ANSWERS- VOLUME 2: EQUILIBRIUM

Chapter 3, Cross-Sectional Properties

problem 3.18, page 140

Remarks: See §3.2.2, pages 98 till 100

Answers:

$$I_{zz} = 20 \times 10^6 \text{ mm}^4$$

Explanation:

The centroid of both profiles is located at half of their height.

$$I_{zz} = 2\{4 \times 10^6 \text{ mm}^4 + (2400 \text{ mm}^2)(50 \text{ mm})^2\} = 20 \times 10^6 \text{ mm}^4$$

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