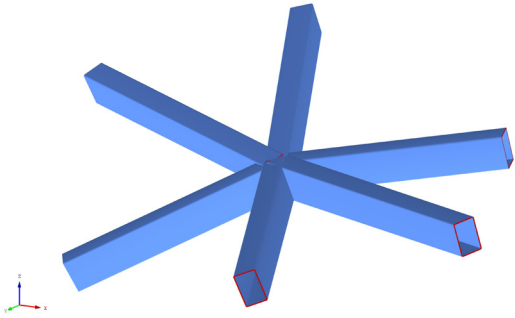
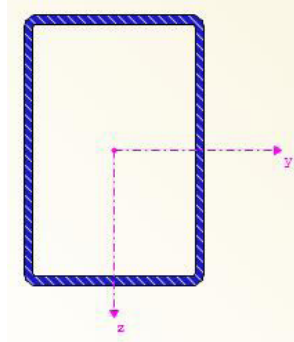


## FACTS AND INFORMATIONS



**NODE OVERVIEW**



**CROSS SECTION**

**Node must transfer forces and moments from connecting elements.**

**Major forces and moments are:**

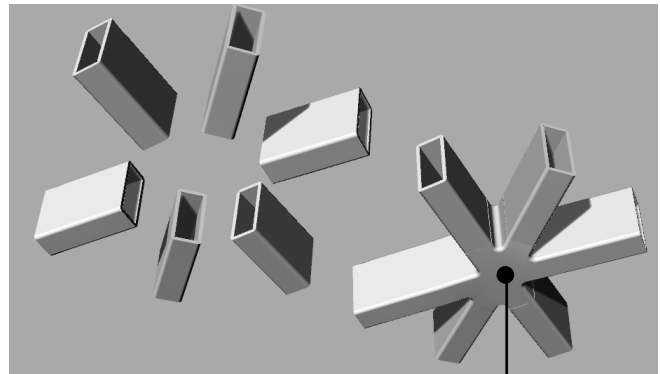
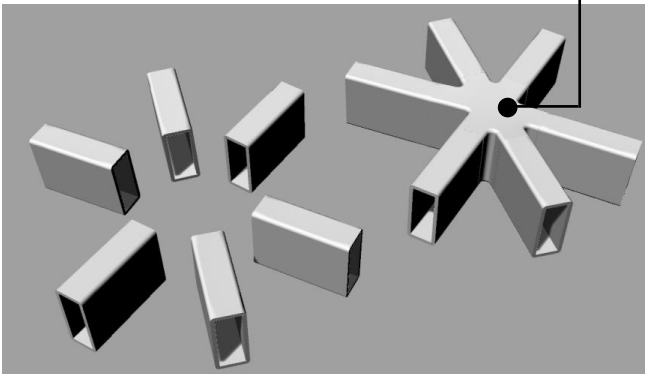
- normal force ( $N = \pm 150 \text{ kN}$ )
- $V_z$  shear force ( $V_z = 155 \text{ kN}$ )
- $M_y$  moment ( $M_y = 30 \text{ kNm}$ )

**Minor forces and moments are:**

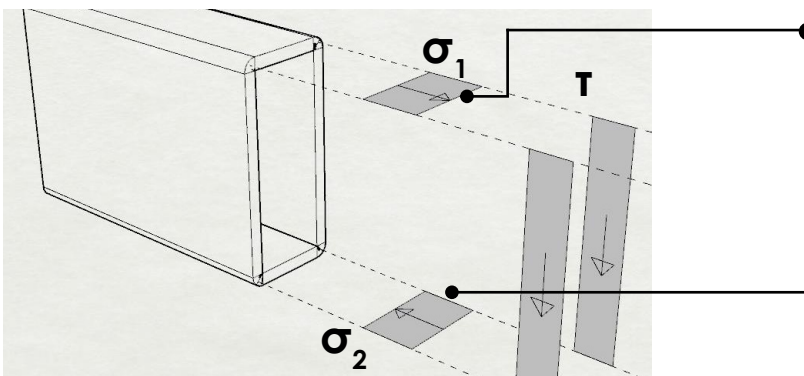
- $V_y$  shear force ( $V_y = 55 \text{ kN}$ )
- Torsion ( $M_t = 3.0 \text{ kNm}$ )
- $M_z$  moment ( $M_z = 10 \text{ kNm}$ )

All stress and local buckling checks have to be fulfilled.

Top plate has to be continuous



Bottom plate has to be continuous



**Normal stress due to normal force and moment  $M_y$**

$$\sigma_1 = +25 \text{ MPa}$$

$$\sigma_2 = -25 \text{ MPa}$$

$$T = 4 \text{ MPa}$$

**Shear stress due to shear force  $V_z$**