FILTRACIJA

$$C_k = \left[\frac{1}{c} - \frac{1}{\rho_s} - \frac{f-1}{\rho} \right]^{-1}$$

$$V_c = \frac{Q \cdot T}{c_k \cdot n} = \frac{Q \cdot T \cdot t_c}{3600 \cdot c_k}$$

$$F_c^2 - \frac{V_c \cdot \eta \cdot R_m}{\Delta p \cdot t_c} \cdot F_c - \alpha \cdot \eta \cdot c_k \cdot \frac{V_c^2}{2 \cdot \Delta p \cdot t_c} = 0$$

$$F_{c(dej)} = 3 \cdot F_c$$

$$D = \sqrt{\frac{F_{c(dej)}}{2 \cdot \pi}}$$

$$Q = \frac{dV}{dt} = \frac{F \cdot \Delta p}{\alpha \cdot \eta \cdot c_k \cdot \left(\dfrac{V}{F} \right) + \eta \cdot R_m}$$

$$\frac{dt}{dV} = \alpha \cdot \eta \cdot c_k \cdot \frac{V}{F^2 \cdot \Delta p} + \frac{\eta \cdot R_m}{F \cdot \Delta p} = aV + b$$

$$QS = \frac{QT}{c}$$

$$Q = \frac{F \cdot \Delta p}{\eta \left(R_m + R_k \right)}$$

$$R_k = \alpha \cdot w$$

$$wF = cV$$

SPECIFIČNA POVRŠINA
po Blaineu

$$S_m = \frac{k}{\rho} \cdot \sqrt{\frac{t}{\eta}}$$

RRS diagram

$$S_v = \frac{6{,}39 \cdot f}{d'} \cdot e^{\frac{1{,}795}{n^2}}$$

$$S_m = \frac{S_V}{\rho}$$

$$\Sigma \Delta R = 100 \cdot \exp \left(-\frac{x}{d'} \right)^n$$

MLETJE/SEJALNA ANALIZA
parametra n in d' iz RRS porazdelitve

$$n = \frac{\ln\left(\dfrac{\ln\dfrac{100}{\sum \Delta R_2}}{\ln\dfrac{100}{\sum \Delta R_1}}\right)}{\ln\dfrac{x_2}{x_1}}$$

$$n \cdot \ln x - n \cdot \ln d' = \ln\left(\ln\frac{100}{\sum \Delta R}\right) \Rightarrow \ln d' = \frac{n \cdot \ln x - \ln\left(\ln\dfrac{100}{\sum \Delta R}\right)}{n}$$

parametra GGS porazdelitve

$$p = \frac{\log\left(\dfrac{Q_r(x_2)}{Q_r(x_1)}\right)}{\log\dfrac{x_2}{x_1}}$$

$$d_{\max} = \frac{x_i}{\left(\dfrac{Q(x_i)}{100}\right)^{\frac{1}{p}}}$$

zgoščevalnik

$$c_o H_o = c_g H_g$$

$$G_{KT} = c_o H_o / t_c \_ spec.obr.$$

$$Q_g = Q_v \cdot c_o / c_g$$

$$S = c_g Q_g / G_{KT}$$

$$v_p = Q_p / S$$