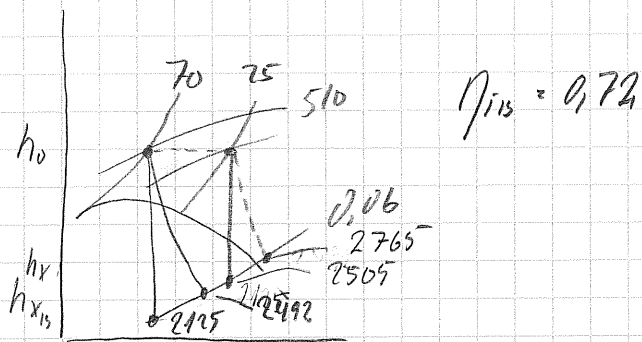


20.1



$$\Delta h_{is} = (h_0 - h_{x_{15}})$$

$$h_{dryc} = h_0 - (h_0 - h_{x_{15}}) \cdot \eta_{is} = 3435 - (3435 - 2125) \cdot 0,72 = 2492 \text{ kJ/kg}$$

$$h_{dradv} = h_0 - (h_0 - h_{x_{15}}) \cdot \eta_{is} = 3435 - (3435 - 2505) \cdot 0,72 = 2765 \text{ kJ/kg}$$

$$\text{Reduktion (X)}\%: M_{d,dradv} = M_{d,(1-x)} \cdot \Delta h_{dryc}$$

$$\text{red. } x = \frac{M_{d,dradv} - M_{d,dryc}}{M_{d,dryc}} =$$

$$\text{red } x = \frac{(h_0 - h_{dryc}) - (h_0 - h_{dradv})}{(h_0 - h_{dryc})} = \frac{(3435 - 2492) - (3435 - 2765)}{(3435 - 2492)}$$

$$\text{red } x = \frac{943 - 670}{973} \cdot 100\% = \underline{\underline{28,95\%}}$$

~~$$(1-x) \cdot (3435 - 2492) = 3435 - 2765$$

$$843 = 670$$~~

alt.  $M_{d,dradv} \cdot \Delta h_{dradv} = M_{d,dryc} \cdot \Delta h_{dryc}$

$$\frac{M_{d,dryc}}{M_{d,dradv}} = \frac{\Delta h_{dradv}}{\Delta h_{dryc}} = \frac{3435 - 2765}{3435 - 2492} = 0,71$$

$$M_{d,dryc} = M_{d,dradv} \cdot 0,71 \Rightarrow$$

$$\text{red } x = M_{d,dradv} - M_{d,dradv} \cdot 0,71 = 1 - 0,71 = 28,95\%$$