

Remarks: See §3.1.1 till §3.1.3, pages 74 till 82

Answers 3.2-1:

a. $S_y = 0$

b. $S_z = 24 \times 10^3 \text{ mm}^3$

Answers 3.2-2:

a. $S_y = -9 \times 10^3 \text{ mm}^3$

b. $S_z = -4,5 \times 10^3 \text{ mm}^3$

Answers 3.2-3:

a. $S_y = 37,7 \times 10^3 \text{ mm}^3$

b. $S_z = -12,6 \times 10^3 \text{ mm}^3$

Explanation:

$$A^{(1)} = 800 \text{ mm}^3; \quad y_C = 0; \quad z_C = 30 \text{ mm}$$

$$A^{(2)} = 450 \text{ mm}^3; \quad y_C = -20 \text{ mm}; \quad z_C = -10 \text{ mm}$$

$$A^{(3)} = 400\pi \text{ mm}^3; \quad y_C = 30 \text{ mm}; \quad z_C = -10 \text{ mm}$$