

Exposición de Velocidad de Fluído y
reacciones de continuidad

① $Q = 192 \text{ m}^3/\text{h} = 0.0533 \text{ m}^3/\text{s}$

$v = 6 \text{ m/s}$ $A = d^2$

$\therefore A = \frac{Q}{v} = \frac{0.0533}{6} = 0.00888 \text{ m}^2$

② $Q = d^2 \cdot L/\text{mm}$

$d = 1.25 \text{ pulgadas}$

$1.25 - 0.065 = 1.185 \text{ pul}$

$\text{Esp} = 0.065''$

$A = 7.1753 \times 10^{-4} \text{ m}^2$

$v = 3 \text{ m/s}$

$\therefore Q = 0.01138(3) = 180 \text{ lb/min}$

③ $U_{S1} = 50 \text{ mm}$

$U_{S2} = 100 \text{ mm}$

$v_1 = 8 \text{ m/s}$

$v_2 = d^2$

$Q = d^2$

$M = d^2$

~~$\mu = 1.996 \text{ kg/m}^3$~~

$\mu = 978 \text{ kg/m}^3$

$A_1 = 1.963 \times 10^{-3} \text{ m}^2$

$A_2 = 7.853 \times 10^{-3} \text{ m}^2$

$v_2 = 2 \text{ m/s}$

$Q = 15.7 \times 10^{-3} \text{ m}^3/\text{s}$

$M = 15.36 \text{ kg/s}$