Concentradores

Calculo de extracción Solido-líquido. (Procedimiento)

1. **Cálculo de X_M**

$$X_{SM} = \frac{(L_0 X_{S0} + V_2 Y_{S2})}{(L_0 + V_2)}$$

$$X_{AM} = \frac{(L_0 X_{A0} + V_2 Y_{A2})}{(L_0 + V_2)}$$

$$X_M = [X_{SM}, X_{AM}]$$

2. **Cálculo de X_1**

$$\frac{X_{SM}}{X_{AM}} X_{A1} = X_S - X_{A1}$$

$$X_S - X_{A1} - X_{SM}/X_{AM} X_{A1}$$

$$-X_S = -X_{A1}(1 + \frac{X_{SM}}{X_{AM}})$$

$$X_{A1} = \frac{X_S}{(1 + X_{SM}/X_{AM})}$$

$$X_{S1} = 1 - X_B - X_{A1}$$

$$X_1 = [X_{A1}, X_{S1}]$$

3. **Cálculo de Y_1**

$$\frac{X_{SM}}{X_{AM}} Y_{A1} = Y_S - \frac{Y_{S2}}{X_{A0}} Y_{A1}$$

$$(\frac{Y_{S2}}{X_{A0}} + \frac{X_{SM}}{X_{AM}}) Y_{A1} = Y_S$$

$$Y_{A1} = \frac{Y_S}{(\frac{Y_{S2}}{X_{A0}} + \frac{X_{SM}}{X_{AM}})}$$

$$Y_{S1} = 1 - Y_{A1}$$

$$Y_1 = [Y_{A1}, Y_{S1}]$$