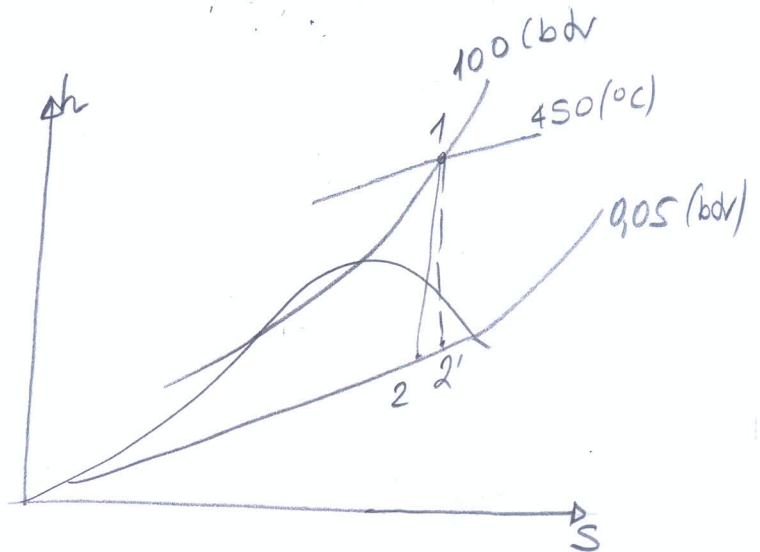
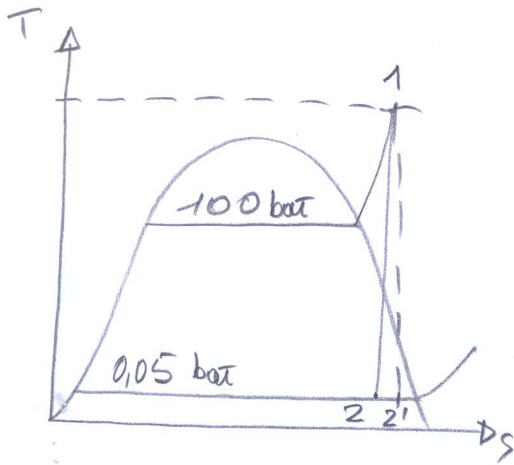


G^m ΑΕΚΗΣΗ



$$\eta_{\text{εκτ.}} = \frac{h_1 - h_{2'}}{h_1 - h_2} \quad (1)$$

$$h_1 = 3243,35 \text{ kJ/kg}$$

$$s_1 = 6,423 \text{ kJ/kg}\cdot\text{K}$$

$$p = 0,05 \text{ bar}, \quad T = 32,898 + 273,15 = 306,048 \text{ (K)}$$

$$h_g = 137,77 \text{ kJ/kg}$$

$$h_2 = h_g + r \cdot x_2$$

$$r = 2423,8 \text{ kJ/kg}$$

$$\rightarrow h_2 = 1955,62 \text{ (kJ/kg)}$$

$$s_1 = s_2 = s_g + \frac{r}{T} \cdot x_2 \rightarrow x_2 = \frac{s_1 - s_g}{\frac{r}{T}} \cdot T = 0,75$$

$$s_g = 0,4763 \text{ kJ/kg}\cdot\text{K}$$

$$A_{10} \text{ (I)} \rightarrow h_{2'} = h_1 - \eta_{\text{εκτ.}} \cdot (h_1 - h_2) = 2187,412 \text{ kJ/kg} < 2561,6 \text{ kJ/kg}$$

$$(h_v)_{0,05 \text{ (bar)}}$$

$$h_{2'} = h_g + r \cdot x_{2'} \rightarrow x_{2'} = \frac{h_{2'} - h_g}{r} = 0,845$$