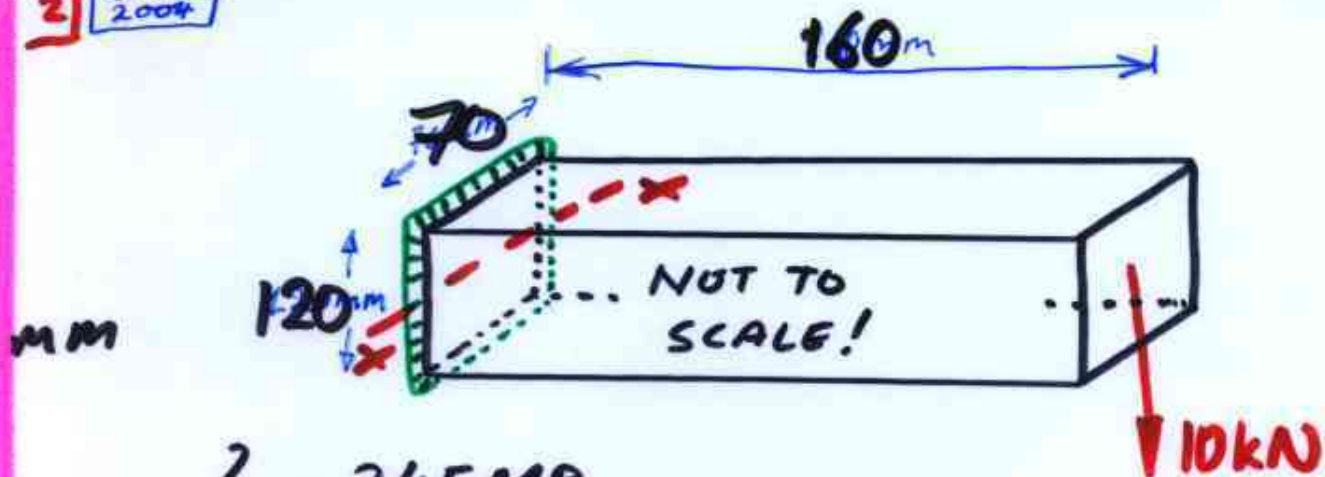


2 | 26-MAR  
2004

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

find required WELD DIMENSION

① Bending moment

$$(10 \times 10^3) (16 \times 10^{-3}) = 16000 \text{ Nm}$$

②  $\sigma = \frac{My}{I}$  NEED  $I_{xx}$

$I$  vertical welds  $L$

$$I = \left( \frac{L^3 t}{12} \right) (\times 2)$$

↑  
2 welds

$$= 2 (144 \times 10^{-9} t) \text{ m}^4$$

$I$  horizontal welds  $\frac{1}{2} 60 = a$   
 $70 = t$

$$= 2 L t a^2$$

$$= 2 (70)(t)(60)^2 = 2 (252 \times 10^{-9} t) \text{ m}^4$$