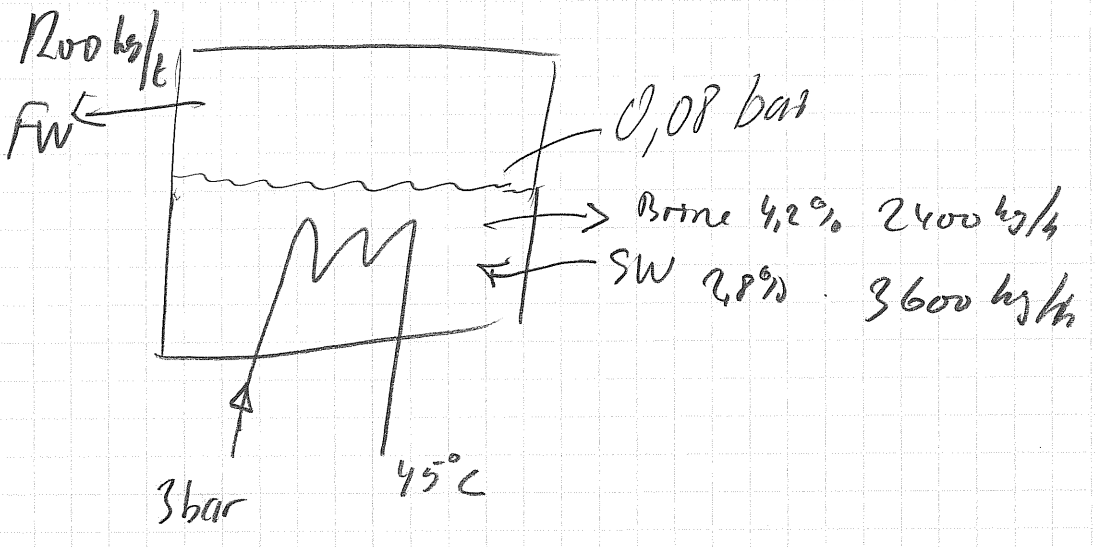
35




$$M_{SW} = (M_B + 1200)$$

$$M_B \cdot 4{,}2\% = M_{SW} \cdot 2{,}8\%$$

$$M_B \cdot 4{,}2\% = (M_B + 1200) \cdot 2{,}8\%$$

$$0{,}042\, M_B = 0{,}028 M_B + 0{,}028 \cdot 1200 \Rightarrow M_B = \frac{0{,}028 \cdot 1200}{(0{,}042 - 0{,}028)} = 2400 \text{ kg/h}$$

$$M_{SW} = M_B + 1200 = 2400 + 1200 = 3600 \text{ kg/h}$$

$$Q_{FWG} = \left[M_{FW} \cdot r + M_{SW} \cdot (h' - h_{H_2O})\right] \cdot \frac{1}{\eta_{FG}} =$$

$$Q_{FWG} = \left[\frac{1200}{3600} \cdot 2406{,}2 + \frac{3600}{3600} \cdot (173{,}9 - 83{,}9)\right] \cdot \frac{1}{0{,}96} = 929 \text{ kW}$$

$$Q_D = \dot{M}_d \cdot \lambda_d \Rightarrow \dot{M}_d = \frac{929}{(2724{,}7 - 188{,}4)} = \underline{\underline{0{,}37 \text{ kg/s}}}$$