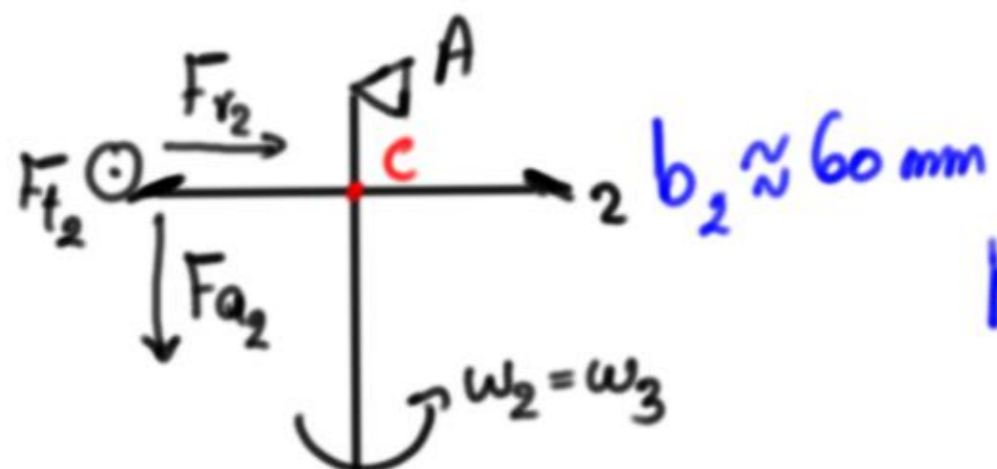
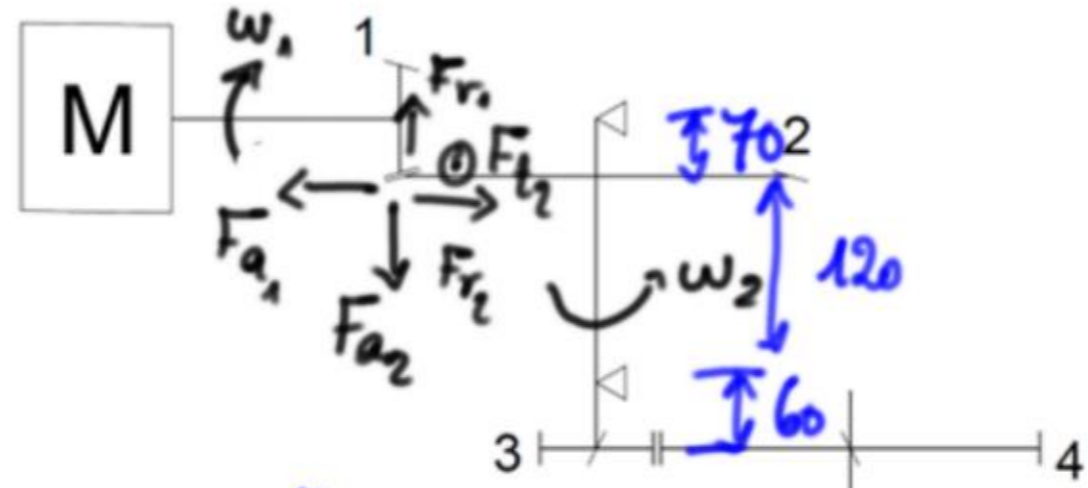


Dimensionamento dell'albero di rinvio:



Hip: larghezza dei cuscinetti
 $\Rightarrow b_A = b_B = 50 \text{ mm}$

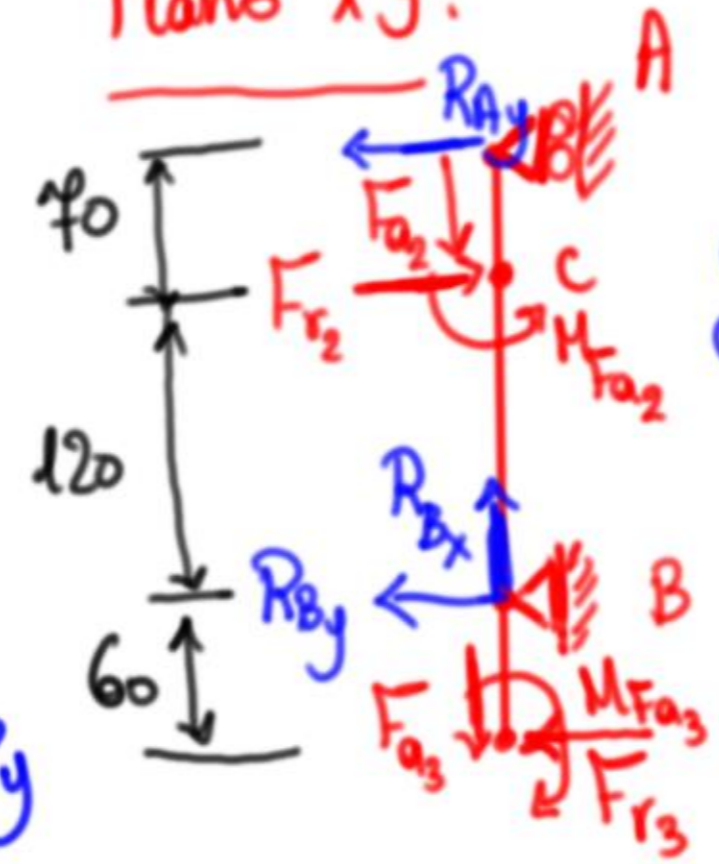
$$M_{Fa_2} = F_{a_2} \cdot \frac{d_2}{2} = 43380 \text{ Nmm}$$

$$M_{Fa_3} = F_{a_3} \cdot \frac{d_3}{2} = 17656 \text{ Nmm}$$

$b_3 \approx 40 \text{ mm}$



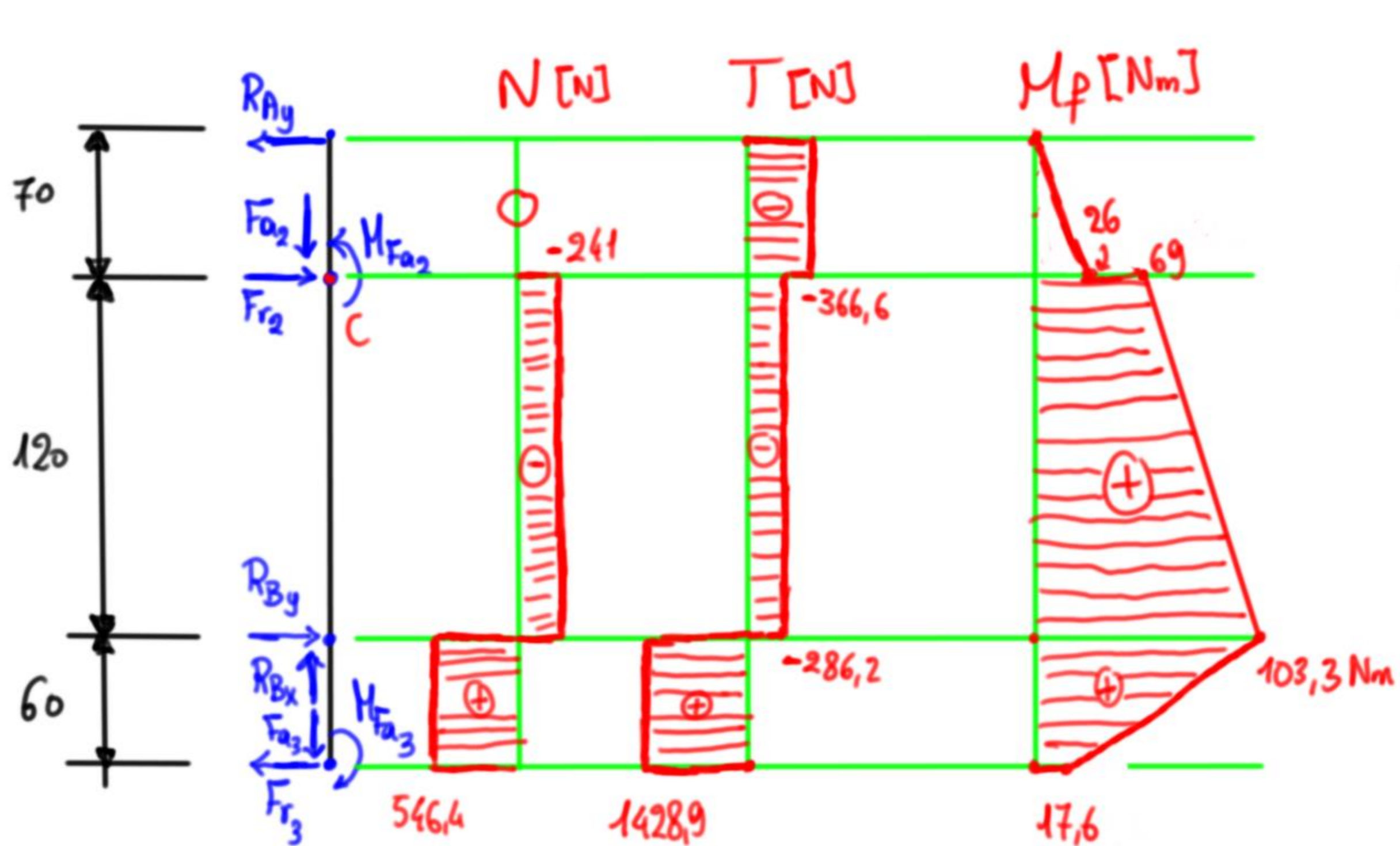
Piano x y:



Reaz. vincolari

$$\begin{cases} \uparrow \sum F_x = 0 \\ \rightarrow \sum F_y = 0 \\ \curvearrowright \sum M_A = 0 \end{cases} \begin{cases} R_{Bx} - F_{a_2} - F_{a_3} = 0 \\ -R_{Ay} + F_{r_2} = R_{By} - F_{r_3} = 0 \\ -M_{Fa_2} - F_{r_2} \cdot 70 + R_{By} \cdot 190 + M_{Fa_3} + F_{r_3} \cdot 250 = 0 \end{cases}$$

$$\begin{cases} R_{Bx} = 487,4 \text{ N} \\ R_{By} = -1715,2 \text{ N} \\ R_{Ay} = 367 \text{ N} \end{cases}$$

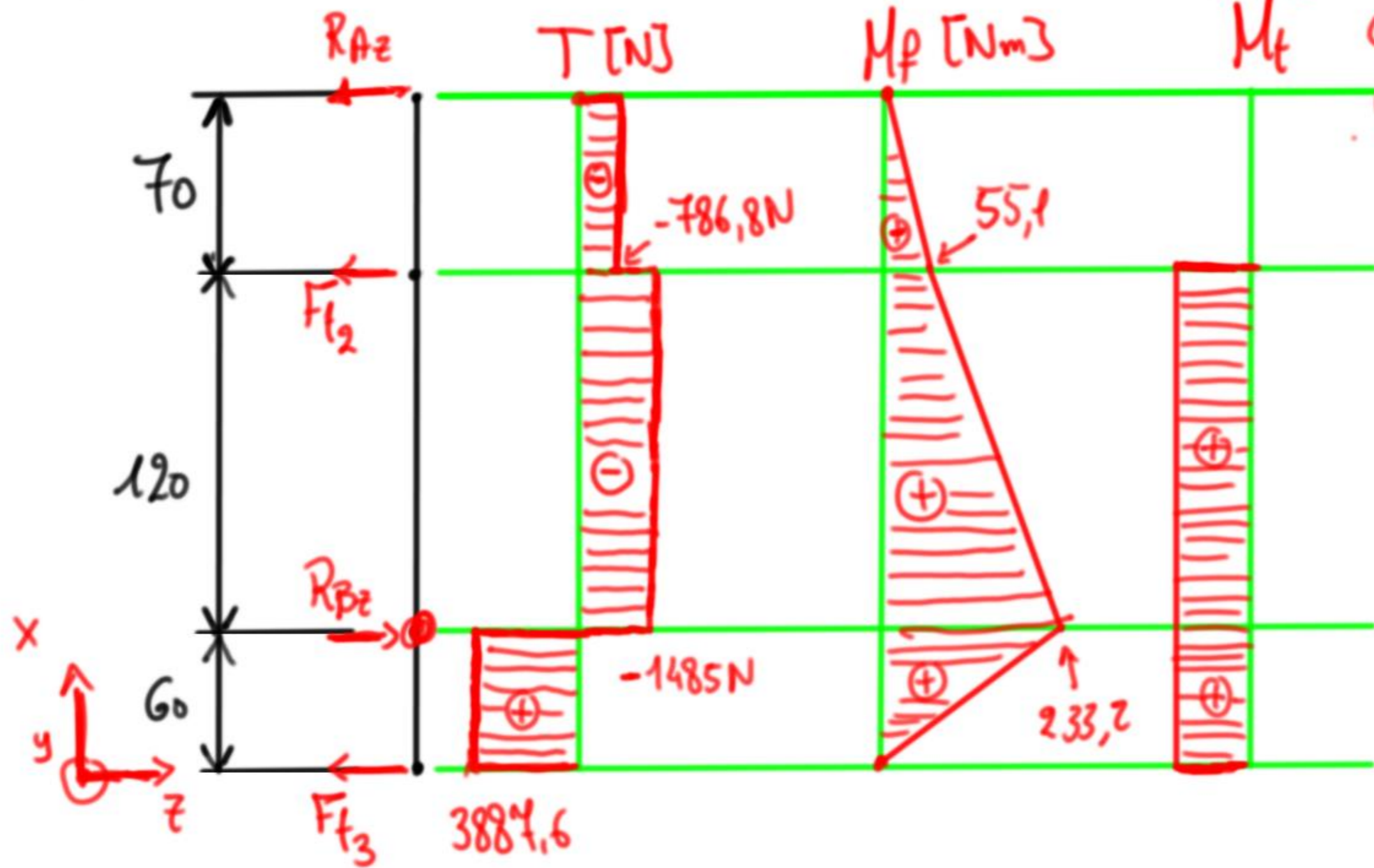


$$M_{p_{FB}} = M_{Fa_3} + F_{r_3} \cdot 60 = 103,34 \text{ Nm}$$

$$M_{p_{FC}}^- = M_{Fa_3} + F_{r_3} \cdot 180 - R_{By} \cdot 120 = 69 \text{ Nm}$$

$$M_{p_{FC}}^+ = M_{Fa_3} + F_{r_3} \cdot 180 - R_{By} \cdot 120 + M_{Fa_2} = 26 \text{ Nm}$$

Piano xz:



Reaz. vincolari:

$$\begin{cases} \sum F_z = 0 \\ \sum M_A = 0 \end{cases} \quad \begin{cases} R_{Az} - F_{t2} + R_{Bz} - F_{t3} = 0 \\ F_{t2} \cdot 70 - R_{Bz} \cdot 120 + F_{t3} \cdot 250 = 0 \end{cases}$$

$$\begin{aligned} \rightarrow & R_{Bz} = 5372,4 \text{ N} \\ \rightarrow & R_{Az} = -786,8 \text{ N} \\ & \begin{cases} R_{Bz} = 5372,4 \text{ N} \\ R_{Az} = 786,8 \text{ N} \end{cases} \end{aligned}$$

$$M_{fB} = F_{t3} \cdot 60 = 233,2 \text{ Nm}$$

$$M_{fC} = F_{t3} \cdot 180 - R_{Bz} \cdot 120 = 55,1 \text{ Nm}$$