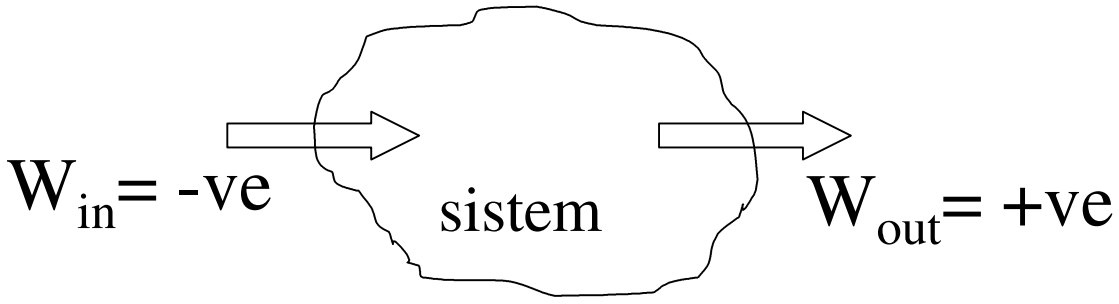
<u>KERJA</u>, W [J, kJ]

<u>Kerja</u> – Tenaga yg. *sedang melintasi* sempadan *<u>selain haba</u>* (elektrik, kipas, syaf, omboh yg bergerak, etc.)

-Bukan sifat (dikaitkan dgn *proses*)
-Mod *pemindahan* tenaga



$$w = \frac{W}{m} \quad \left[\frac{\text{kJ}}{\text{kg}}\right]$$

$$\frac{W}{t} = \dot{W} \quad \left[\frac{\text{kJ}}{\text{s}} = \text{kW}\right] \quad = \text{kadar kerja} = \text{kuasa}$$

$$\int_1^2 \delta W = W_{12}$$

bergantung kpd. laluan

Jenis Kerja

Kerja

- Elektrik $W_{el} = \int_1^2 VIdt$
- Mekanikal $W = \int_1^2 F \cdot ds$
  - Sempadan $W_b = \int_1^2 p \cdot dV$
  - Graviti $W_g = mg(z_2 - z_1)$
  - Cepatan $W = \frac{1}{2} m(\vec{V}_2^2 - \vec{V}_1^2)$
  - Pusingan Syaf $W = 2\pi n \tau$
  - Spring $W = \frac{1}{2} k(x_2^2 - x_1^2)$