

Equ

$$P = \dot{m} \times c_p \times \Delta T$$

$\frac{Q_w}{\text{kg/s}} \quad 4,185 \frac{\text{J}}{\text{K} \cdot \text{kg}} \quad \text{K}$

$$\frac{P}{Q_w} = \frac{Q_v}{\text{m}^3/\text{s}} \times \left(\rho \times c_p \right) \times \frac{\Delta T}{\text{K}}$$

$\frac{\text{kg}}{\text{m}^3} \quad 4,185 \frac{\text{J}}{\text{K} \cdot \text{kg}}$

$$\rho \times c_p = \frac{1000 \times 4,185}{3600} \frac{\text{J Wh}}{\text{kg} \cdot \text{K}}$$

$$= 1,16 \frac{\text{J Wh}}{\text{kg} \cdot \text{K}}$$

$$\frac{P}{Q_w} = \frac{Q_v}{\text{m}^3/\text{s}} \times 1,16 \times \frac{\Delta T}{\text{K}}$$

$$= 3600 \frac{Q_v}{\text{m}^3/\text{h}} \times 1,16 \times \frac{\Delta T}{\text{K}}$$

