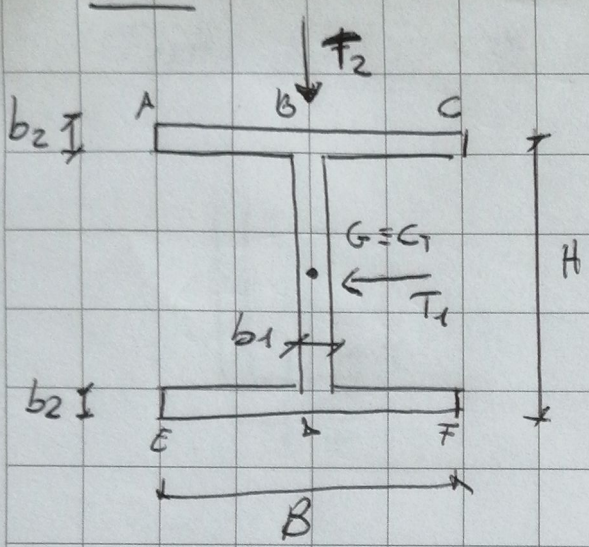


Ex. 3



$$\tilde{\sigma}_{t3} = -\frac{T_2 S'_x}{I_x b} - \frac{T_1 S'_y}{I_y b}$$

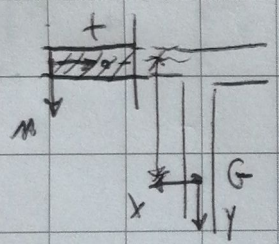
Analizziamo T_2

si approssima

$$I_x = 2 \left[\frac{b_2^3 \cdot B}{12} + b_2 \cdot B \cdot \frac{H^2}{4} \right] + \frac{H \cdot b_1^3}{12}$$

$$I_y = 2 \left[\frac{b_2 \cdot B^3}{12} \right] + \frac{H b_1^3}{12}$$

Tratto AB

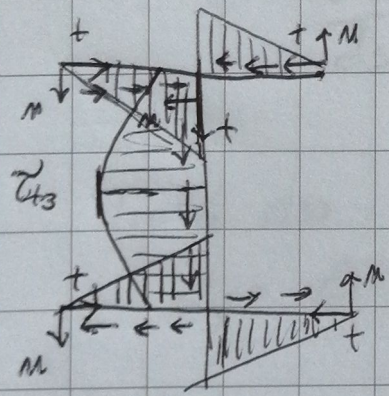


$$S'_x = -b_2 \cdot s \cdot \frac{H}{2} \leq 0 \Rightarrow \tilde{\sigma}_{t3} \geq 0$$

Tratto CB

$$S'_x = -b_2 \cdot s \cdot \frac{H}{2} \leq 0 \Rightarrow \tilde{\sigma}_{t3} \geq 0$$

Tratto BD

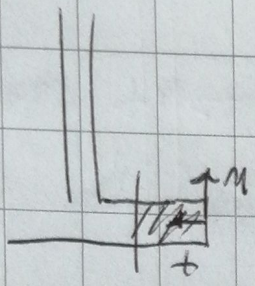


$$S'_x = -b_2 \cdot B \cdot \frac{H}{2} - b_1 \cdot s \cdot \left(\frac{H}{2} - \frac{s}{2} \right) \leq 0 \Rightarrow \tilde{\sigma}_{t3} \geq 0$$

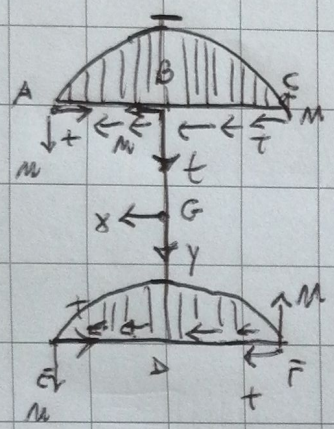
$$\frac{dS'_x}{ds} = -b_1 \frac{H}{2} + b_1 s \Rightarrow \frac{dS'_x}{ds} = 0 \text{ per } s = \frac{H}{2}$$

Tratto ED $S'_x = +b_2 s \cdot \frac{H}{2} \geq 0 \Rightarrow \tilde{\sigma}_{t3} \leq 0$

Tratto EF $S'_x = b_2 \cdot s \cdot \frac{H}{2} \geq 0 \Rightarrow \bar{U}_{t3} \leq 0$



Analizziamo T_1



Tratto AB

$$S'_y = b_2 \cdot s \cdot \left(\frac{B}{2} - \frac{s}{2} \right) \geq 0 \Rightarrow \bar{U}_{t3} \leq 0$$

$$\frac{d^2 S_y}{ds^2} = b_2 \frac{B}{2} - b_2 s \Rightarrow = 0 \text{ per } s = \frac{B}{2}$$

Tratto BC

$$S'_y = -b_2 \cdot s \cdot \left(\frac{B}{2} - \frac{s}{2} \right) \leq 0 \Rightarrow \bar{U}_{t3} \geq 0$$

$$\frac{d^2 S_y}{ds^2} = -b_2 \frac{B}{2} + b_2 s \Rightarrow = 0 \text{ per } s = \frac{B}{2}$$

Tratto BD

$$S'_y = B \cdot b_2 \cdot \phi + b_1 \cdot s \cdot \phi = 0 \Rightarrow \bar{U}_{t3} = 0$$

Tratto ED $S'_y = b_2 \cdot s \cdot \left(\frac{B}{2} - \frac{s}{2} \right) \geq 0 \Rightarrow \bar{U}_{t3} \leq 0$

③

$$\frac{d's_y'}{ds} = b_2 \frac{B}{2} - b_2 s \Rightarrow \hat{=} 0 \text{ per } s = \frac{B}{2} \left(\overset{N}{U_{t_3 \max}} \right)$$

Tratto ΔF

$$\Delta y' = -b_2 \cdot s \cdot \left(\frac{B}{2} - \frac{s}{2} \right) \leq 0 \Rightarrow \overset{N}{U_{t_3}} \geq 0$$

$$\frac{d's_y'}{ds} = 0 \text{ per } s = \frac{B}{2}$$