

Solución ejercicio clase

Felipe's Triana

Andrés Becal

Santiago Lagón

$$\frac{P_1}{\rho} + \frac{\bar{v}_1^2}{2g} + z_1 = \frac{P_2}{\rho} + \frac{\bar{v}_2^2}{2g} + z_2 + h_L$$

$$P_2 = P_1 + z_1 \rho - h_L \rho$$

Se asumen valores z y se intenta por valor NPSh

Procedimiento

$$P_{2,1} = 101293 \text{ Pa} + 3 \text{ m} \cdot \left(1 \cdot 999,1 \frac{\text{Kg}}{\text{m}^3} \right) - 1,828 \text{ m} \cdot \left(1 \cdot 999,1 \frac{\text{Kg}}{\text{m}^3} \right)$$
$$= 102,464 \text{ KPa}$$

$$P_{2,2} = 105,461 \text{ KPa}$$

$$P_{2,3} = 108,458 \text{ KPa}$$

$$u = 111,456 \text{ KPa}$$

$$= 11$$

Ecuación Específica

$$NPSH = \frac{P_{atm} - P_v}{\gamma} + z - h_L$$

$$z = NPSH \cdot \gamma - P_{atm} + P_v + h_L$$

$$z_1 = 37 \cdot (1 \cdot 999,1) - 101329 + 3169 \quad b =$$

$$z_2 = 32 \cdot (0,998 \cdot 965,5) - 101329 + 3169 \quad b =$$

Fillocaris Triana

Andres Barahona

Santiago Baya