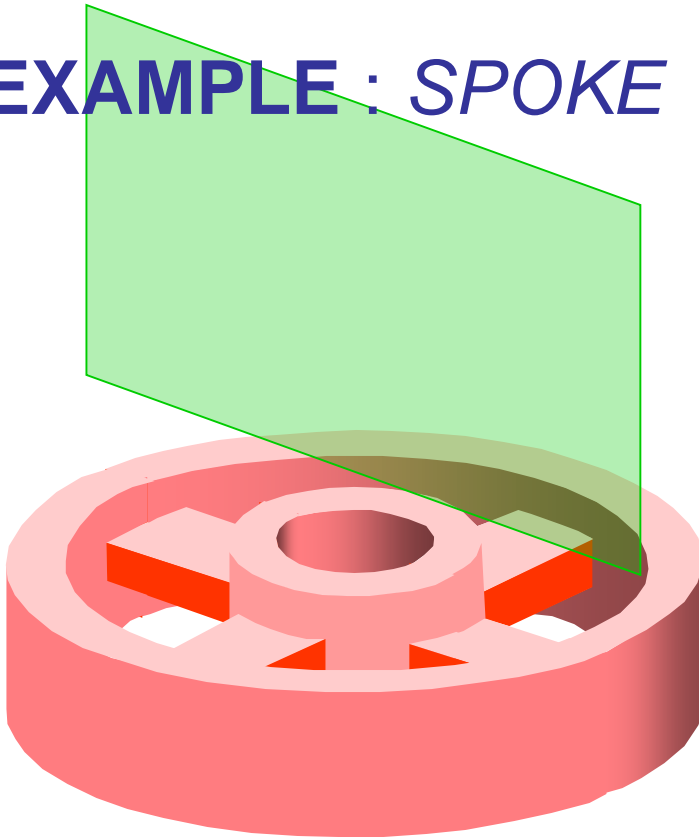
EXAMPLE : *WEB* : crosswise cut



EXAMPLE : *WEB* : multiple section view

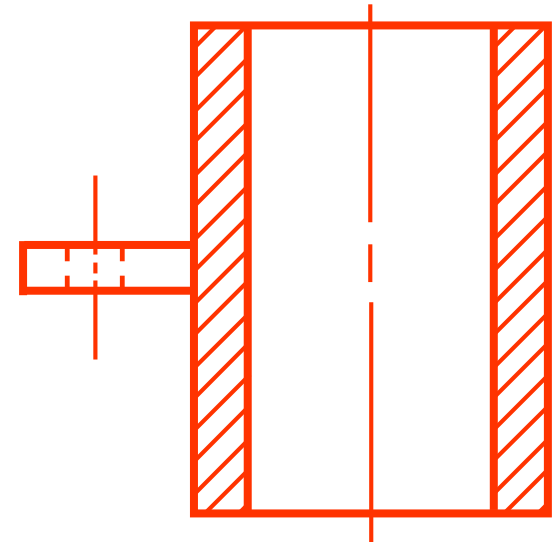
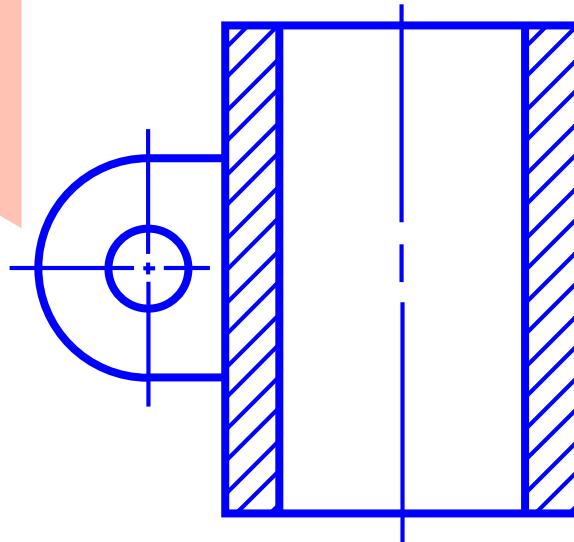
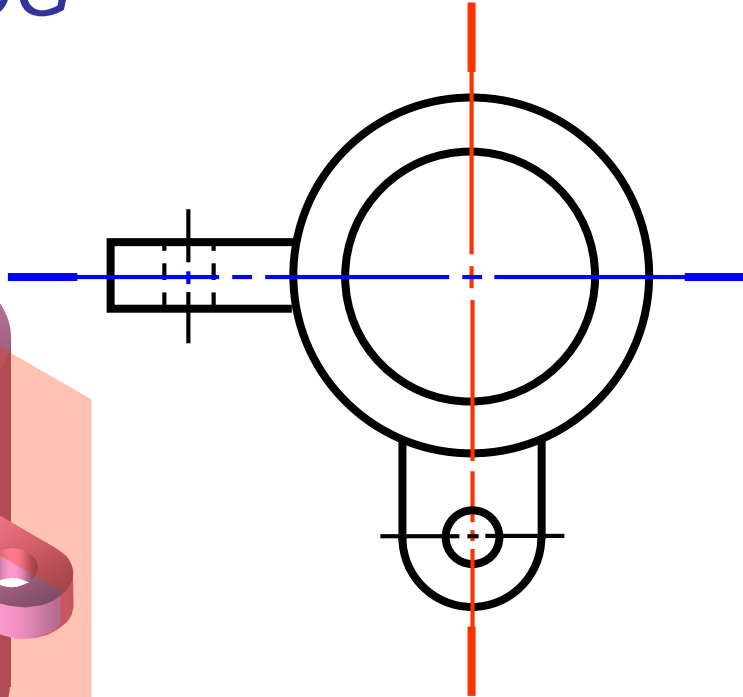
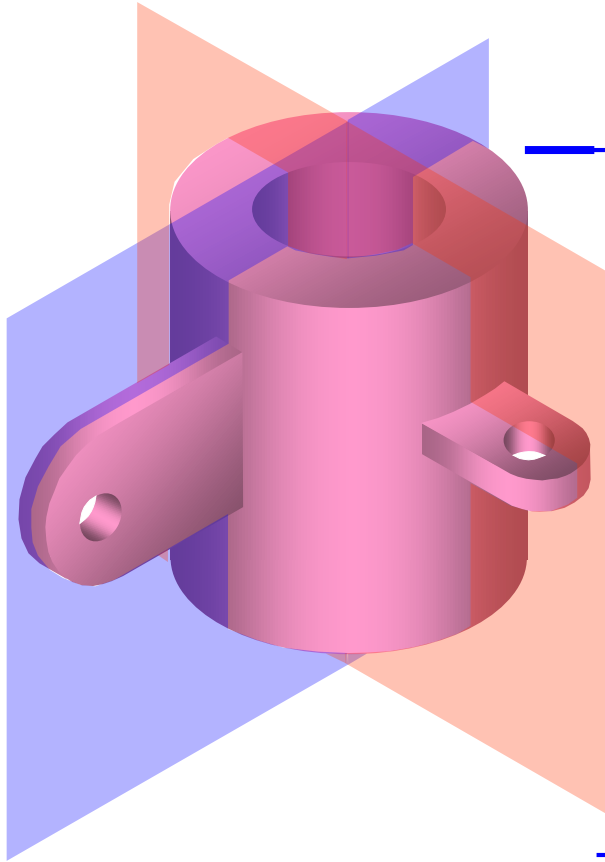


EXAMPLE : *SPOKE*



Misleading impression

EXAMPLE : *LUG*



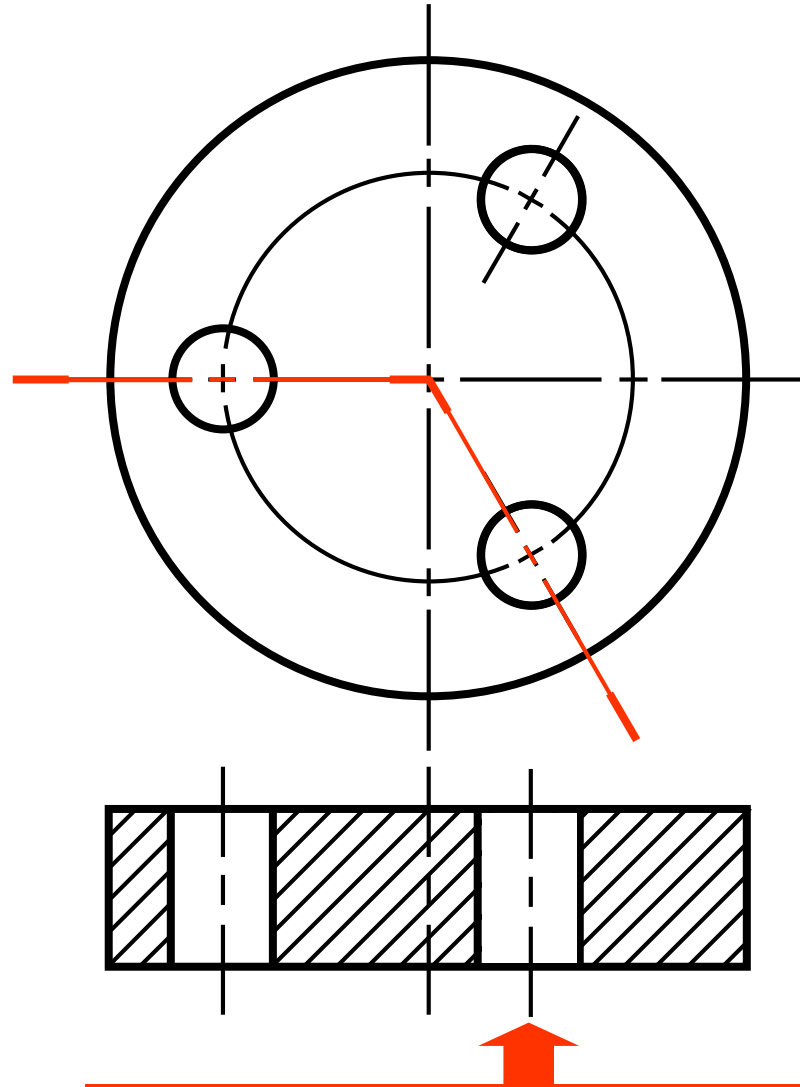
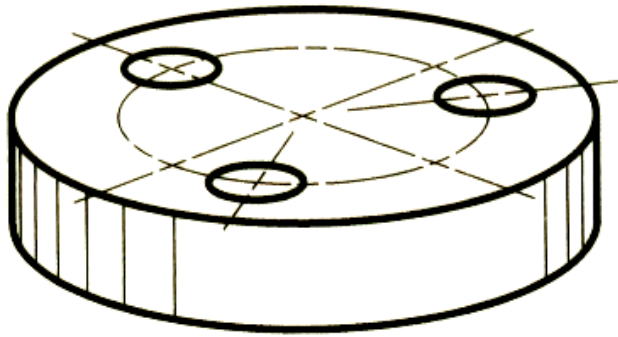
Aligned Section



DEFINITION

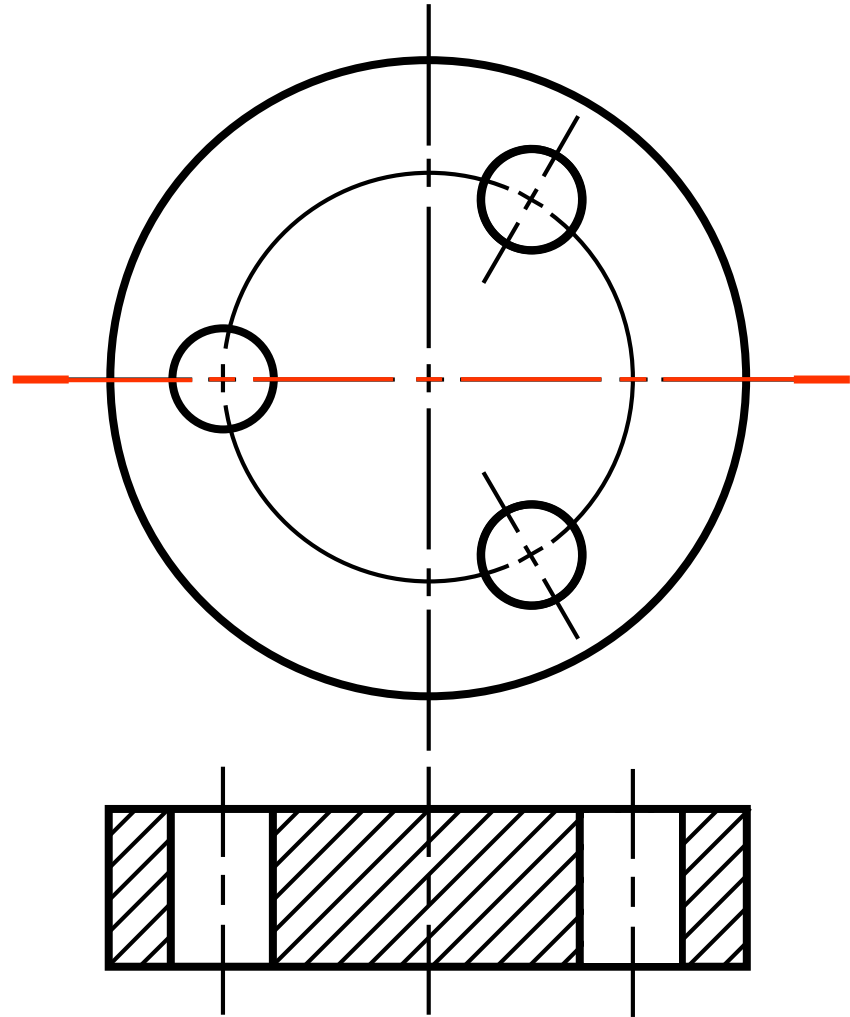
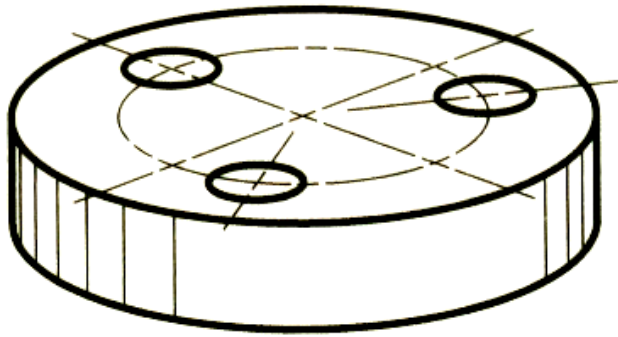
- **Aligned section** is a section view that is drawn by *imaginary rotating* the object's features appeared in a principal view about symmetry axis

Example : *Hole*

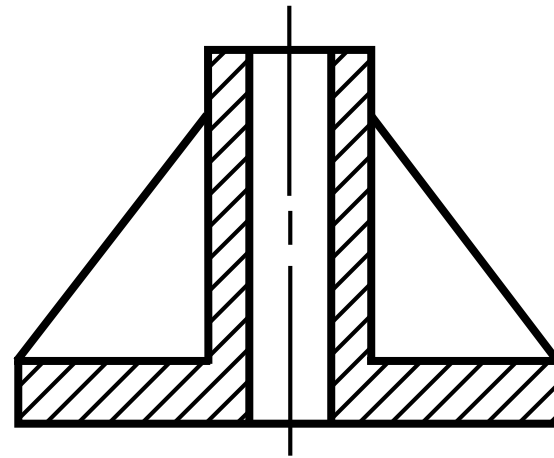
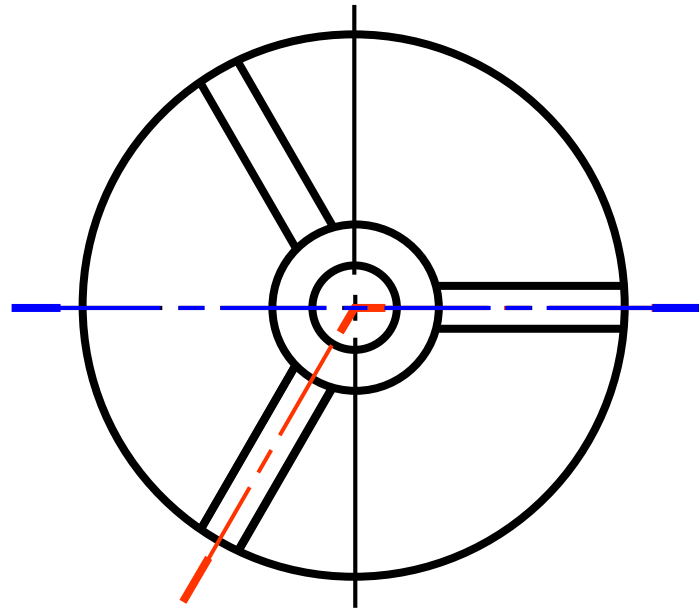
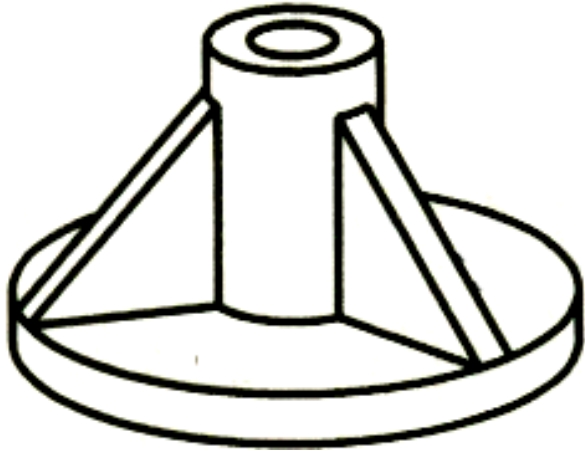


Gives the impression that this holes are at unsymmetrical position.

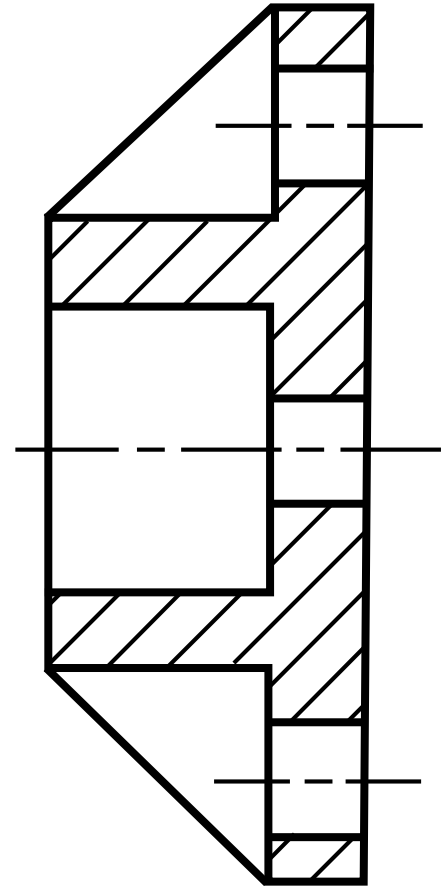
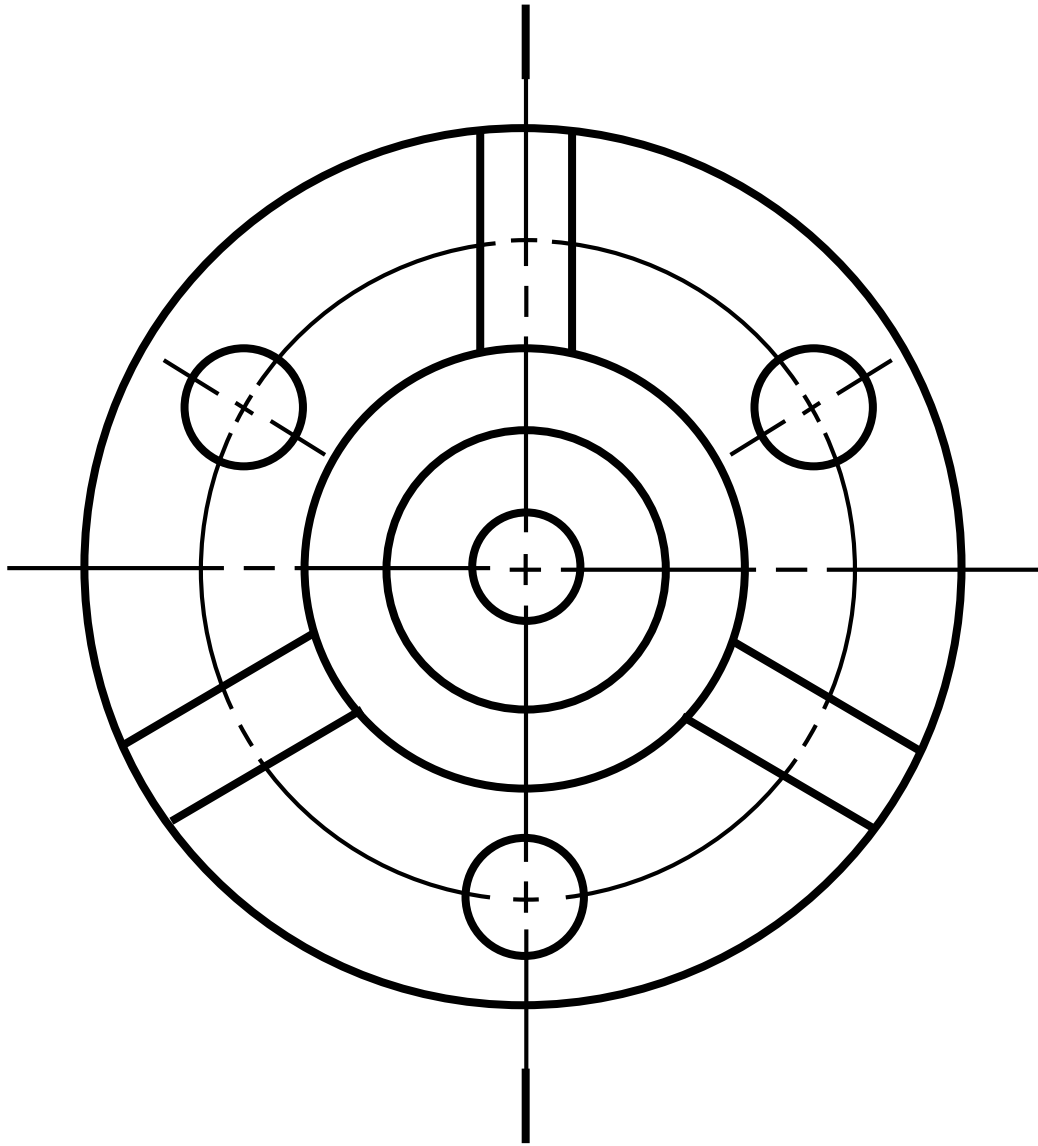
Example : *Hole*



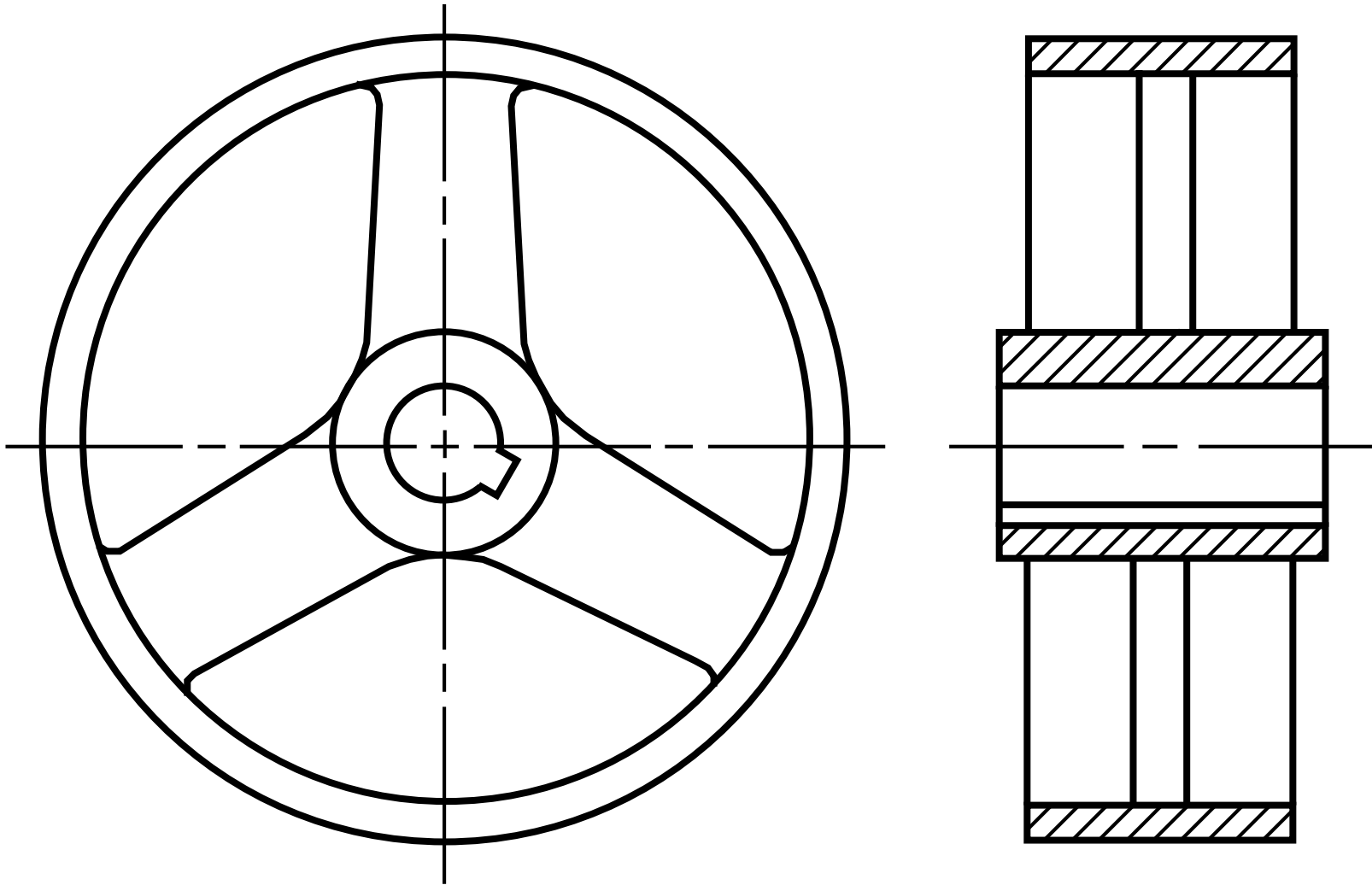
Example : *Rib*



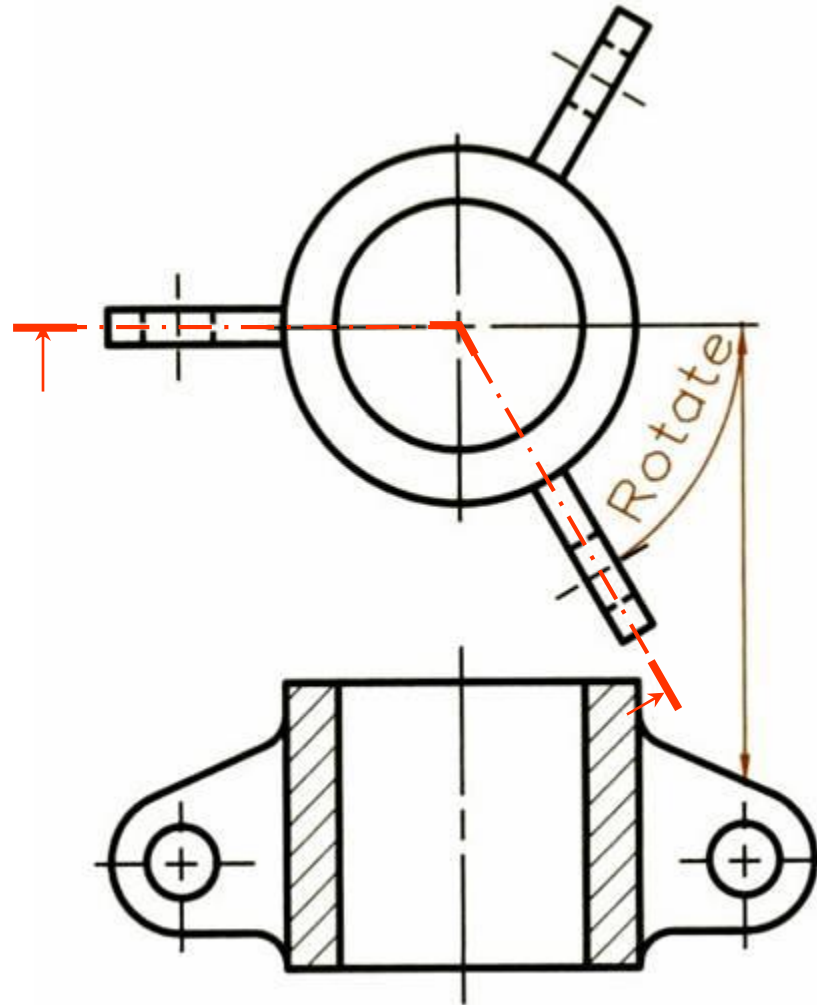
Example : *Ribs & Holes*



Example : *Spoke & Keyway*



Example : *Lug*



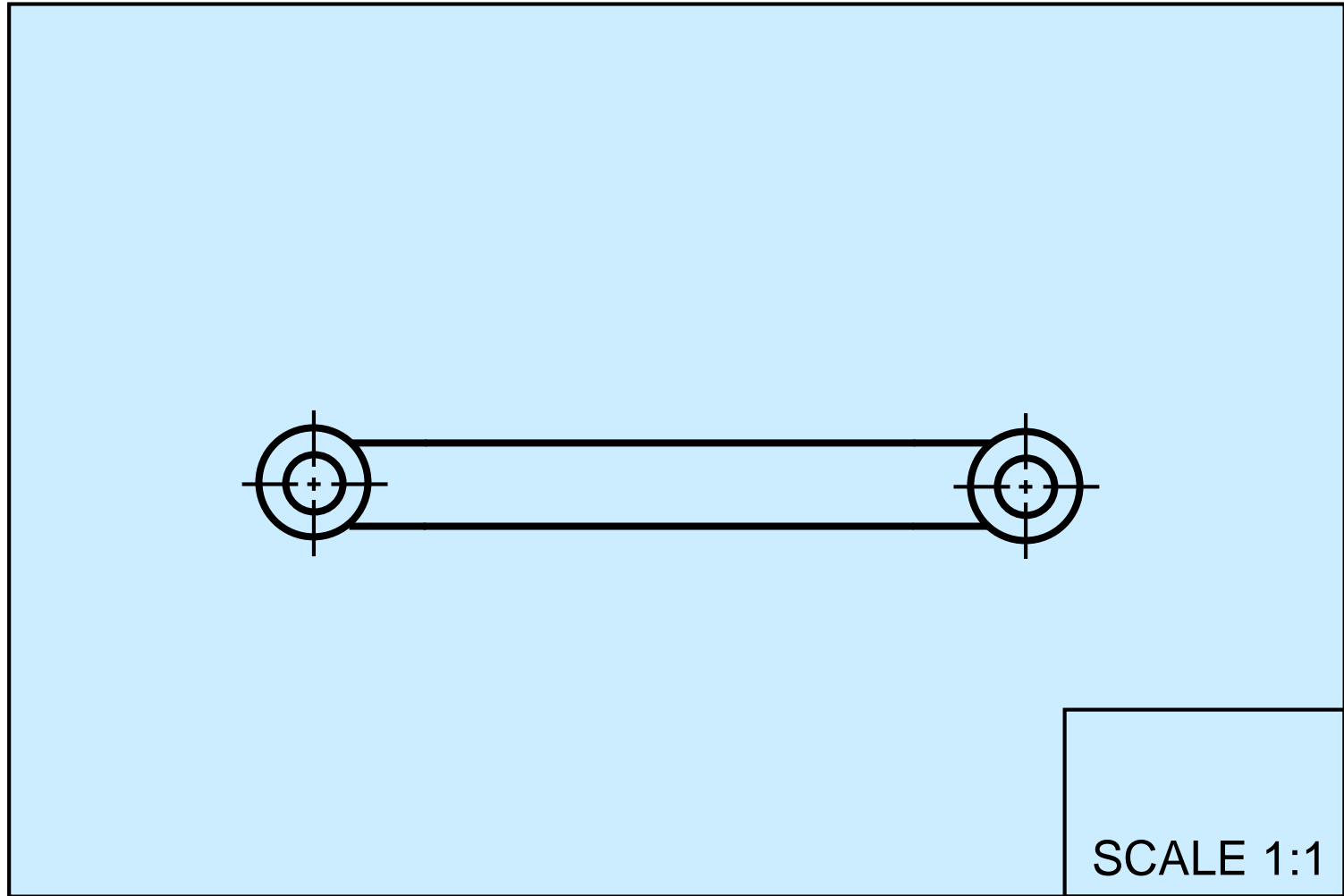
Conventional Break



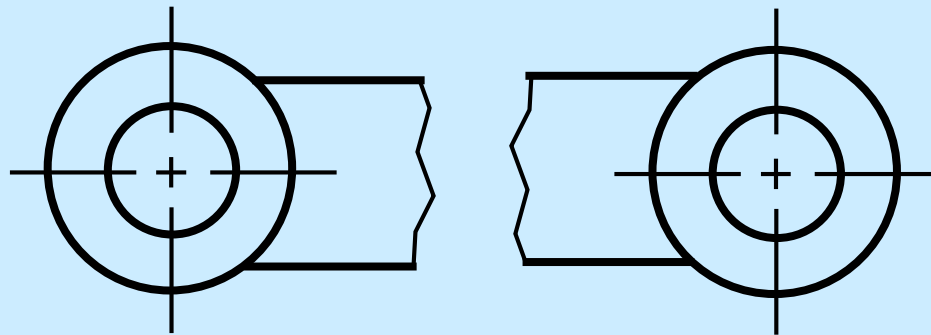
CONVENTIONAL PRACTICE

For *long objects* that have to draw in a small scale to fit them on the paper, it is recommended to remove its long portion (which contains *no* important information) and draw the break lines at the broken ends.

Example



Example

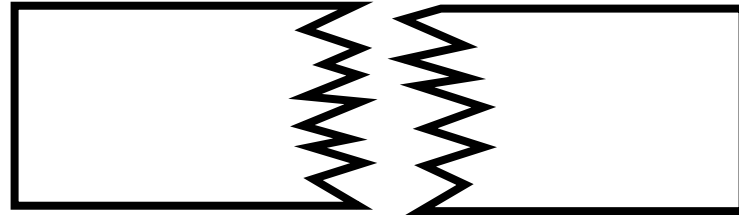


SCALE 2:1

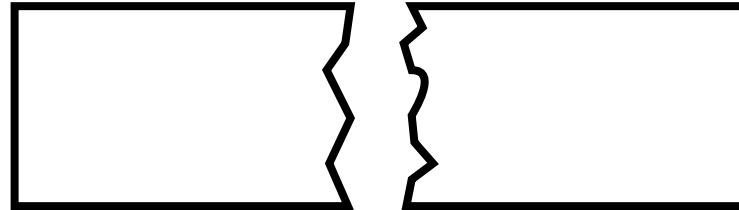
STANDARD BREAK LINES

Rectangular
cross section

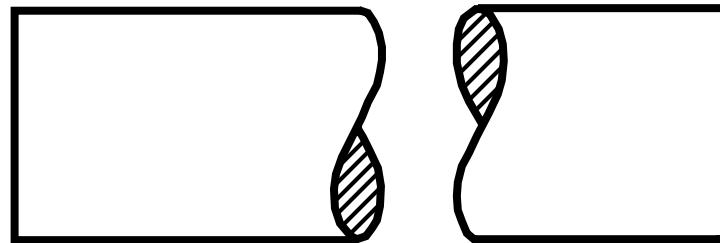
Wood



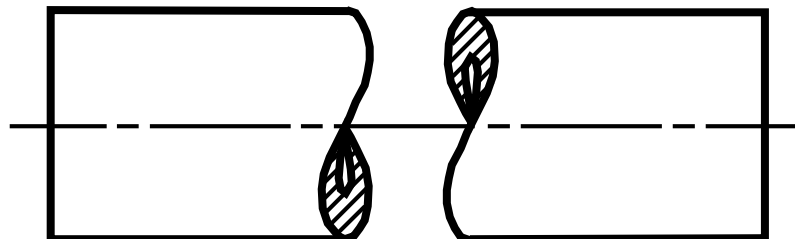
Metal



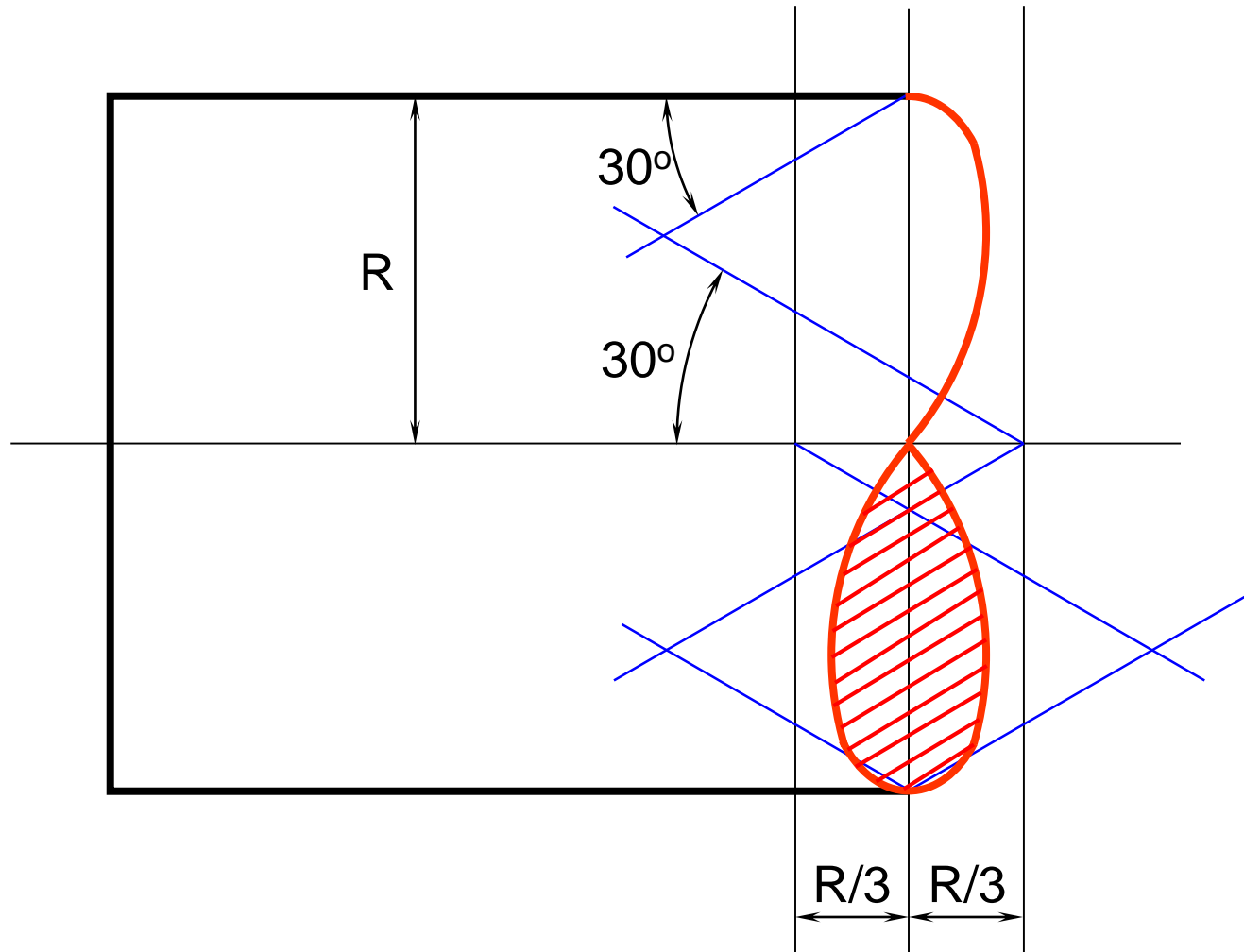
Cylindrical
cross section



Tubular
cross section

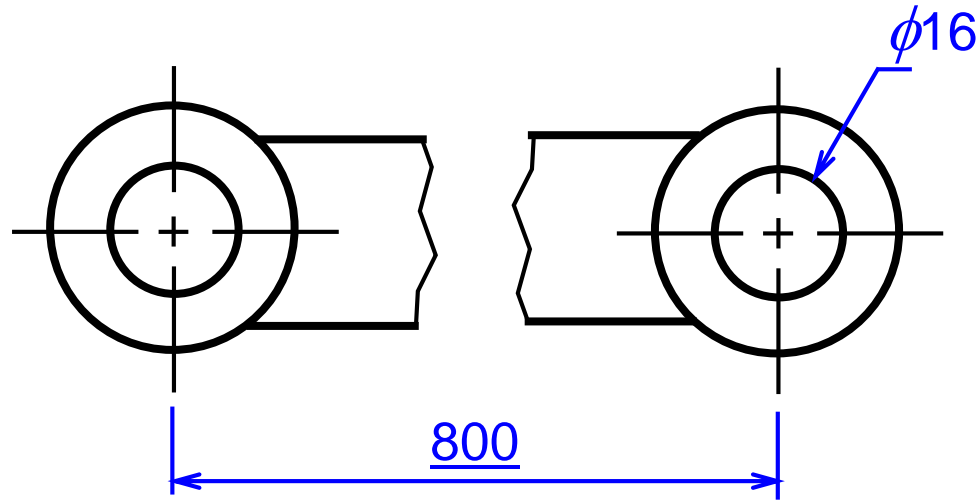
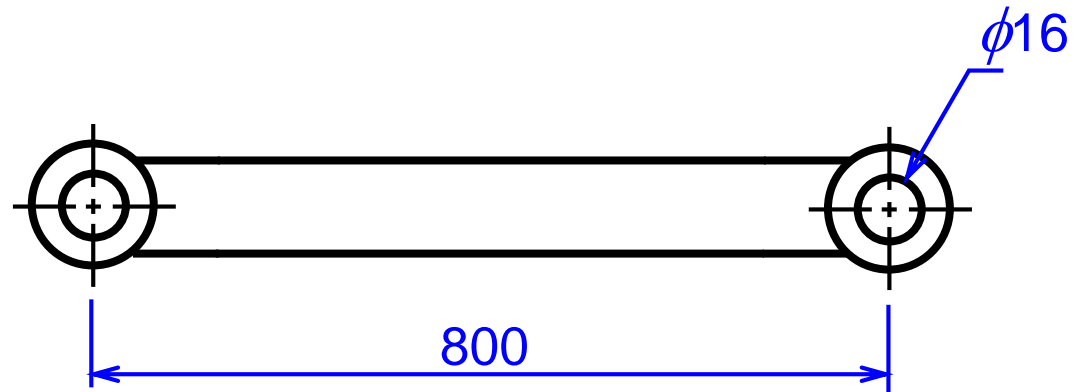


TO DRAW CYLINDRICAL BREAK



TO DIMENSION A BROKEN PART

Typical
dimensioning
method



not to scale dimensions