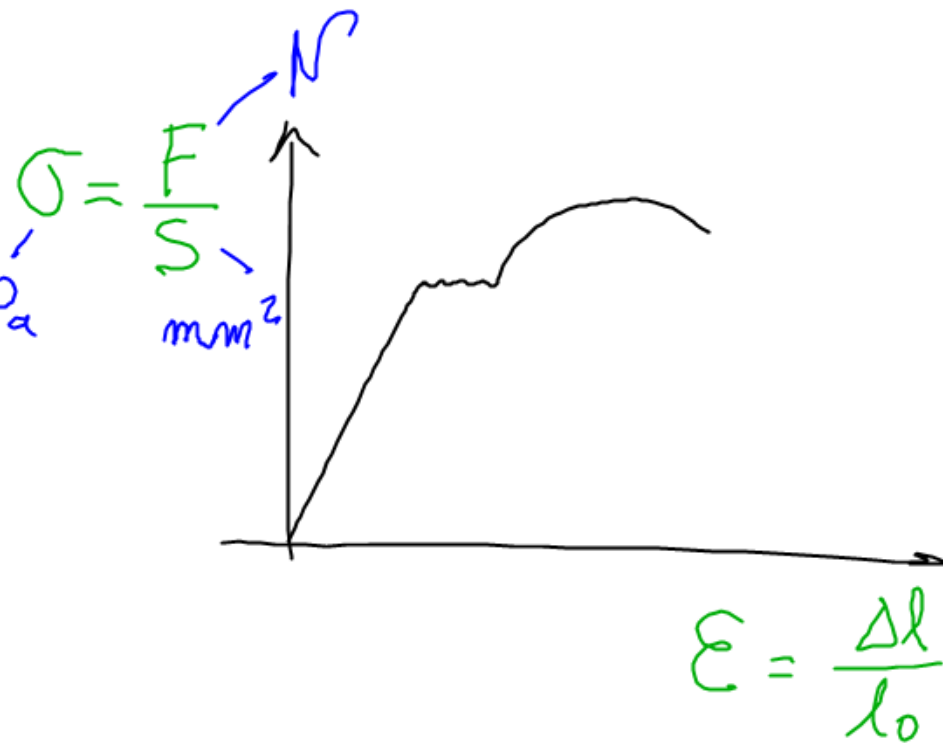


Sollicitati : x - traction/comp
 - cisaillement
 x - flexion MPa
 - torsion



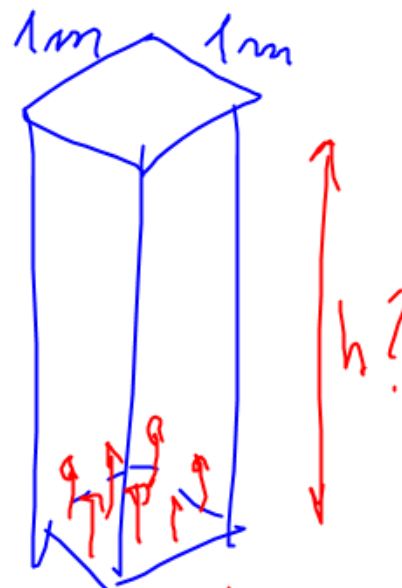
$$P = \frac{F}{S}$$

P — Pa
 F — N
 S — m^2

$$1 \text{ Pa} = 1 \frac{\text{N}}{m^2}$$

$\text{N} \rightarrow \text{kg}$
 $P = m \cdot g \sim 10 \text{ m/s}^2$

1 m^2
 $F = p \cdot S$
 $= 100000 \cdot 1$
 $F = 100000 \text{ N}$
 $\rightarrow$ correspond to
 10000 kg



$p = 1 \text{ bar}$
 $= 10^5 \text{ Pa}$
 $= 100000 \text{ Pa}$

$$\rho_{\text{air}} = 1,25 \text{ kg/m}^3$$

$$p = \frac{P_{\text{air}}}{S} \quad \left| \quad P_{\text{air}} = \rho_{\text{air}} V_{\text{air}} \cdot g \right.$$

$$P_{\text{air}} = \rho_{\text{air}} \cdot S \cdot h \cdot g$$

$$p = \frac{\rho_{\text{air}} \cdot S \cdot h \cdot g}{S}$$

$$h = \frac{p}{\rho_{\text{air}} \cdot g}$$

$$h = \frac{100000}{1,25 \cdot 10} \approx 8000 \text{ m}$$