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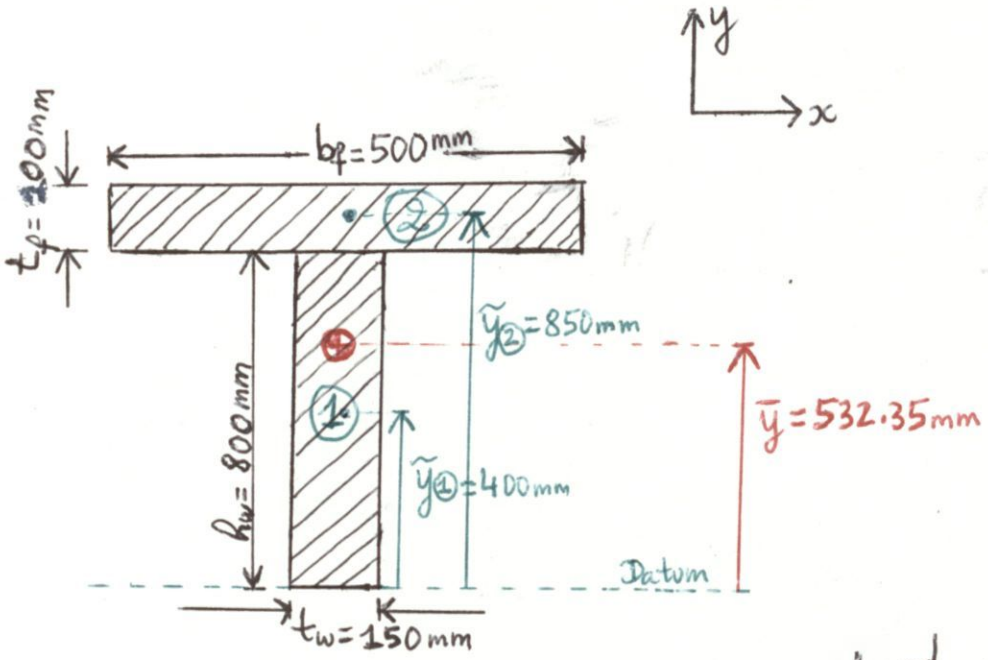
Date: 5th December 2018



Section	b	h	$\tilde{y}$	A=bh	$\tilde{y}A$	$d=\bar{y}-\tilde{y}$
①	150mm	800mm	$\frac{800}{2}$ = 400mm	(150)(800) = 120,000 mm^2	$48*10^6$ mm^3	532.35 − 400 = 132.35
②	500mm	100mm	$800+\frac{100}{2}$ = 850	(500)(100) = 50,000 mm^2	$42.5*10^6$ mm^3	850 − 532.35 = 317.65
			ΣA	170,000 mm^2	$\Sigma\tilde{y}A$ = $90.5*10^6$ mm^3	

$$\bar{y}=\frac{\Sigma\tilde{y}A}{\Sigma A}=\frac{90.5*10^6\,mm^3}{170{,}000\,mm^2}=532.35\,mm$$

$$I_{①}=\frac{bh^3}{12}+Ad^2=\frac{(150)(800)^3}{12}+(120{,}000)(132.35)^2=8{,}501{,}982{,}700\,mm^4$$

$$I_{②}=\frac{bh^3}{12}+Ad^2=\frac{(500)(100)^3}{12}+(50{,}000)(317.65)^2=5{,}086{,}742{,}792\,mm^4$$

$$I_{x(tot)}=I_{①}+I_{②}=(8{,}501{,}982{,}700)+(5{,}086{,}742{,}792)=1.359*10^{10}\,mm^4$$

$$I_{x(tot)}=1.359*10^{10}\,mm^4\left(\frac{1*10^{-12}\,m^4}{1\,mm^4}\right)=1.359*10^{-2}\,m^4$$