

Ejercicio n° 15. 71.

Datos

$$m = 1000 \text{ kg}$$

$$Q = 48 \text{ kcal}$$

$$v_0 = ?$$

$$Q = E_c = \frac{1}{2} m v^2 \Rightarrow v = \sqrt{\frac{2 E_c}{m}} = \sqrt{\frac{2 \cdot 200648}{1000}} = 20 \frac{\text{m}}{\text{s}}$$

$$48 \text{ kcal} \cdot \frac{10^3 \text{ cal}}{1 \text{ kcal}} \cdot \frac{4.18 \text{ J}}{1 \text{ cal}} = 200640 \text{ J}$$