$\because W_{iso}$ is -ive $\Rightarrow$ work is done on the system.

2. **Isobaric Process:** $P = \text{constant} \Rightarrow \frac{V}{T} = \text{constant}$

$PV = \mu RT \Rightarrow \frac{V}{T} = \frac{\mu R}{P} = \text{const.}$

by Eq (1) $\quad W_{isobaric} = \int_{V_i}^{V_f} P\,dV$

$= P\int_{V_i}^{V_f} dV$

$= P[V]_{V_i}^{V_f}$

$\left\{ \int_a^b dx = \int_a^b x^0\,dx = \left[\frac{x^1}{1}\right]_a^b = [x]_a^b \right.$

$$\boxed{W_{isobaric} = P(V_f - V_i)} \quad -(5)$$

$V_f - V_i$ = change in volume

$W_{isobaric}$ = P x change in volume $\quad -(6)$

3. **Isochoric Process:** $V = \text{constant}$

change in volume $dV = 0$