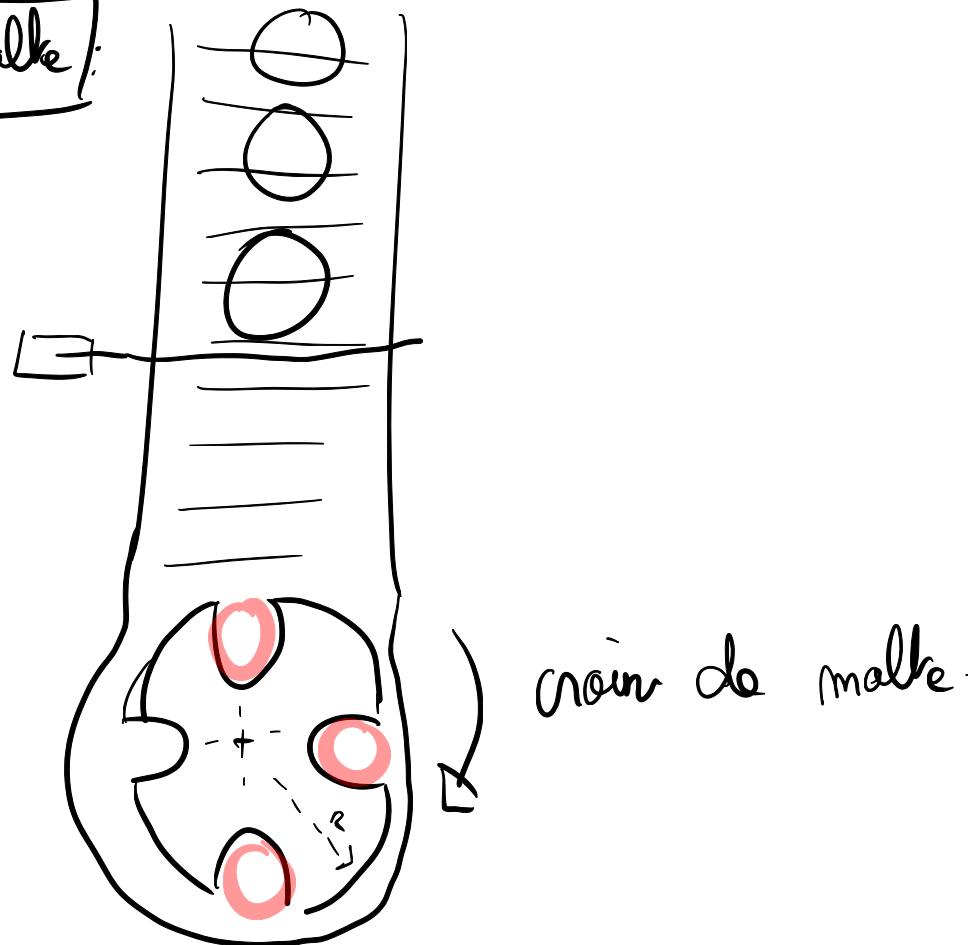
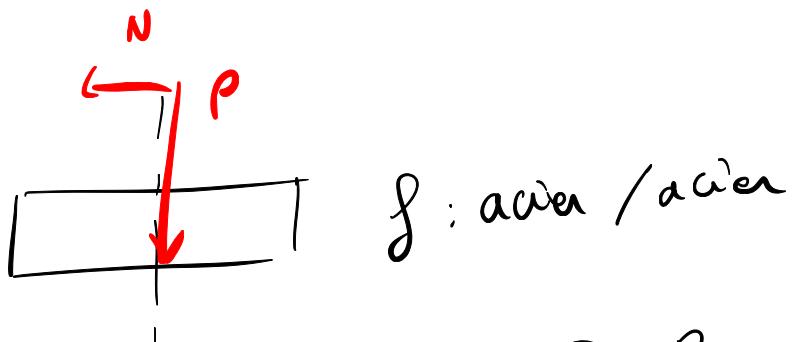


# Distribution des arrêts:

1) Crâne de malte:



1.a) Coûts moteur crâne de malte



$$C_m = 3 \times R \times N$$

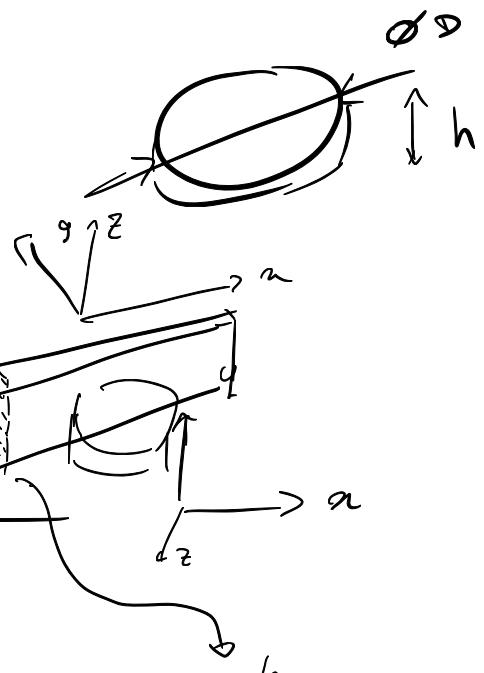
$$= 3 \times R \times P \times f$$

$$C_m = 3 \times R \times m g \times f$$

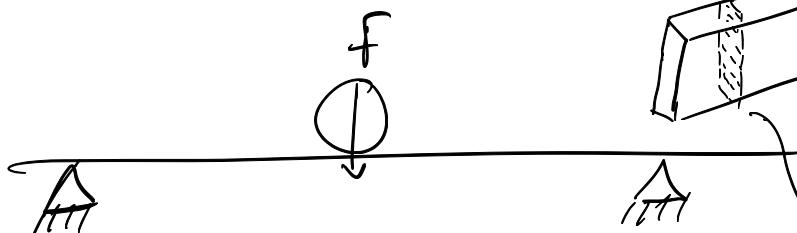
$$\hookrightarrow C_{m\text{ total}} = C_m + C_{m\text{ pièce}}$$

$$C_m \text{ pièce} \Rightarrow J\dot{\omega} = C_m \cdot$$

$J = \text{cylindre}$

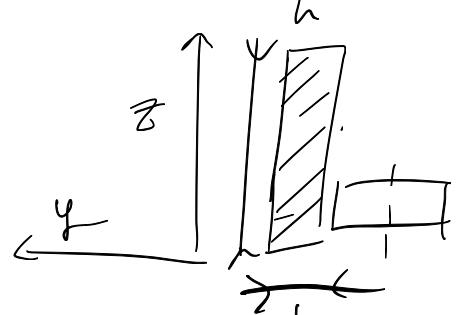


15)



$$\text{arret en } 0,2s \rightarrow a = 8 \text{ m/s}^2$$

$$F = 30 \text{ N}$$



$$y = \frac{PL^3}{48EI_{cm}} = \frac{FD^3}{48E_{\text{acier}}I_{cm}}$$

$$I_{cm} = \frac{hb^3}{12}$$

=

$$y = \frac{30 \times 180^3 \times 12}{48 \times 210 \times 10^3 \times 50} b^3$$

$$b = \left( \frac{30 \times 12 \times 180^3}{48 \times 210 \times 10^3 \times 50 \times 10} \right)^{1/3}$$

$$b = 0,7 \text{ mm}$$

deformation max  
 $y = 10 \text{ mm}$

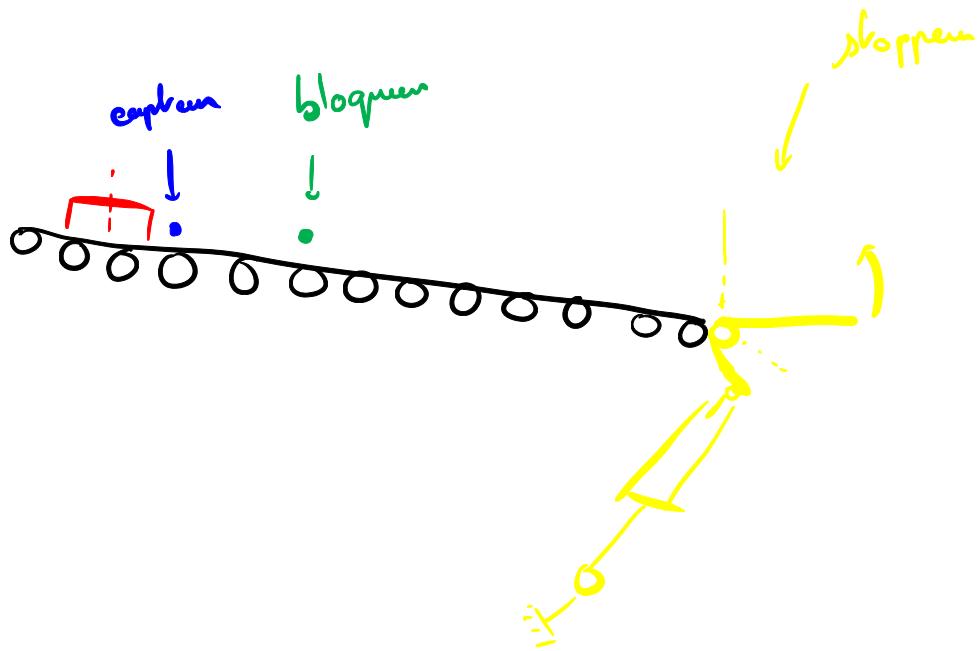
$$M_f = \frac{PL}{4} = \frac{300 \times D}{4} = \frac{300 \times 180}{4} = 13500 \text{ Nmm}$$

$$\sigma_{eq} \approx \frac{Mf}{I_{6n}} = \frac{13500}{50 \times h^3} \times 12 \times 3$$

$$h = \left( \frac{13500 \times 12 \times 3}{50 \times 250} \right)^{1/3}$$

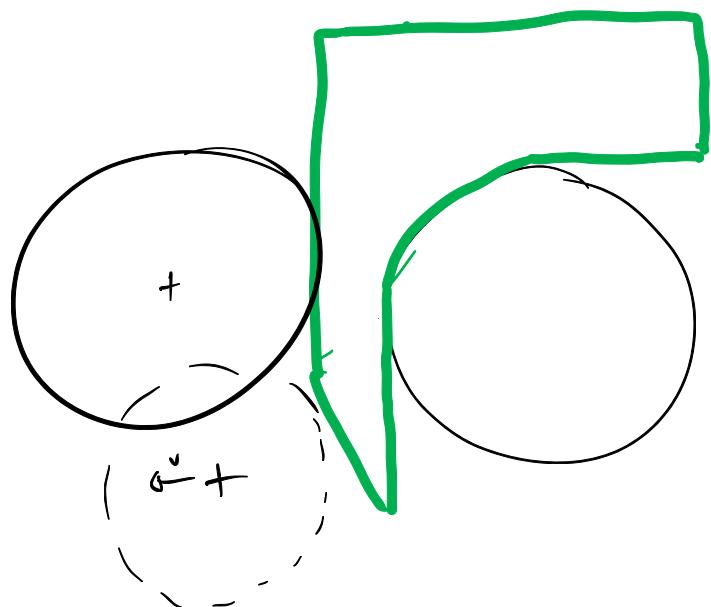
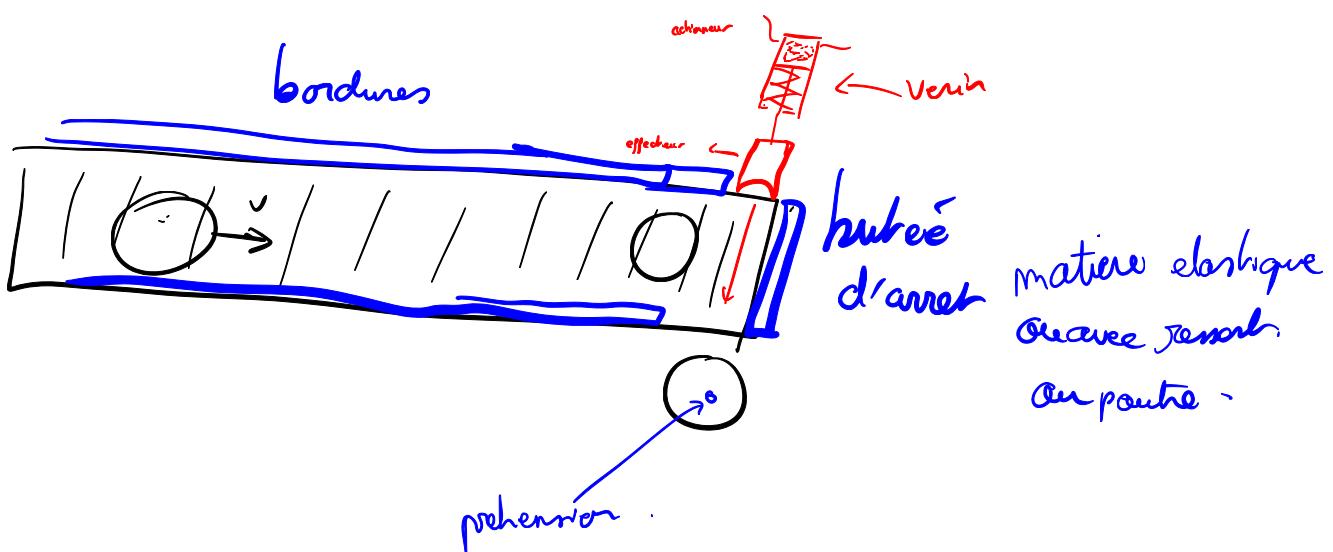
$$h = 3,38 \text{ mm}$$

## 2) Solution Verin + bloquem



Calculs : cf autre document.

### 3) Solution "Pellierien"

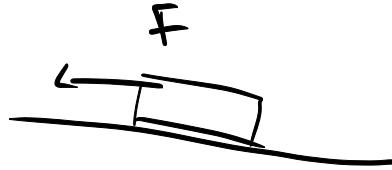


Si l'effet radial est guidé tout le long il n'y a pas d'effet radial sur le verin

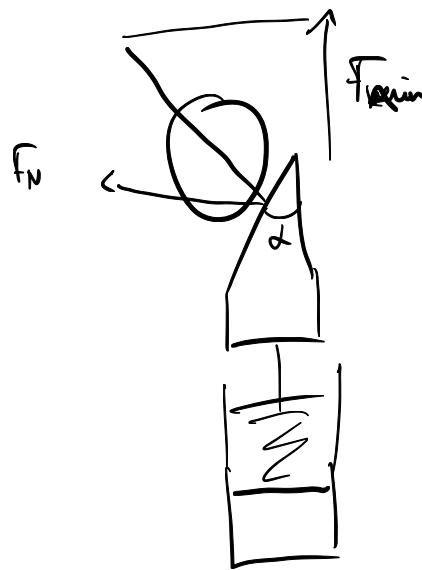
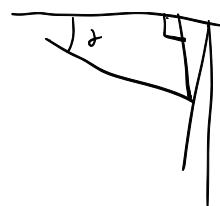
→ Calcul de l'effort pour faire remonter la pte de disques.

$$m = 10 \text{ munit} \Rightarrow P = 100 \times 3 = 300 \text{ N}$$

hyp Sans frottements.



$$\begin{aligned}F &= P \times \sin(\alpha) \\&= 300 \times \sin(29^\circ) \\&= 15 \text{ N.}\end{aligned}$$



$$F_N = F_T \cos(\alpha)$$

$$F_T = \frac{F_A}{\sin(\alpha)}$$

$$F_N = \frac{\cos(\alpha)}{\sin} F_A$$

$$F_N = \frac{1}{\tan(\alpha)} F_A$$

place of previous

→ Par simplicité je préfère prendre cette solution car il n'y a qu'un seul actionneur.

T'en penses quoi ?