

Thermodynamics 1st Law

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Overview:

- Terminologies: State functions & Processes
 - Review the 4 most common thermal processes $\left\{ \begin{array}{l} \text{Formula true for everything} \\ \text{Formula for ideal gas only} \end{array} \right.$
 - Calculation for thermal cycle, efficiency and COP
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1 Thermodynamics 1st Law

1.1 Terminologies in Thermodynamics

1.2 State Functions v.s. Non-State Functions

2 The 4 Most Common Processes

2.1 Isovolumetric Process (const. V)

2.2 Isobaric Process (const. P)

2.3 Isothermal Process (const. T)

2.4 Adiabatic Process ($\delta Q = 0$)

2.5 Summary

3 Solving Thermal Cycle

— The End —