



Bending moment

$$(160 \times 10^{-3})(10 \times 10^3) = 1600 \text{ Nm}$$

$$I_{x \text{ vert welds}} = 2 \left(\frac{L^3 t}{12} = 2 (144 \times 10^{-9} t) \text{ m}^4 \right)$$

\downarrow
 120 mm

$$I_{x \text{ Hz. welds}} = 2 L t a^2 = (2 \times 70)(t)(60^2)$$

$$2(252 \times 10^{-9} t) \text{ m}^4$$

$$I_{x \text{ total}} = I_{x \text{ vert}} + I_{x \text{ Hz}}$$

then you have M, I, y

calc stresses.

Ans. $t = 1.86 \text{ mm}$

$h = \sim 3 \text{ mm}$

$$\sigma_y = 345 \text{ MPa}$$