$$a \coloneqq s_1 + s_2 = 70 \text{ mm}$$

$$B_t = 245 \ mm$$

 $d_2 = 130 \ mm$ $c := \frac{B_t + d_2}{2} = 187.5$ mm

 $b := \frac{3 \cdot T + 5 \ mm - c}{2} = 34.75 \ mm$

$$I \coloneqq 3 \cdot T + 5 \ mm + 2 \cdot a = 397 \ mm$$

$$q \coloneqq \frac{G_u + G_g + G_i}{c} = 295.504 \frac{\textbf{kgf}}{\textbf{mm}}$$
 $q_p \coloneqq \frac{G_u + G_g + G_i}{2 \ a} = 395.764 \frac{\textbf{kgf}}{\textbf{mm}}$

$M_{CC} \coloneqq q_p \cdot \frac{a^2}{2} = 969622.5 \ \textit{kgf} \cdot \textit{mm}$

 $M_{BB} := -q \cdot \frac{c^2}{8} + a \cdot q_p \cdot \left(\frac{c}{2} + b + \frac{a}{2}\right) = 3230920.688 \ kgf \cdot mm$ $T_{CC} \coloneqq q_p \cdot a = 27703.5 \ kgf$ $egin{aligned} s &\coloneqq rac{\left\langle A_t - d_f
ight
angle}{2} \ J_{XX} &\coloneqq 2 \cdot rac{s \cdot {H_t}^3}{12} \! = \! 46686250 \, \, m{mm}^4 \end{aligned}$

$$\sigma_{XX} = 2 \cdot \frac{\sigma_{XX}}{12} = 466$$

$$\sigma_{maxBB} = \frac{M_{BB}}{J_{XX}} = 4.49$$

$$\sigma_{maxBB} \coloneqq \frac{M_{BB}}{\dfrac{J_{XX}}{H_t}} = 4.498 \; \dfrac{\textit{kgf}}{\textit{mm}^2}$$

$$T_{maxBB} := \frac{M_{BB}}{\frac{J_{XX}}{H_t}} = 4.49$$

$$egin{array}{c} rac{J_{XX}}{H_t} & m{mm}^2 \ \hline 2 & \end{array}$$

 $\tau_{maxCC} \coloneqq \frac{4}{3} \frac{T_{CC}}{\boldsymbol{\pi} \cdot \frac{d_t^2}{t}} = 4.266 \frac{\boldsymbol{kgf}}{\boldsymbol{mm}^2}$

$$rac{H_t}{2}$$
 . The second section M_{CC} . The second section M_{CC} is the second section M_{CC} . The second section M_{CC} is the second se

$$\sigma_{maxCC} \coloneqq rac{\dfrac{M_{CC}}{H_t}}{\pi \cdot \dfrac{d_t^3}{22}} = 8.532 \, rac{ extbf{\textit{kgf}}}{ extbf{\textit{mm}}^2}$$

$$\frac{3}{mm^2}$$