

komparativ

$$4) \quad h_1 + \frac{1}{2} m \cdot c_1^2 = h_2 + \frac{1}{2} m c_2^2$$

$$p_1 = 14 \text{ bar} \\ t_1 = 400 \text{ }^\circ\text{C}$$

$$4.1 \quad \underline{h_1 = 3258,2 \text{ kJ/kg}}$$

$$4.2 \quad \underline{h_2 = 2925 \text{ kJ/kg}}$$

$$4.3 \quad c_2 = \sqrt{2 \cdot (3258,2 - 2925) \cdot 10^3 + 40^2} = \underline{\underline{817,3 \text{ m/s}}}$$

$$4.4 \quad c_2 = \sqrt{2 \cdot (3258,2 - 2925) \cdot 10^3} = \underline{\underline{816,3 \text{ m/s}}}$$

$$6 \quad p_1 = 10 \text{ bar} \quad t_1 = 200^\circ\text{C} \quad p_2 = 5,5 \text{ bar} \quad \eta_{is} = 0,95$$

$$6.1 \quad \underline{h_1 = 2826,8 \text{ kJ/kg}} \quad h_{2is} =$$

$$\eta_{is} = \frac{(h_1 - h_2)}{(h_1 - h_{2is})} \quad \text{og} \quad h_{2is} = 2715 \text{ kJ/kg}$$

$$6.2 \quad h_2 = h_1 - \eta_{is} \cdot (h_1 - h_{2is}) = 2826,8 - 0,95 \cdot (2826,8 - 2715) = \underline{\underline{2720,6 \text{ kJ/kg}}}$$

$$6.3 \quad \underline{\underline{X = 0,985}}$$

$$6.4 \quad c_2 = \sqrt{2 \cdot 10^3 \cdot (2826,8 - 2720,6) + 0} = \underline{\underline{460,9 \text{ m/s}}}$$