

$$\underline{n_{min}} + 1 = \frac{\log \left[\left(\frac{x_{LK}}{x_{TK}} \right)_D \left(\frac{x_{TK}}{x_{LK}} \right)_W \right]}{\log \alpha_{LKTK}}$$

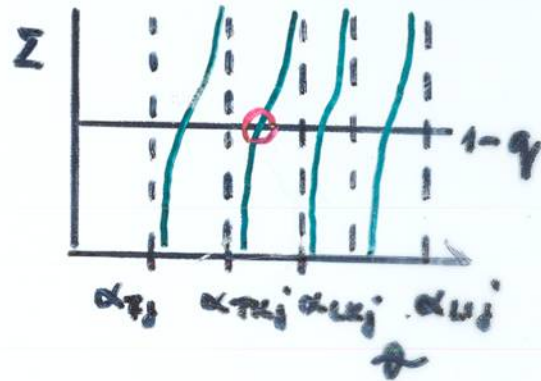
FENSKE

$$1-q = \sum_i \frac{\alpha_{ij} z_i F}{\alpha_{ij} - \theta}$$

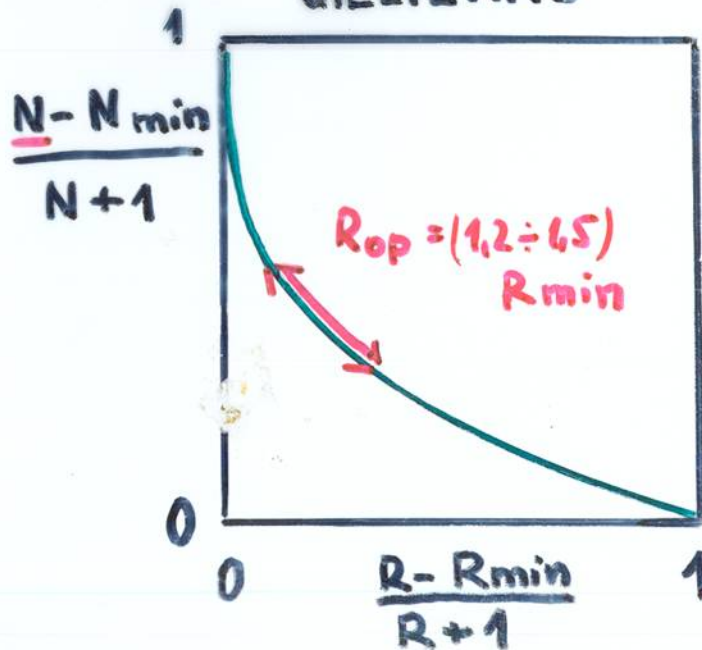
$$\alpha_{LKj} \geq \theta \geq \alpha_{TKj}$$

$$\underline{R_{min}} + 1 = \sum_i \frac{\alpha_{ij} x_{iD}}{\alpha_{ij} - \theta}$$

UNDERWOOD



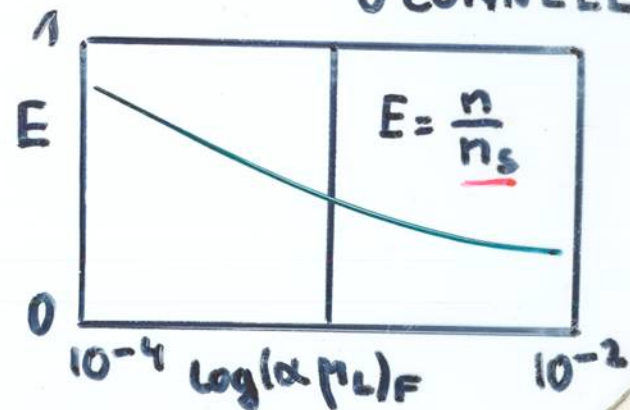
GILLILAND



$$\frac{f}{N} = \left(\frac{f}{N} \right)_{R \rightarrow \infty}$$

COLBURN
-HAPPEL

O'CONNELL



COLBURN - HAPPEL

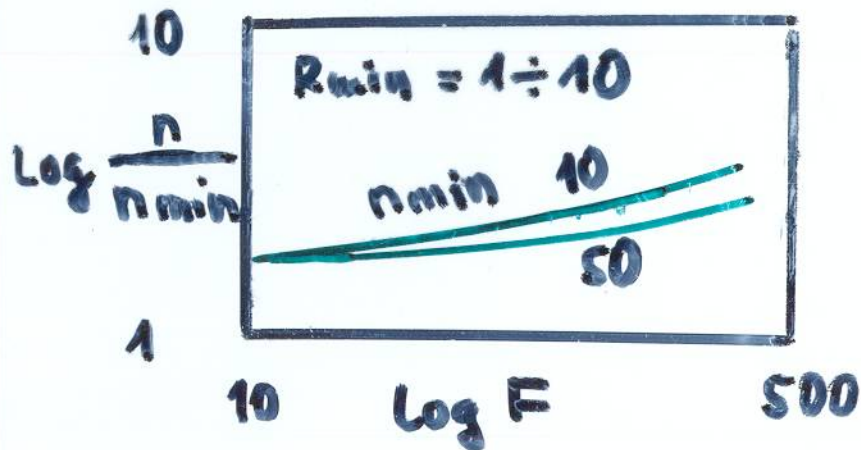
$$C = K_1 n \dot{V} + K_2 \dot{V} + K_3 \dot{V}$$

kolona
kond. + vař.
pdra + voda

$$\dot{V} = (R+1)\dot{D}$$

$$C/\dot{D} = K_1 n(1+R) + K_2(1+R) + K_3(1+R)$$

$$\frac{1}{K_1} \frac{d(C/\dot{D})}{dR} = (1+R) \frac{dn}{dR} + n + \underbrace{\frac{K_2+K_3}{K_1}}_F \stackrel{!}{=} 0$$



$$n_{op} = (2 \div 3) n_{\min}$$

$$R_{op} = (1.2 \div 1.5) R_{\min}$$

HANDS - WHITT

$$h_{RS} = 70 \sqrt{\frac{d_o m_L}{j_L}}$$

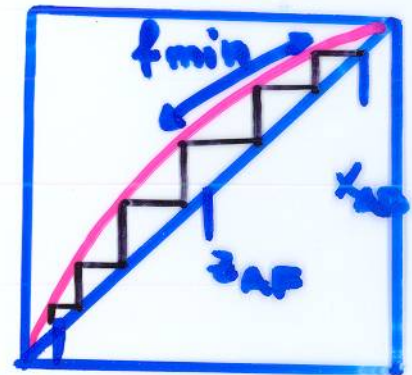


(f)

FENSKE :

$$\frac{(f)}{m} = \frac{f_{min}}{m_{min}}$$

$$\frac{(f)}{m - (f)} = \frac{f_{min}}{m_{min} - f_{min}}$$



KIRKBRIDE

$$\frac{(f)}{m - (f)} = \left[\frac{W}{D} \frac{z_{TK,F}}{z_{LK,F}} \left(\frac{x_{LK,W}}{x_{TK,D}} \right)^2 \right]^{0,206}$$

KONDENZÁTOR

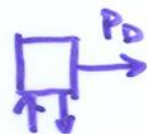
TOT.



$$0,2 < P_D < 1,5 \text{ MPa}$$

min (přet.)

PARC.

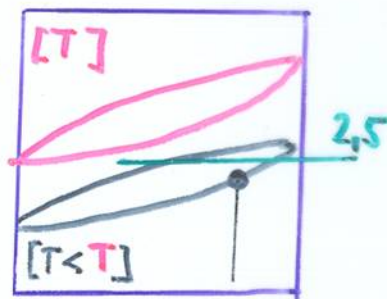
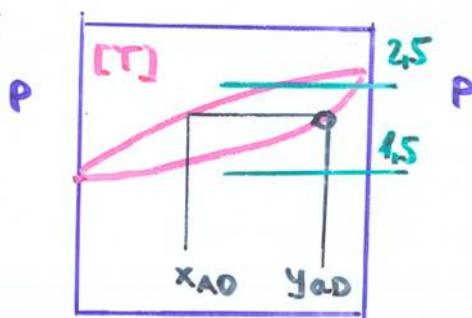
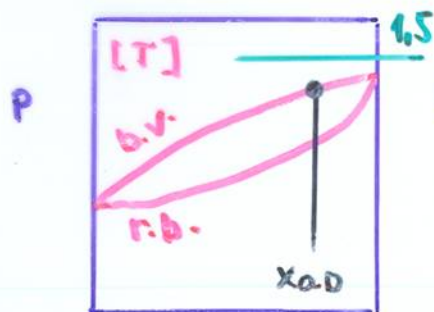


$$1,5 < P_D < 2,5 \text{ MPa}$$

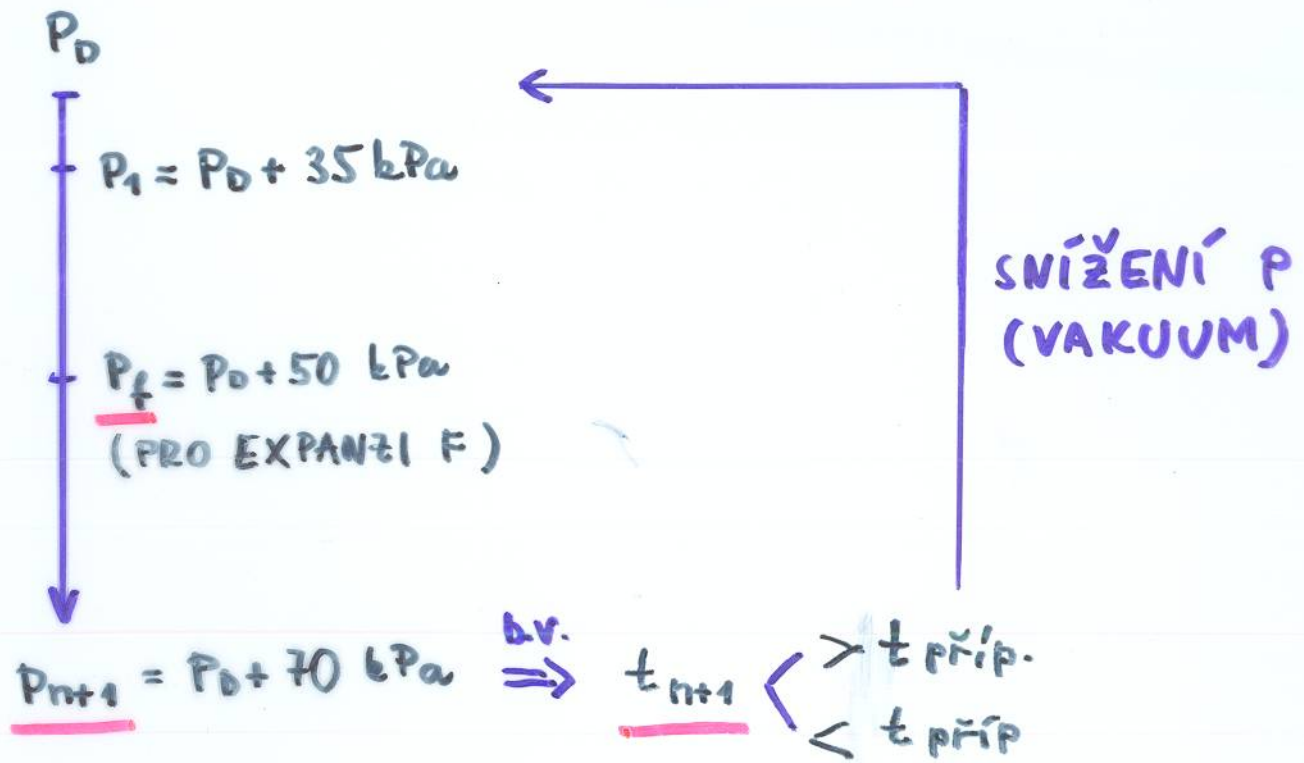
(max 3,0)

P_D CHLAZ. VODOU $t_D = 50^\circ\text{C}$

$t_D \Rightarrow P_D < 1,5 \text{ MPa} \Rightarrow \text{TOT}$
 $t_D \Rightarrow P_D > 1,5 \text{ MPa} \Rightarrow \text{PARC}$
 $\Rightarrow P_D < 2,5 \text{ MPa} \Rightarrow \text{PARC}$
 $\Rightarrow P_D > 2,5 \text{ MPa}$
 $\Downarrow$
 JINÉ CHLADIVO
 (KAP. PLYNY -20°C)



x_a, y_a



DLE KONSTRUKCE :

ΔP	KOND.	15-35 kPa	
	PATRO	0,7-1 kPa	ATM., TLAK.
		0,35	VAK.