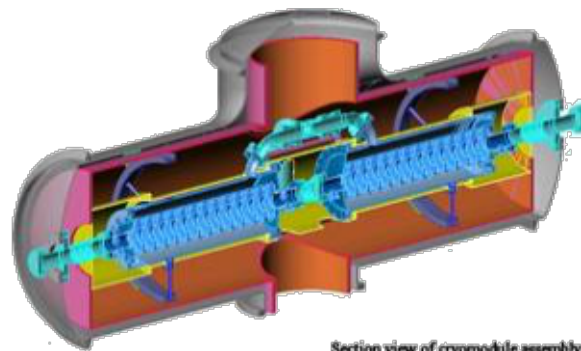# Chapter 10

Conventional Practice in Section View

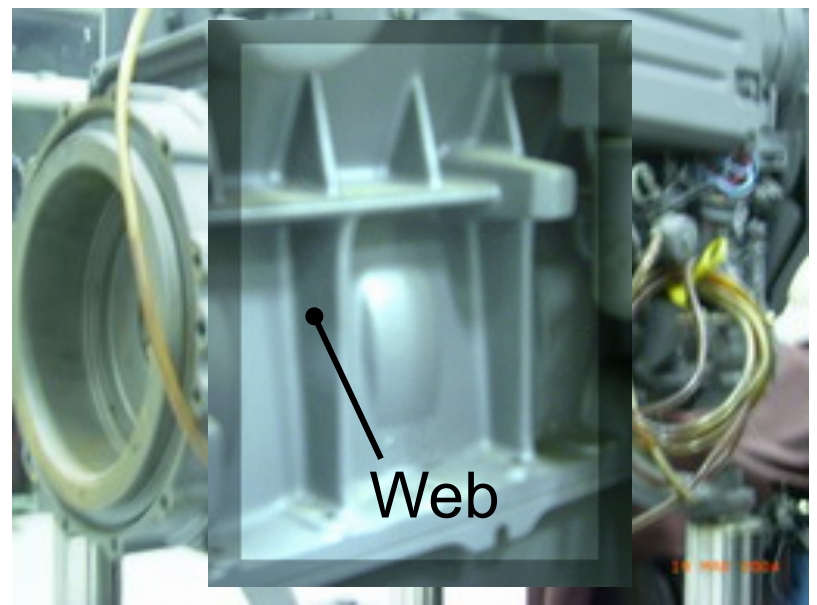Section view of cryomodule assembly.

TOPICS

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

- Aligned section

- Conventional break

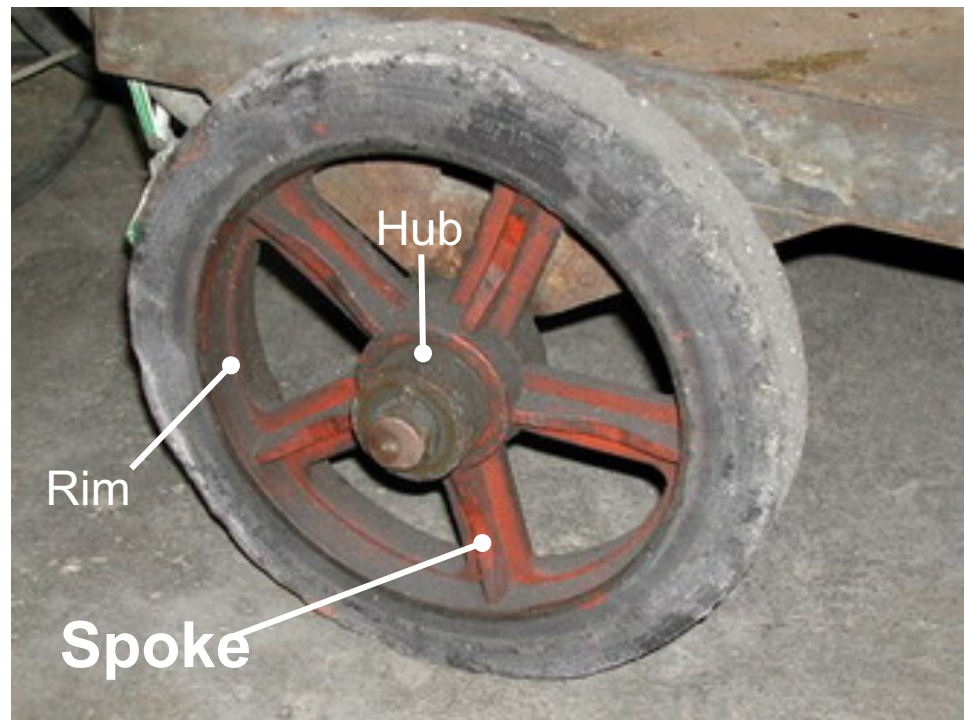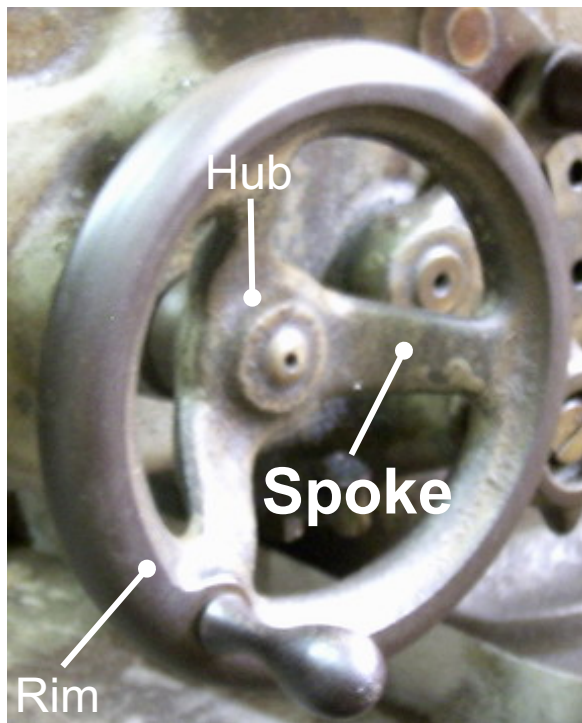# Section view representation of *rib*, *web*, *spoke* and *lug*

TERMINOLOGY

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

Rib

Rib

Web

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

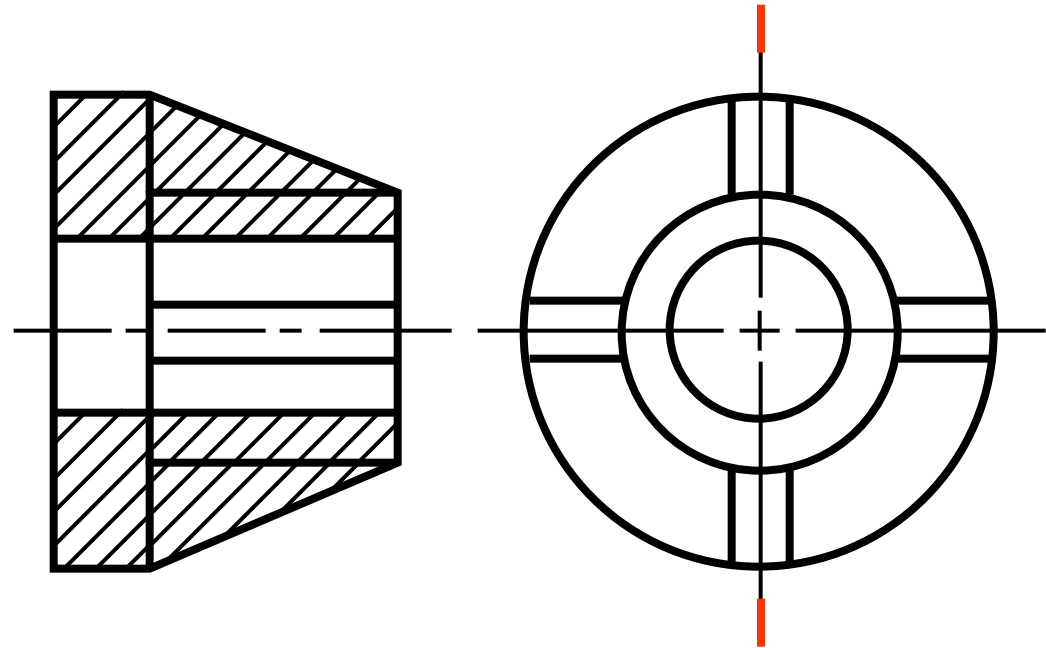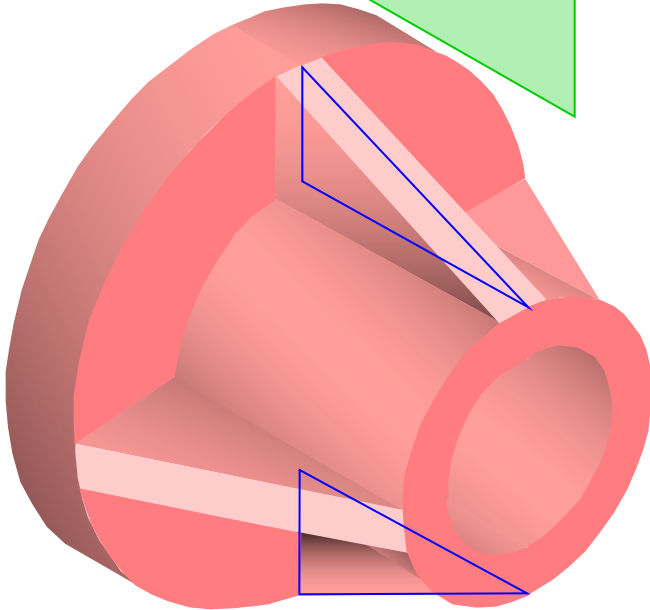**Lug** is an ear which is built as portion of an object for attachment.

CONVENTIONAL PRACTICE

Omit the section lines on the section view of

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

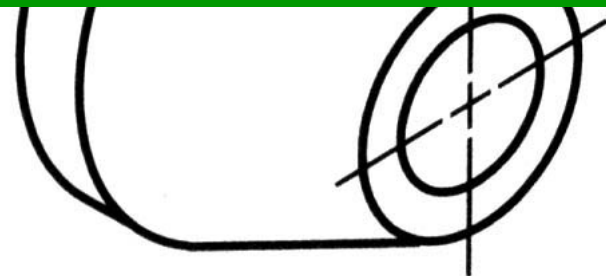- ❖ **Spoke**, if the cutting plane is passed *longwise* through.
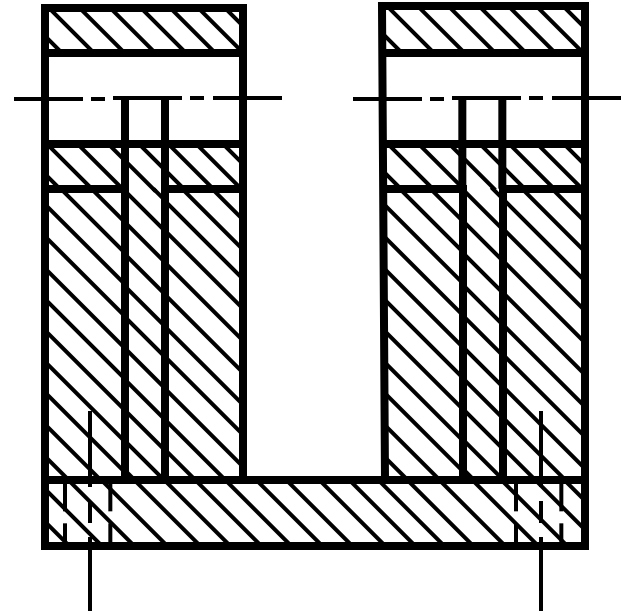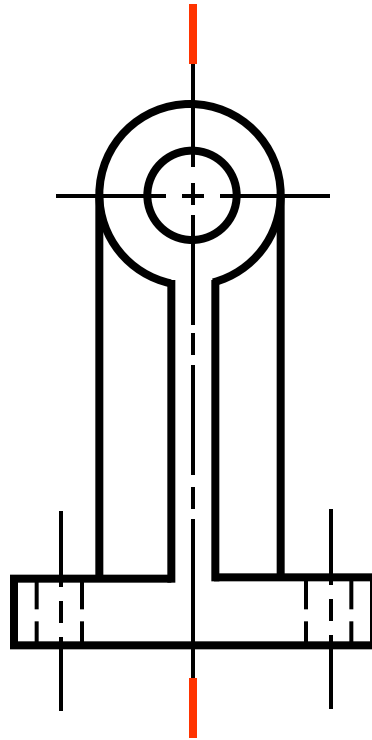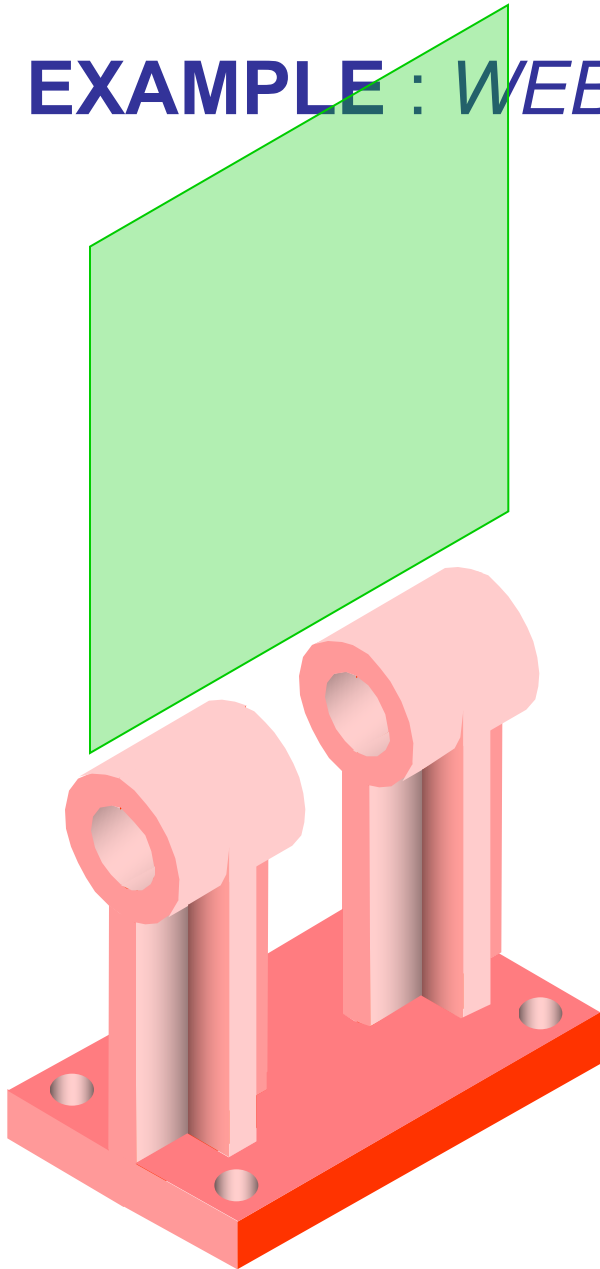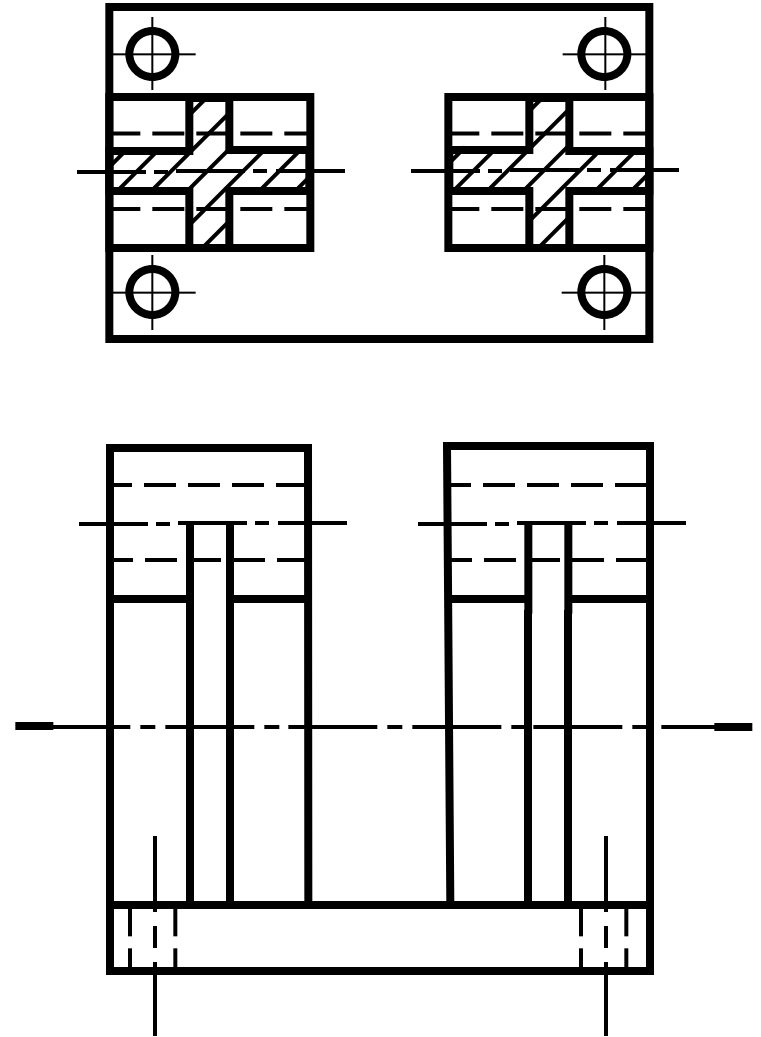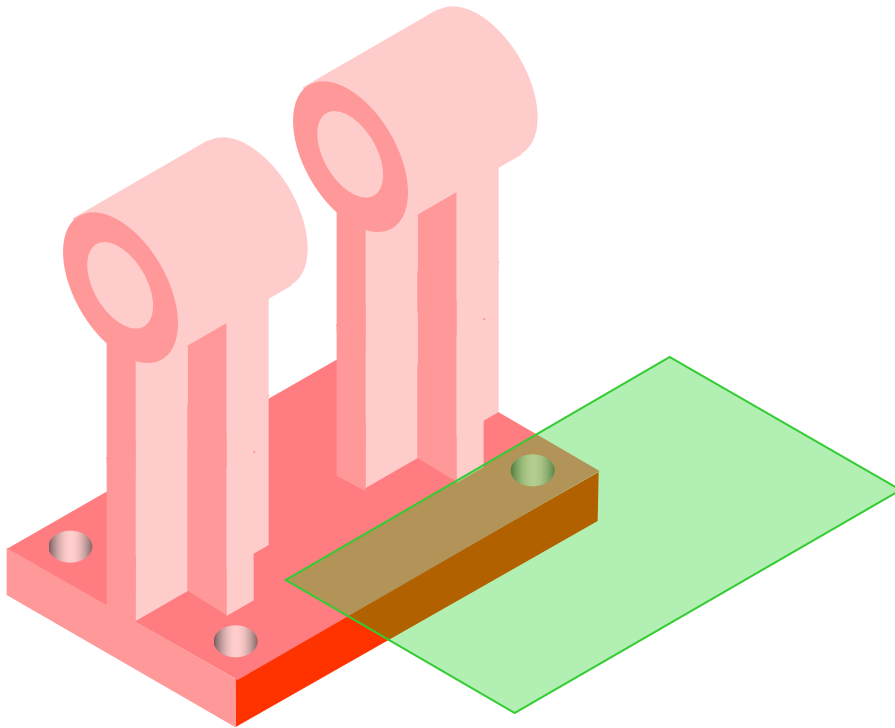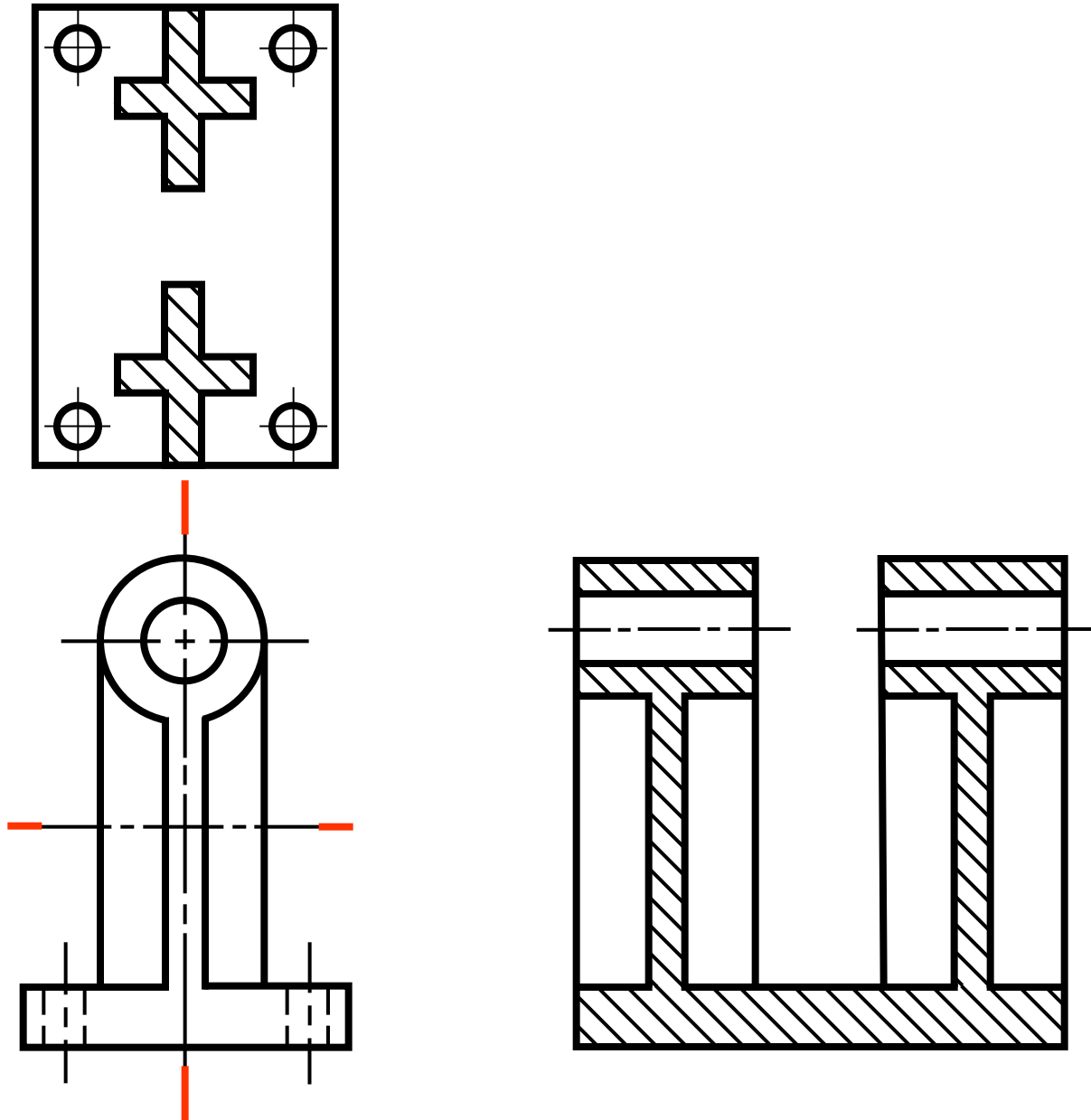
EXAMPLE : *RIB*

Normal multiview drawing

Normal section view

Section view drawing with convention

EXAMPLE : *WEB : flatwise cut*

Normal multiview drawing
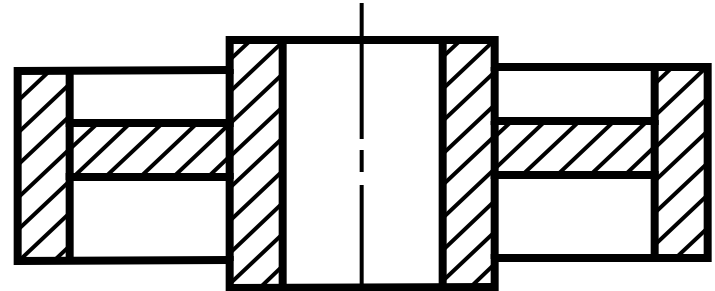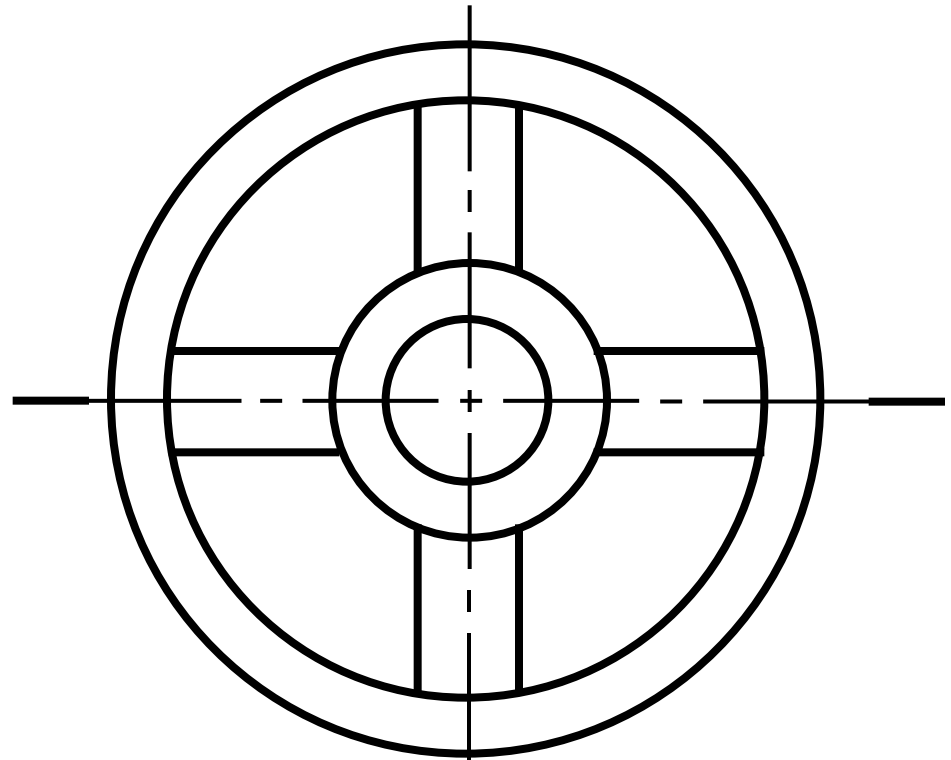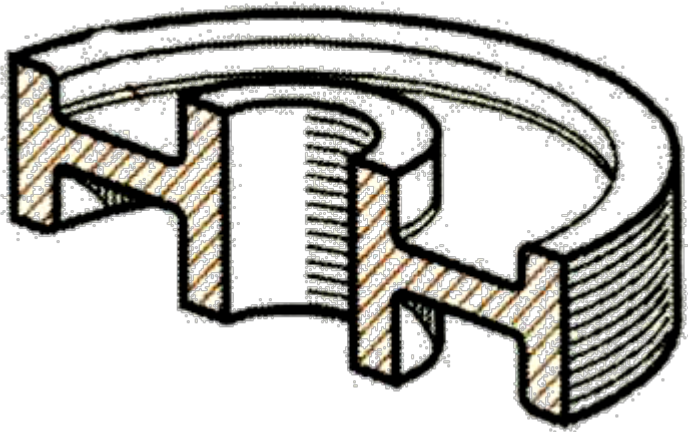
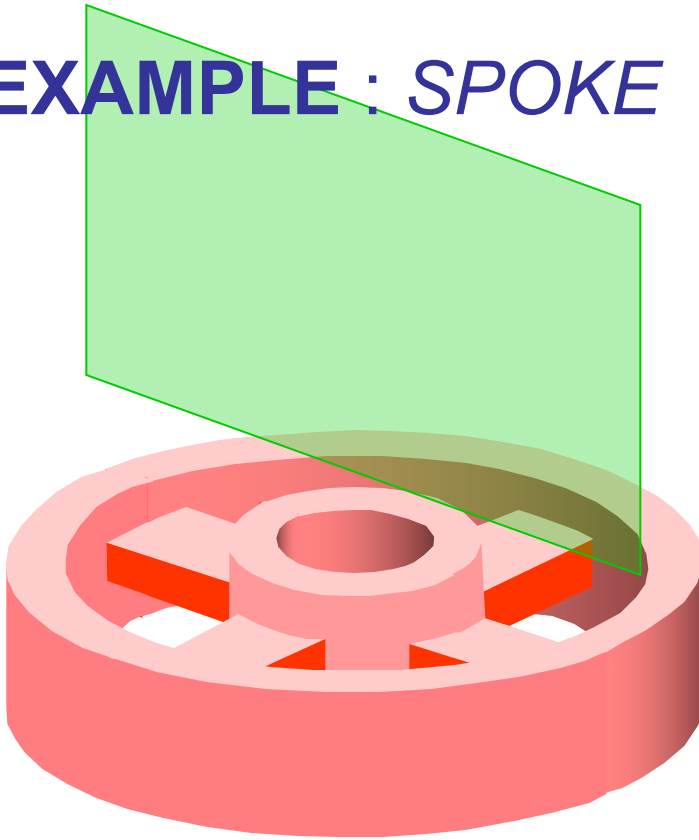Normal section view

Section view drawing with convention

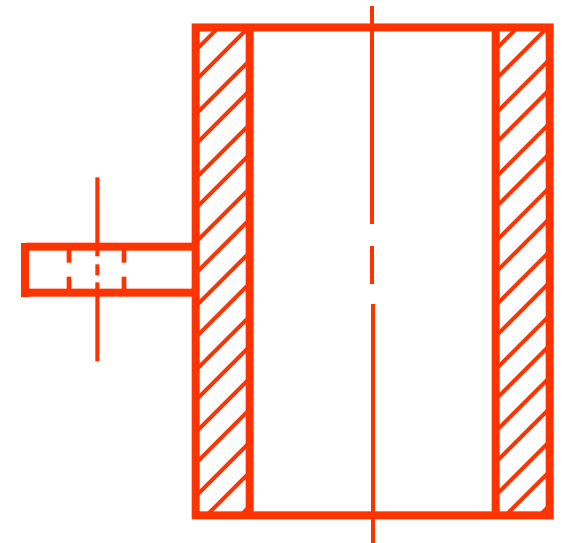# EXAMPLE : *WEB : crosswise cut*
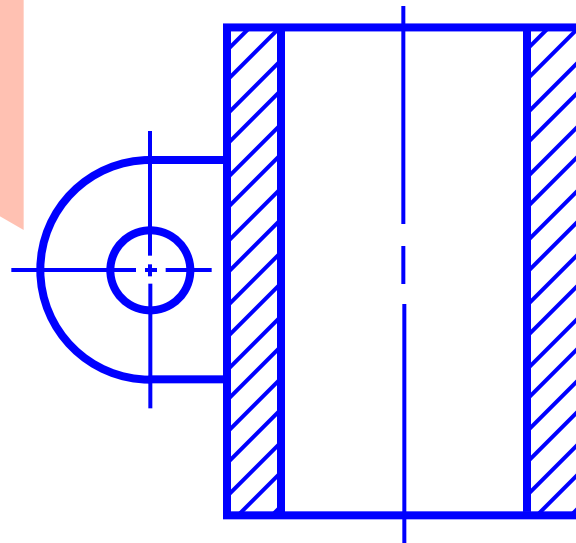
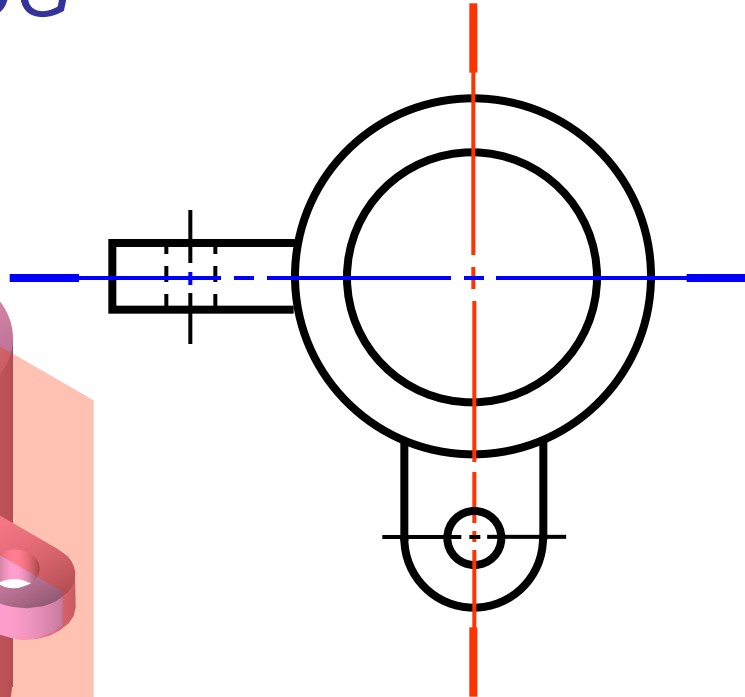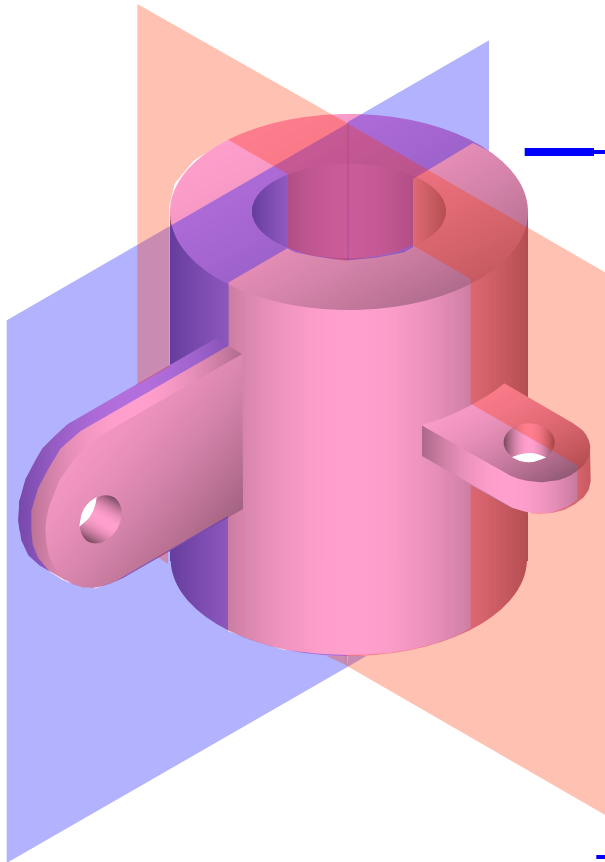**EXAMPLE** : *WEB : multiple section view*

EXAMPLE : *SPOKE*

Misleading impression
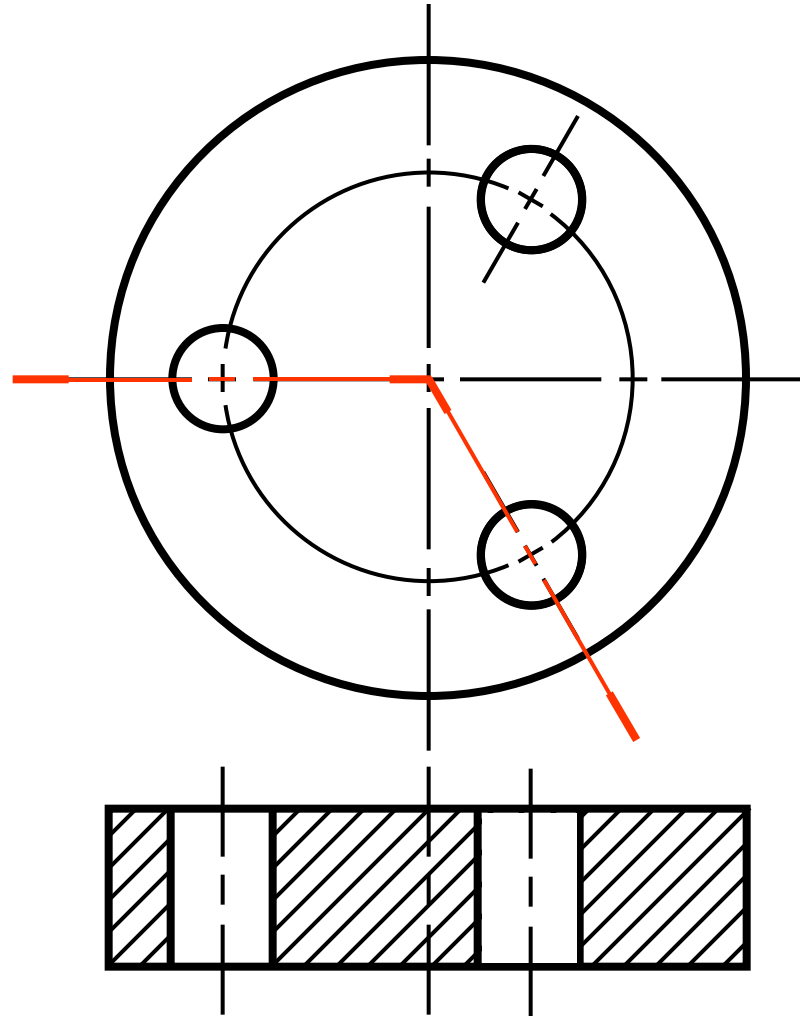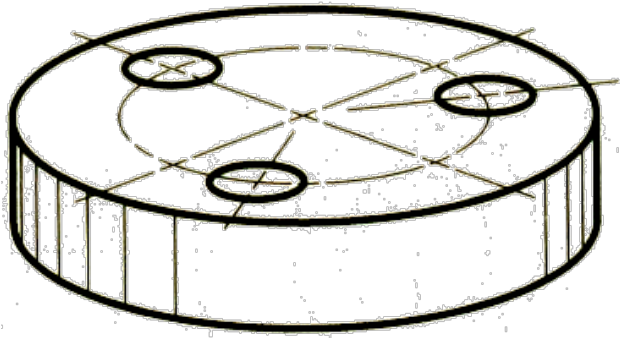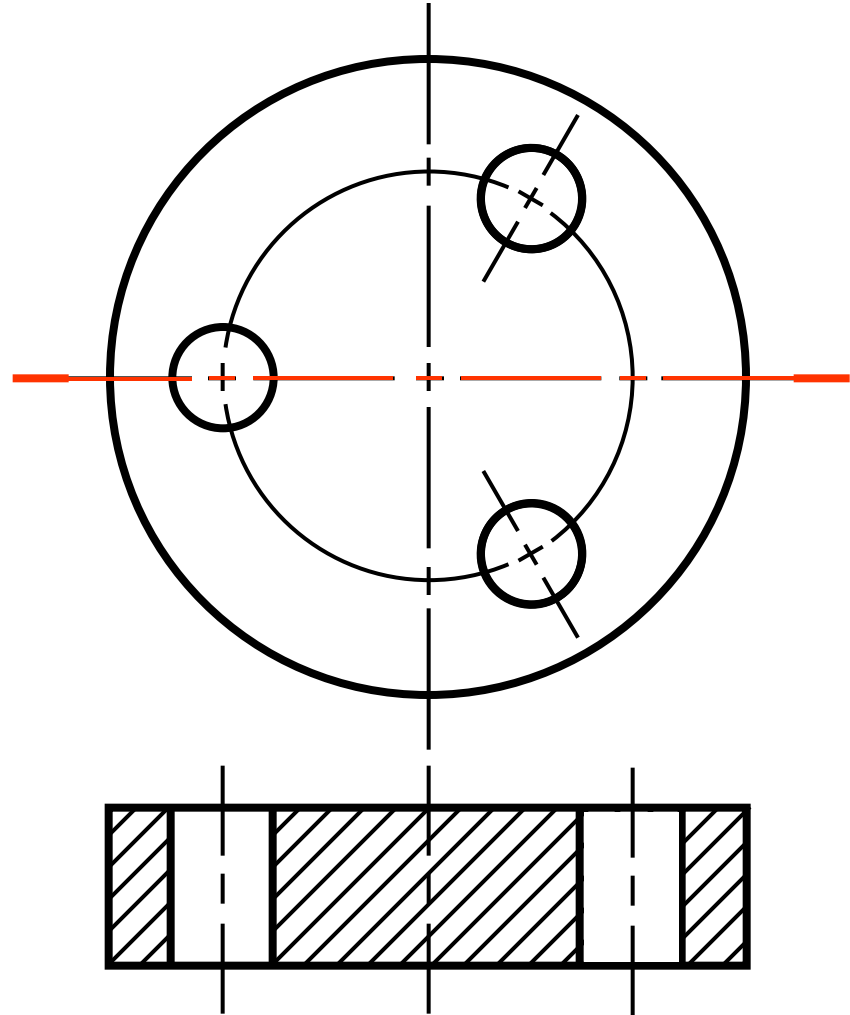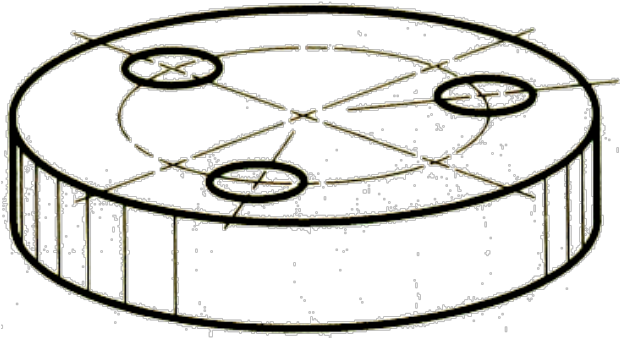
EXAMPLE : *LUG*

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
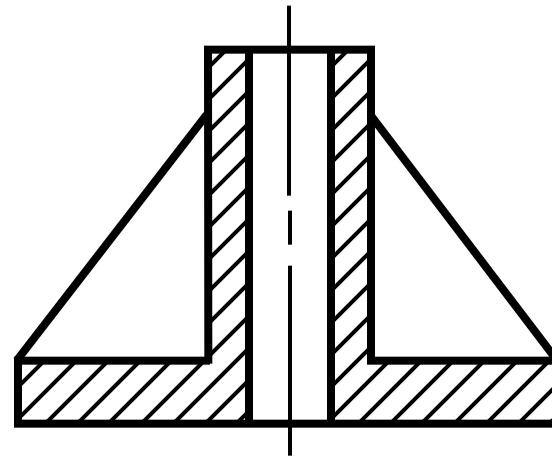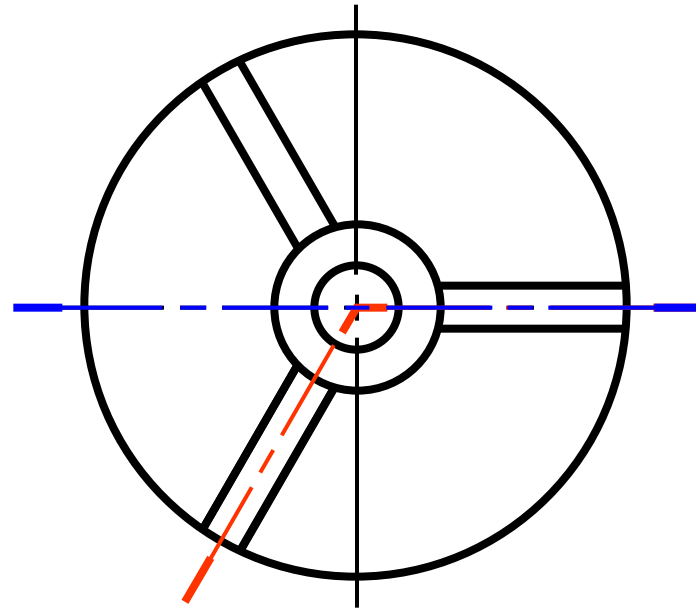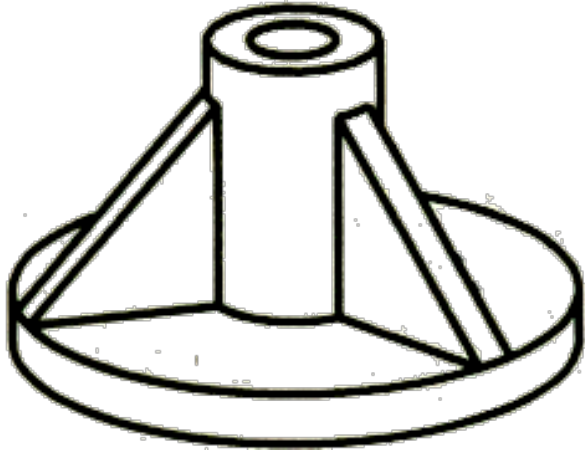
Example : *Hole*

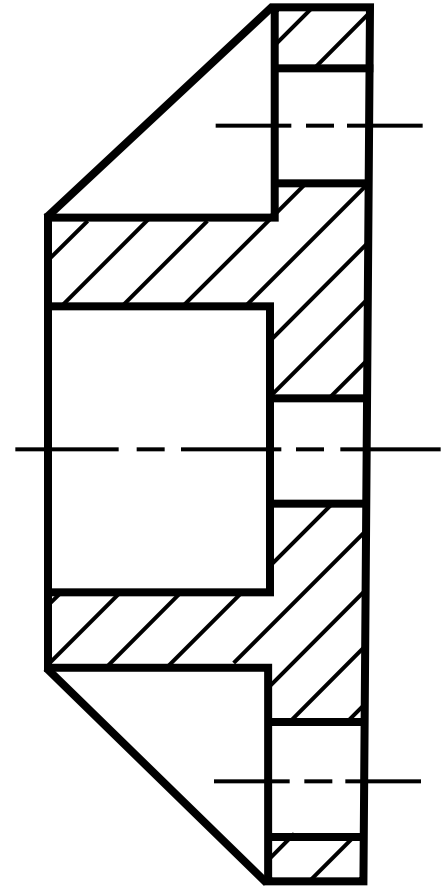Gives the impression that this holes are at unsymmetrical position.
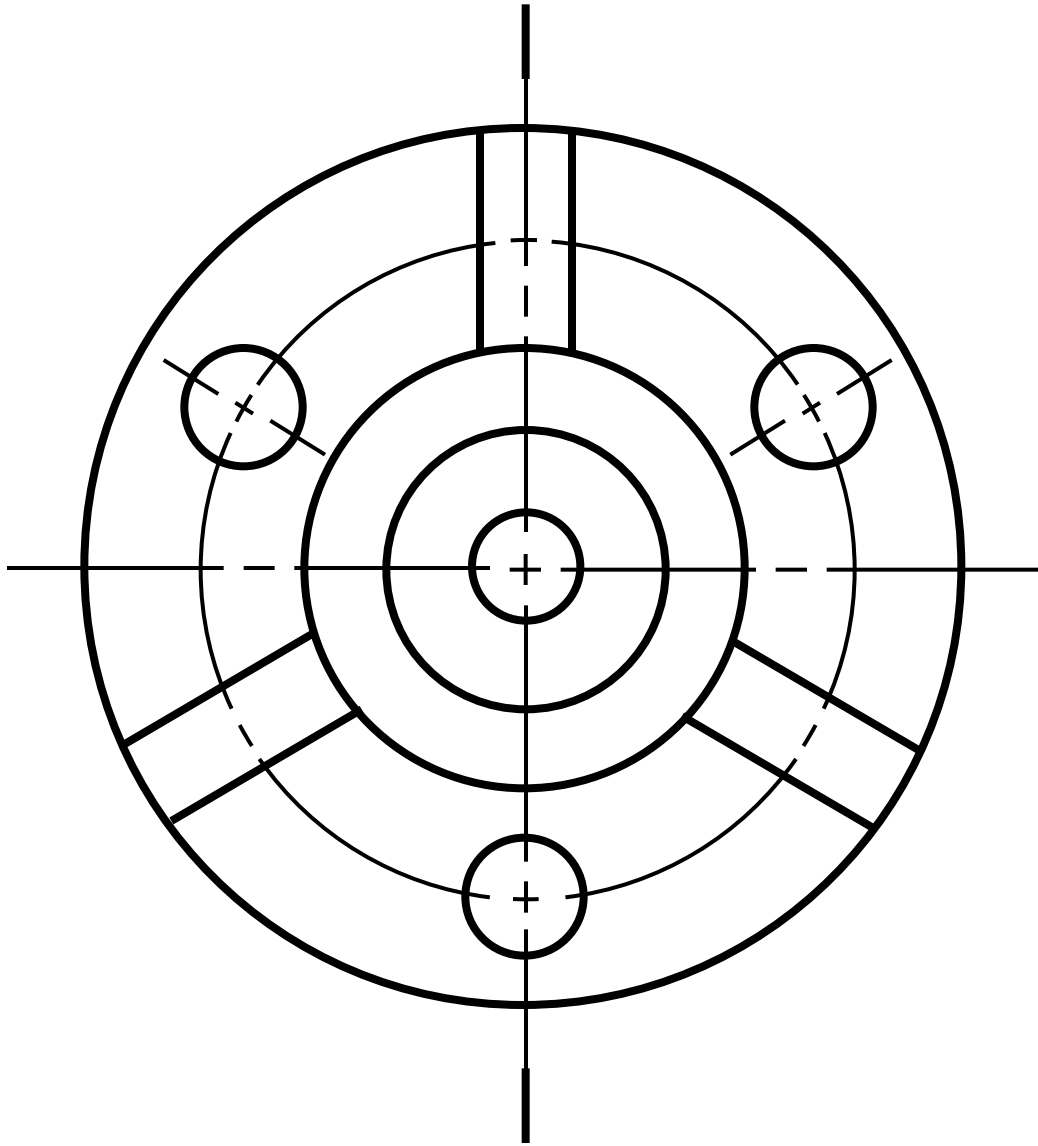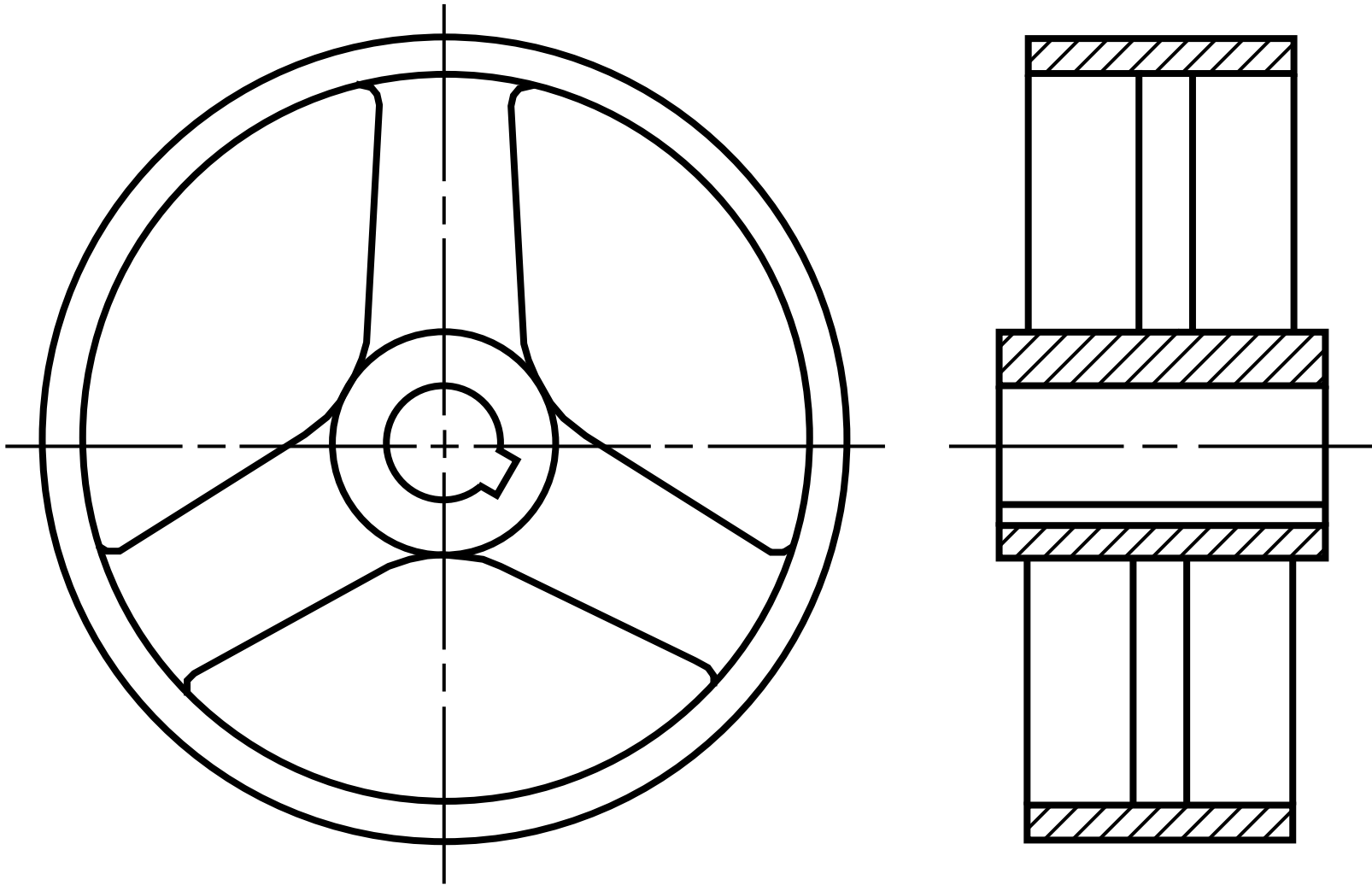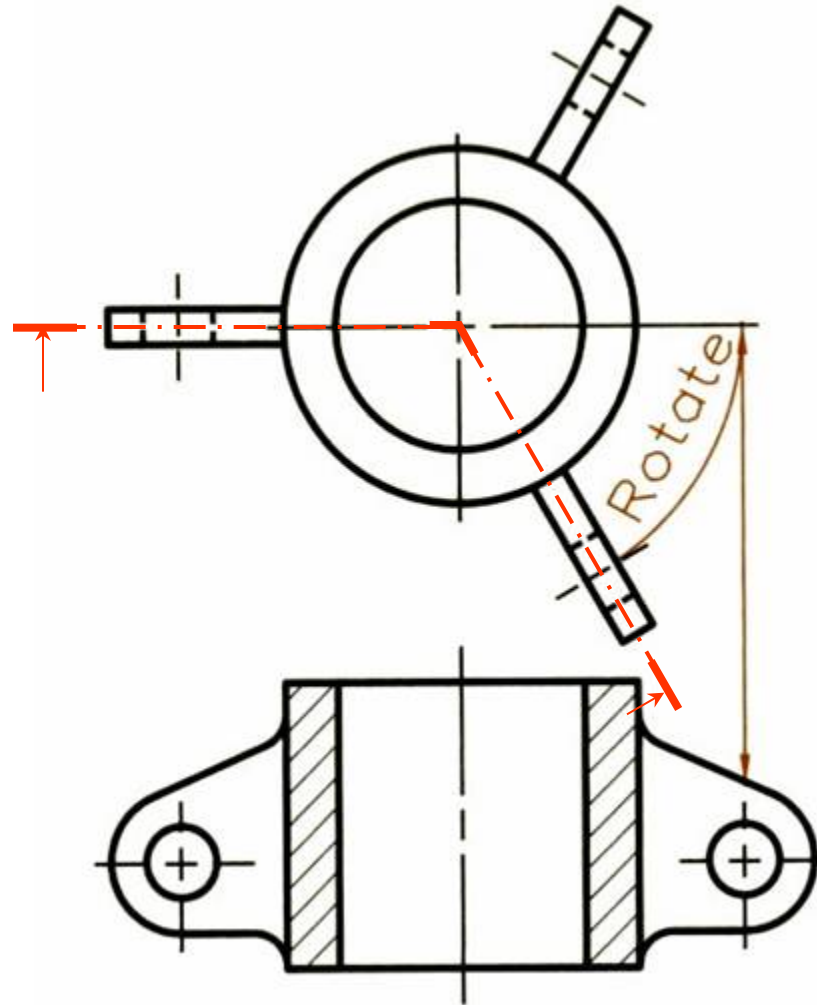
Example : *Hole*

Example : *Rib*

Example : *Ribs & Holes*

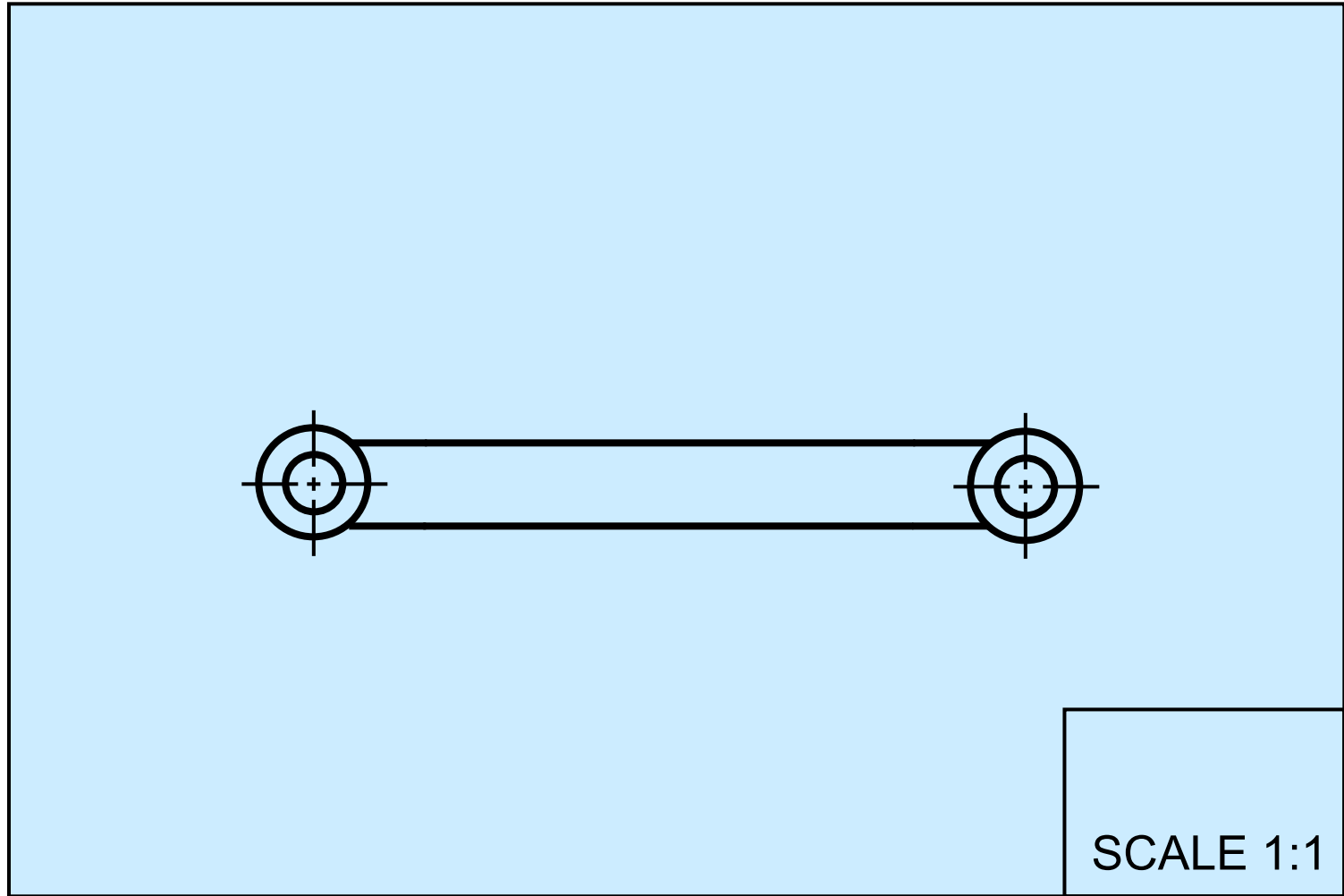# Example : *Spoke & Keyway*

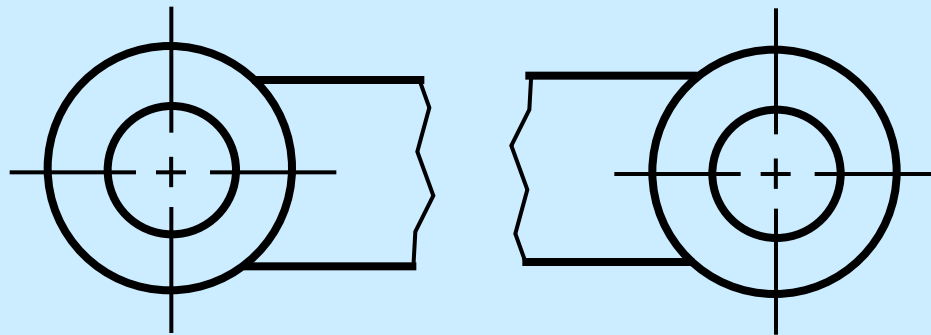# Example : *Lug*

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.
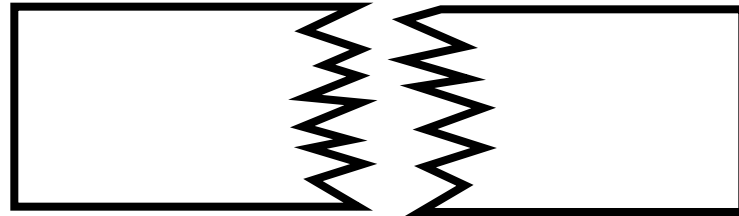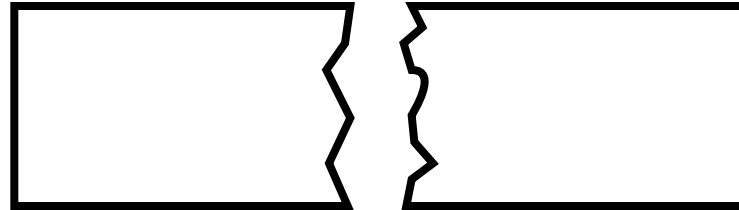
Example
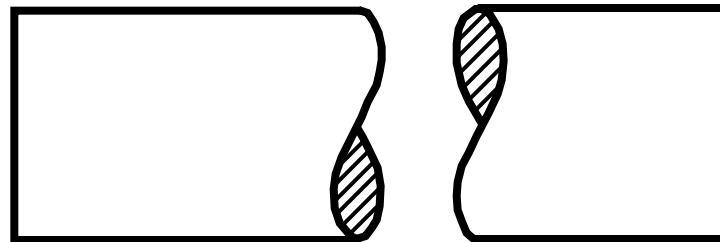

SCALE 1:1

Example

SCALE 2:1

STANDARD BREAK LINES

Rectangular cross section

Cylindrical cross section

Tubular cross section

Wood

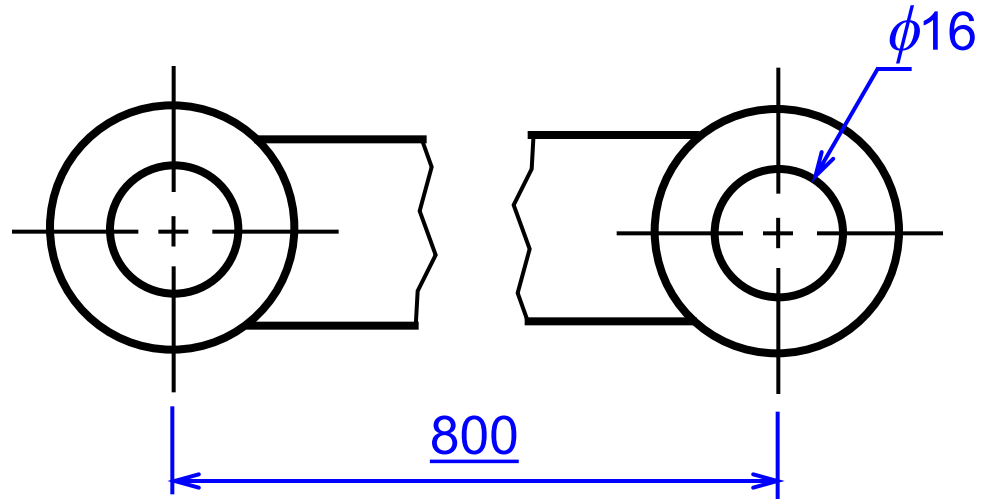Metal
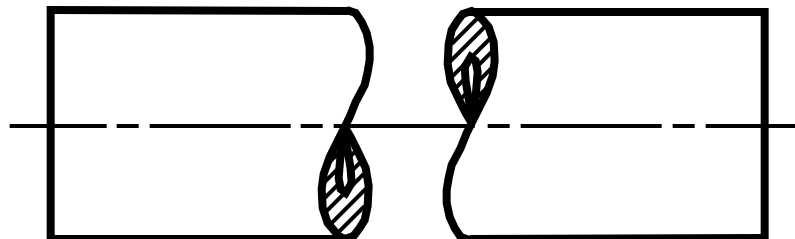
TO DRAW CYLINDRICAL BREAK

30°

30°

R

R/3   R/3
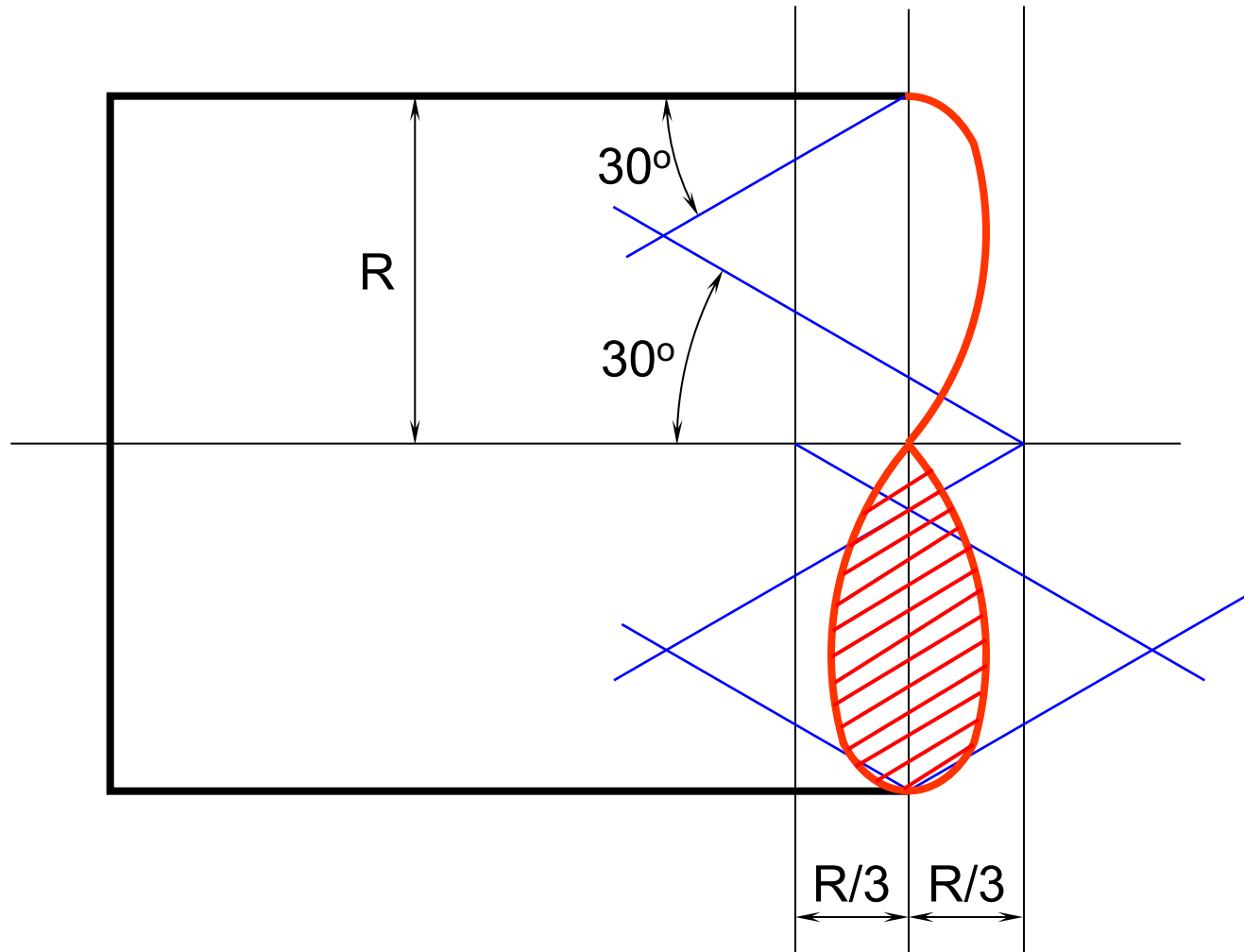
TO DIMENSION A BROKEN PART

Typical
dimensioning
method

$\phi16$

800

$\phi16$

800

not to scale dimensions