

Fórmulas complementarias

Coeficiente de dilatación

$$\alpha = \frac{1}{V} \left(\frac{\partial V}{\partial T} \right)$$

Sólidos

$$\alpha_L = \frac{d \ln V}{dT} \approx \frac{1}{L} \left(\frac{\Delta L}{\Delta T} \right)$$

$$\alpha_V \approx 3\alpha_L$$

$$\alpha_V = \frac{d \ln V}{dT} \approx \frac{1}{V} \left(\frac{\Delta V}{\Delta T} \right)$$

Procesos térmicos

Adiabático

$$\Delta W = -\Delta U$$

Socorico

$$\Delta Q = \Delta U$$

Sotermico

$$\Delta Q = \Delta W$$