

$$Z = \frac{VQ}{It} = \frac{(48,57 \text{ kN} \times 770000) \times 1000^4 / \text{kN}}{33229 \cdot 10^4 \text{ mm}^4 \cdot 10 \text{ mm}} = \frac{37707460000}{33229000000} =$$

$$= 11,37 \text{ N/mm}^2$$

BEPÄLICH $F_A \neq F_B$

$$\sum F_y = 0.$$

$$Ay + 45 \text{ kN} - 35 \frac{\text{kN}}{\text{m}} \cdot 2\text{m} - 25 \text{ kN} + By = 0 \quad \Leftrightarrow$$

$$Ay + 45 \text{ kN} - 70 \text{ kN} - 25 \text{ kN} + By = 0 \quad \Leftrightarrow$$

$$Ay + By - 50 \text{ kN} = 0$$

$$\sum M_B = 0.$$

$$Ay \cdot 7\text{m} + 45 \text{ kN} \cdot 5'1/2\text{m} - 35 \frac{\text{kN}}{\text{m}} \cdot 2\text{m} \cdot 3'1/2\text{m} - 25 \text{ kN} \cdot 1'1/2\text{m} = 0 \quad \Leftrightarrow$$

$$Ay \cdot 7\text{m} + 247,5 \text{ kNm} - 245 \text{ kNm} - 12,5 \text{ kNm} = 0 \quad \Leftrightarrow$$

$$Ay \cdot 7\text{m} - 10 \text{ kNm} = 0 \quad \Leftrightarrow$$

$$Ay \cdot 7\text{m} = 10 \text{ kNm} \quad \Leftrightarrow$$

$$Ay = \frac{10 \text{ kNm}}{7\text{m}} = 1,429 \text{ kN} = \underline{\underline{1,43 \text{ kN}}}$$

$$Ay + By - 50 \text{ kN} = 0 \quad \Leftrightarrow$$

$$1,43 \text{ kN} + By - 50 \text{ kN} = 0 \quad \Leftrightarrow$$

$$By = \underline{\underline{48,57 \text{ kN}}}$$