

str. 67 / úloha 341

$$h = ? \text{ [m]}$$

$$F = 500\,000 \text{ N}$$

$$S = 1 \text{ dm}^2 = 0,01 \text{ m}^2$$

$$\rho = 1025 \frac{\text{kg}}{\text{m}^3}$$

$$p_h = h \cdot \rho \cdot g$$

$$p_h = \frac{F}{S}$$

$$h = \frac{p_h}{\rho \cdot g}$$

$$p_h = \frac{500\,000}{0,01}$$

$$h = \frac{50\,000\,000}{1025 \cdot 10}$$

$$p_h = 50\,000\,000 \text{ Pa}$$

$$h = 4\,878 \text{ m}$$

$$h \doteq 4,9 \text{ km}$$

Tento tlak je v hloubce 4,9 km.