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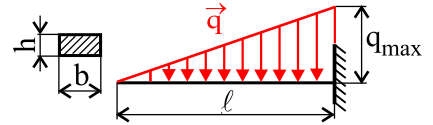
### Problem 604

Determine the equation of the deflection curve, maximum deflection and the safety factor against the limit state of elasticity of the beam with rectangular cross section according the figure. Gravitational forces can be neglected.

Input values:

$$l = 1,75 \text{ m}, \quad q_{max} = 200 \text{ Nm}^{-1}, \quad E = 2 \cdot 10^5 \text{ MPa},$$
$$b = 0,03 \text{ m}, \quad h = 0,02 \text{ m}, \quad \sigma_K = 200 \text{ MPa}$$

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flexion

deflection curve

extreme stress