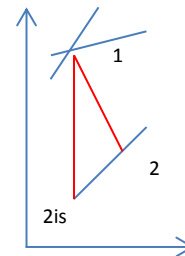


52.1 
$$i_s = \frac{h_1 - h_2}{h_1 - h_{2is}}$$

$$= \frac{3387,8 - 3123,4}{3387,8 - 3010}$$

= 0,69



52.2 
$$m_d * (h_x - h') = m_k \phi * c * (t_1 - t_2)$$

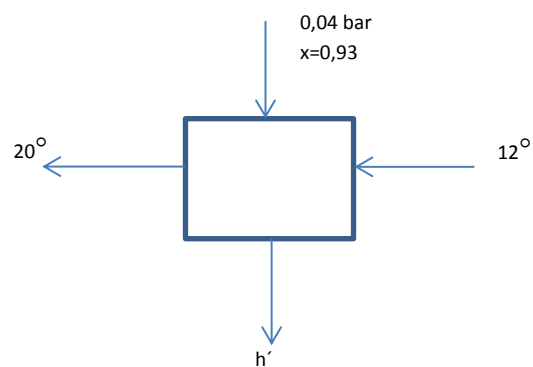
$$h_x = h' + (x * r)$$

$$= 121,4 + (0,93 * 2433,1)$$

$$= 2384,18 \text{ kJ/kg}$$

$$m_d = 300 - 34 - 48 - 4 - 172$$

$$M_d = 42 \text{ kg/s}$$



$$mk\emptyset = \left( \frac{md * (hx - h')}{c * (t1 - t2)} \right)$$

$$mk\emptyset = \left( \frac{42 * (2384,18 - 121,4)}{4,19 * (20 - 12)} \right)$$

$$= \underline{10207 \text{ T/h}}$$

52.3

$$Pkl = (Piht + Pimt + Pilt) * eta m * eta g$$

$$Piht = md * delta h$$

$$Piht = 300 * (3387,8 - 3123,4)$$

$$Piht = 79320 \text{ kW}$$

$$Pi mt = (md1 * (delta h1)) + ((md2 * (delta h2)))$$

$$Pi mt = (266 * (3123,4 - 2950)) + (218 * (2950 - 2890,7))$$

$$Pi mt = 59052 \text{ kW}$$

$$Pi lt = (md1 * (delta h1)) + ((md2 * (delta h2)))$$

$$Pi lt = (214 * (2890,7 - 2745)) + (42 * (2745 - 2384,18))$$

$$Pi lt = 46334$$

$$Pkl = (Piht + Pimt + Pilt) * eta m * eta g$$

$$Pkl = (79320 + 59052 + 46334) * 0,96 * 0,98$$

$$Pkl = \underline{173771 \text{ kW}}$$

52.4 Ny Elproduktion

$$Pi lt = (md1 * (delta h1))$$

$$Pi = 108395 \text{ kw}$$

Medfører ny

$$Pkl = \underline{232159 \text{ kW}}$$

52.5

Temp tilgang VB

$$hVB * mVB = hlt * mlt + hk_{on} * mk_{on}$$

$$hVB = (hlt * mlt + hk_{on} * mk_{on}) / mVB$$

$$hVB = (2890,7 * 4 + 121,4 * 214) / 218$$

$$\underline{hVB = 172,2 \text{ kJ/kg}}$$

$$t = h/c$$

$$t = 172,2 / 4,19$$

$$t = 41^\circ$$

