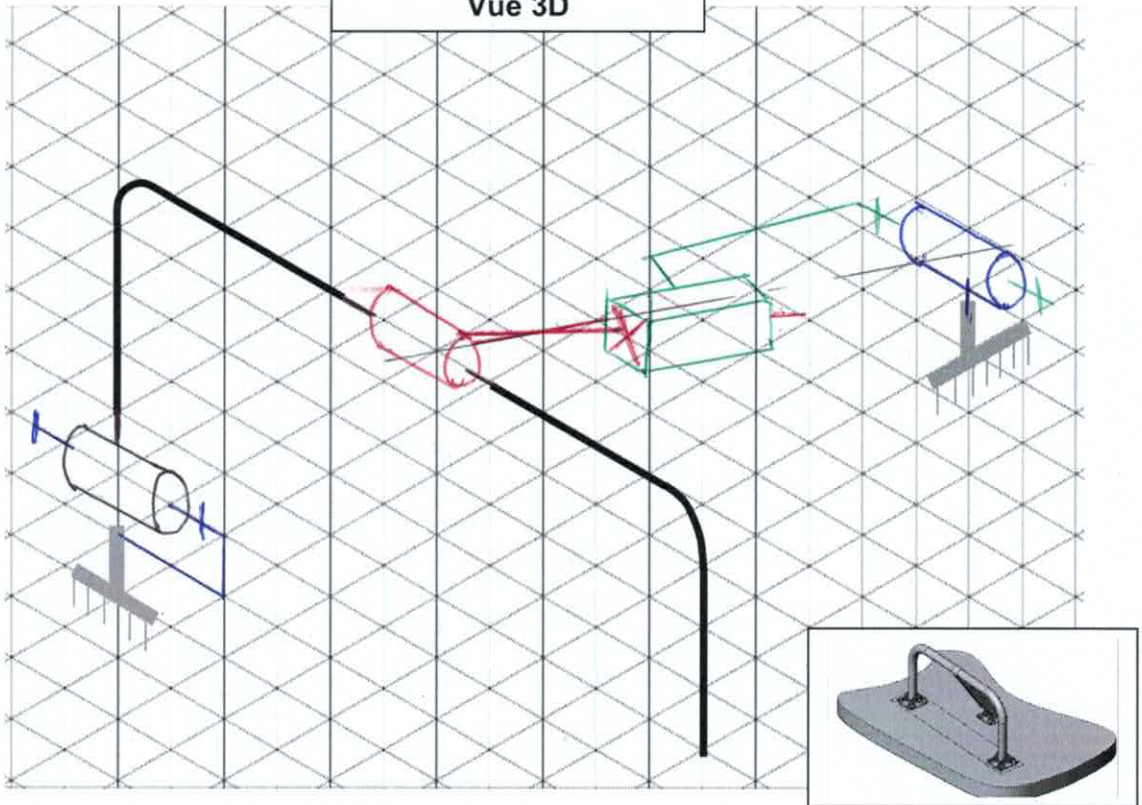
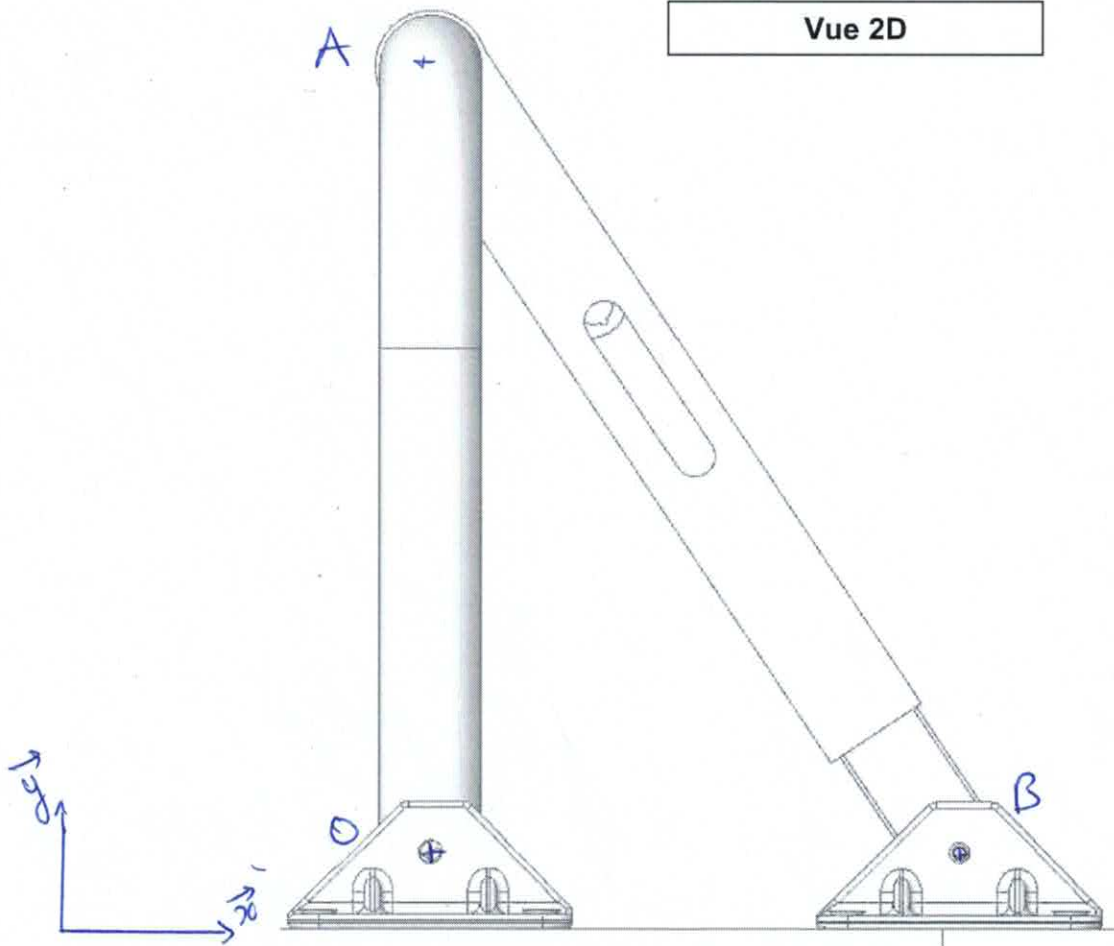


Vue 3D

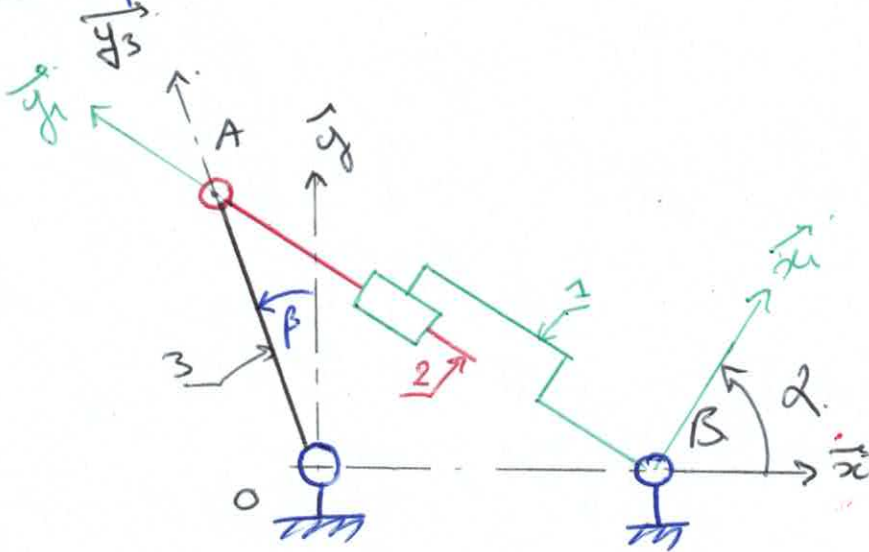


Vue 2D

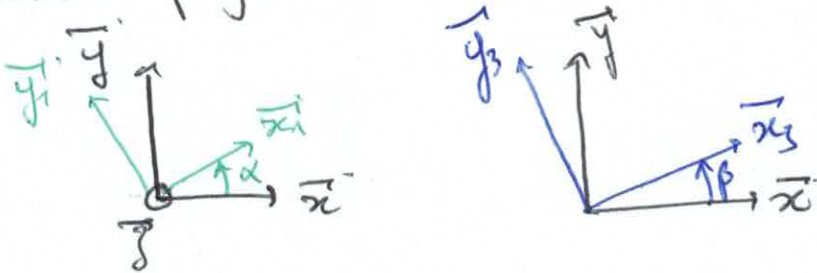


Arceau parking

Schéma plan



4) Figures de projection des bases 1 et 3 dans 0:



on pose $OA = a$; $OB = b$, $AB = x$ (variable).

fermeture de chaîne: $\vec{OA} + \vec{AB} + \vec{BO} = \vec{0}$
 $\Rightarrow a\vec{y}_3 - x\vec{y}_1 - b\vec{x} = \vec{0}$

on projette dans B_0 : $\vec{x} \cdot \begin{cases} -a \sin \beta + x \sin \alpha - b = 0 \\ a \cos \beta - x \cos \alpha = 0 \end{cases}$

on veut relier β et x : on élimine α .

$$\begin{cases} x \sin \alpha = b + a \sin \beta & (1) \\ x \cos \alpha = a \cos \beta & (2) \end{cases} \quad (1)^2 + (2)^2 \Rightarrow x = \sqrt{(b + a \sin \beta)^2 + (a \cos \beta)^2}$$

5) En position fermée: $x_{\min} = \sqrt{b^2 + a^2} \quad (\beta = 0)$

ouverte $x_{\max} = (b+a) \quad (\beta = \frac{\pi}{2})$

d'où la course $x_{\max} - x_{\min} = (b+a) - \sqrt{b^2 + a^2}$