

6) idealni prtok napolnjenja

$$a_{nc} = a_{t3,4} = - \int_3^4 v dp \quad P_4 = P_1 - \text{izoterm}$$

$$P_3 = P_2 = -11$$

sva mala obdela $v_3 = v_4 = v = 0,001 \text{ m}^3/\text{kg}$

$$P_{nc} = m a_{nc} = m \cdot v_3 (P_1 - P_2) = 101,81 \cdot 0,0010050 (15 - 0,004759) \cdot 10^6 = 1534,3 \text{ kJ}$$

$$\frac{P_{nc}}{P_T} = \frac{1534,3 \cdot 10^3}{150 \cdot 10^6} = 1,02\% \Rightarrow P_{nc} = 1\% P_T$$

7) merna spolna parna

$$C_{parna} = \frac{m}{P_T} = \frac{101,81}{150 \cdot 10^6} = 6,787 \cdot 10^{-7} \left[\frac{\text{kg}}{\text{m}^3} \right] \left[\frac{1 \text{ kg}}{\text{m}^3} \right]$$

$$C_{parna} = 6,787 \cdot 10^{-7} \frac{3600}{10^{-3}} = 2,44 \left[\frac{\text{kg}}{\text{kWh}} \right], \quad C_{parna} = \frac{m}{P_T} = \frac{m}{m_{at}} = a_T^{-1} = \frac{1}{h_0}$$

8) merna spolna toplota

$$C_{toplota} = \frac{Q_{PE}}{P_T} = \frac{m q_{PE}}{P_T} = \frac{101,81 \cdot 3316,39 \cdot 10^3}{150 \cdot 10^6} = 2,250,94 \left[\frac{\text{kJ}}{\text{kWh}} \right]$$

$$C_{toplota} = \frac{3600}{10^{-3}} = 8103,4 \left[\frac{\text{kJ}}{\text{kWh}} \right]$$

$$\text{relativna toplota} = \frac{Q_{PE}}{P_T} = \frac{m q_{PE}}{m_{at}} = \frac{1}{q_T} = \frac{1}{q_{PE}}$$

9) spolna toplota

$$Q_{PE} = m (h_1 - h_{w0}) = m q_{PE} = m_{pal} \cdot q_m \Rightarrow m_{pal} = \frac{Q_{PE}}{q_m} = \frac{m q_{PE}}{q_m} = \frac{101,81 \cdot 3316,39}{12 \cdot 10^3} = 2,8 \left[\frac{\text{kg}}{\text{s}} \right]$$

$$\frac{\text{kg}}{\text{s}} \cdot \frac{\text{kJ}}{\text{kg}} = \frac{\text{kJ}}{\text{s}}$$

$$10) \text{ merna spolna toplota } C_{pal} = \frac{m_{pal}}{P_T} = \frac{2,8}{150 \cdot 10^6} \cdot \frac{3600}{10^3} = 0,672 \left[\frac{\text{kg}}{\text{kWh}} \right]$$

11) merna toplota na dan

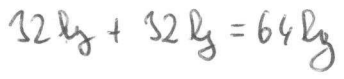
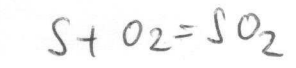
$$m_{pal}(\text{dan}) = 2,8 \cdot 3600 \cdot 24 = 2419,2 \text{ t/dan}$$

$$12) m_{pal}(\text{ml}) = 2419,2 \cdot 365 = 883008 \text{ t/ml}$$

13) merna ~~toplota~~ na ml

$$m_S(\text{na ml}) = m_{pal}(\text{na ml}) \cdot 0,007 = 6181 \left[\frac{\text{t}}{\text{ml}} \right]$$

14) merna SO₂ na ml



$$1 \text{ kg S} + 1 \text{ kg O}_2 = 2 \text{ kg SO}_2 \Rightarrow m_{SO_2} = m_S(\text{na ml}) \cdot 2 = 6181 \cdot 2 =$$

$$m_{SO_2} = 12362 \left[\frac{\text{t}}{\text{ml}} \right]$$