

[Remarks:](#) See §3.3.2, pages 125 till 132

See §4.4, pages 168 till 170

[Answer:](#)

$$M = 600 \text{ kNm}$$

[Explanation:](#)

$$I = \frac{1}{2} I_p = \frac{1}{2} \times 2\pi R t \times R^2 = \pi R^3 t = 1,751 \times 10^9 \text{ mm}^4$$

$$\sigma_{\max} = \frac{M \times (350 \text{ mm})}{1,751 \times 10^9 \text{ mm}^4} = 120 \text{ N/mm}^2 \Rightarrow M = 600 \text{ kNm}$$