

DTU. Beton Konstruktioner

$$P = 10 \text{ kN}$$

$$M_{ed} = 6 \text{ kNm}$$

$$V_{ed} = 10 \text{ kN}$$

$$T_{ed} = 0,4 \text{ kNm}$$

Bærende

$$T_{rd,w} = 1,7 \text{ kNm}$$

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$$V_{rd,w} = 21,1 \text{ kN}$$

$$T_{rd,c} = 2,0 \text{ kNm}$$

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$$V_{rd,c} = 23,8 \text{ kN}$$

$$T_{rd,l} = 0,9 \text{ kNm} \quad M_{rd,l} = 11,0 \text{ kNm}$$

$$V_{rd,l} = 23,0 \text{ kN}$$

Detaljeret check

$$\frac{T_{ed}}{T_{rd,w}} + 0 + \frac{V_{ed}}{V_{rd,w}} = \frac{0,4}{1,7} + 0 + \frac{10}{21,1} = 0,92 < 1 \quad \checkmark$$

$$\frac{T_{ed}}{T_{rd,c}} + 0 + \frac{V_{ed}}{V_{rd,c}} = \frac{0,4}{2,0} + 0 + \frac{10}{23,8} = 0,62 < 1 \quad \checkmark$$

$$\frac{T_{ed}}{T_{rd,l}} + \frac{M_{ed}}{M_{rd,l}} + \frac{V_{ed}}{V_{rd,l}} = \frac{0,4}{0,9} + \frac{6}{11,0} + \frac{10}{23,0} = 1,41 \quad \%$$

Kan ikke bære

Bedre forankring $\Rightarrow \sigma_{s,max} = f_{yd} = 450 \text{ MPa}$

$\Rightarrow$ øgede $T_{ed,l}$ & $V_{ed,l}$

$\Rightarrow$ Bærende kan bringes i orden

Løsningen