$\sigma_y = 250\,MPa$

$\underline{F = \sigma A}$

$C_{fl} = \sigma_y A_{fl}$

$= 250(100 \cdot 15)$

$= 375\,kN$

$C_{web} = 250\,[15(c-15)]$

$= 3.75c - 56.25\,kN$

$T = 250 \cdot 15 \cdot (135 - c)$

$= 506.25 - 3.75c\,kN$

$\underline{\Sigma F}$

$\Sigma F_x = 0,\ T - C_{web} - C_{fl}$

$c = 25\,mm$, makes sense to be in web

$\underline{Force\ Resultant}$

$\therefore C_{fl} = 375\,kN,\ C_{web} = 37.5\,kN,\ T = 412.5\,kN$

$\underline{\Sigma M_\rho}$

$\Sigma M_x = 0,\ M_\rho = T\left(c + \frac{h-c}{2}\right) - C_{fl}\left(\frac{15}{2}\right) - C_w\left(15 + \frac{c-15}{2}\right)$

$= 412.5(80) - 375(15/2) - 37.5(20)$

$= 29.44\,kN \cdot m$