

pg 154 n°5

$$p = 25 \text{ atmosfere}$$

$$1,013 \cdot 10^5 \text{ Pa} = 1 \text{ atm}$$

h (profonditate)?

$$d = 1030 \frac{\text{kg}}{\text{m}^3}$$

$$p = \frac{P}{S}$$

$$P = mg \quad m = dV \quad V = Sh$$

$$p = \frac{dVg}{S}$$

$$p = \frac{dShg}{S}$$

$$p = dhg$$

$$p = 25 \cdot 1,013 \cdot 10^5 \text{ Pa} = 25,325 \cdot 10^5 \text{ Pa}$$

$$h = \frac{p}{dg} = \frac{25,325 \cdot 10^5 \text{ Pa} - 1,013 \cdot 10^5 \text{ Pa}}{1030 \frac{\text{kg}}{\text{m}^3} \cdot 9,8 \frac{\text{m}}{\text{s}^2}}$$

$$\frac{24,312 \cdot 10^5 \text{ Pa}}{10094 \frac{\text{kg}}{\text{m}^2 \text{ s}^2}} = 240,86 \text{ m}$$

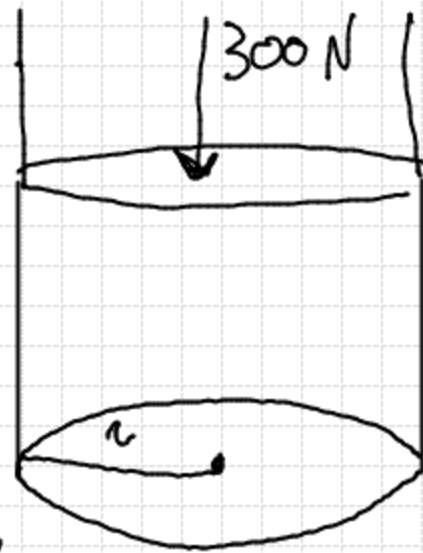
8)  $r = 32 \text{ cm}$

$$1 \text{ bar} = 10^5 \text{ Pa}$$

$$S_b = (0,32 \text{ m})^2 = 0,32 \text{ m}^2 \quad \pi_1 = 1024 \cdot 10^{-4} \text{ m}^2 \quad \pi_1 = 3217 \cdot 10^{-4} \text{ m}^2$$

$$p = \frac{P}{S}$$

$$p = \frac{300 \text{ N}}{3217 \cdot 10^{-4} \text{ m}^2} = 932,54 \text{ Pa}$$



$$P_{\text{atm}} = P_{\text{int}}$$

$$P_{\text{atm}} = 1,013 \cdot 10^5 \text{ Pa}$$

$$P_{\text{interna}} = 1,013 \cdot 10^5 \text{ Pa} = 1,013 \text{ bar}$$

$$933 \text{ Pa} = 0,93 \cdot 10^4$$