



Bending moment

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

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

↓
120 mm

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

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

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

then you have M, I, y

calc stresses.

Ans. $t = 1.86 \text{ mm}$
 $h = \sim 3 \text{ mm.}$

$$y \left[\sigma_y = 345 \text{ MPa} \right]$$