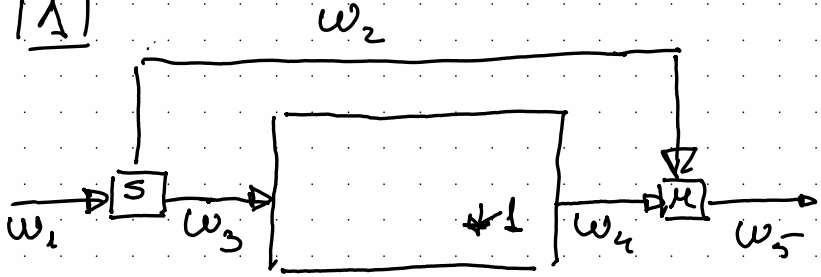
A



$w_1 = 1\ L/s$ $\begin{cases} x_{Sr\,1} = 4'85 \cdot 10^{-4}\ g/L \\ x_{Ca\,1} = 1\ meq/L \end{cases}$ $w_3 = w_4$

B

#1 Separa el 97% del Ca y todo el Sr

$w_4 = $ — $\begin{cases} x_{Sr\,4} = 0 \\ x_{Ca\,4} = 0'03\ meq\,Ca/L \end{cases}$

$w_5 = 1\ L/s$ $\begin{cases} x_{Sr\,5} = ? \\ x_{Ca\,5} = 0'05\ meq\,Ca/L \end{cases}$

C Balanza las unidades

D B al proceso
E B al reactor
} NO se puede

$$w_4 + w_2 = 1 \quad (1)$$

F $x_{34} \cdot w_4 + x_{12} w_2 = x_{15} \cdot w_5$

$$1 \cdot w_2 + 0'03 \cdot w_4 = 0'05 \cdot 1 \quad (2)$$

Sabiendo que $w_3 = w_4$

G Aplicando a (1)

$$1 \cdot w_3 = w_2$$

Aplicando a (2)

$$1 - w_3 + 0'03 \cdot w_3 = 0'05$$

$$w_3 = 0'98 \text{ L/s} \; ; \; w_2 = 0'02 \text{ L/s}$$

H

$$x_{Sr4} \cdot w_4 + x_{Sr2} \cdot w_2 = x_{Sr5} \cdot w_5$$

$$0 \cdot w_4 + (4'85 \cdot 10^{-4} \cdot 0'02) = x_{Sr5} \cdot 1$$

I

$$x_{Sr5} = 9'7 \cdot 10^{-6} \text{ g/L}$$