

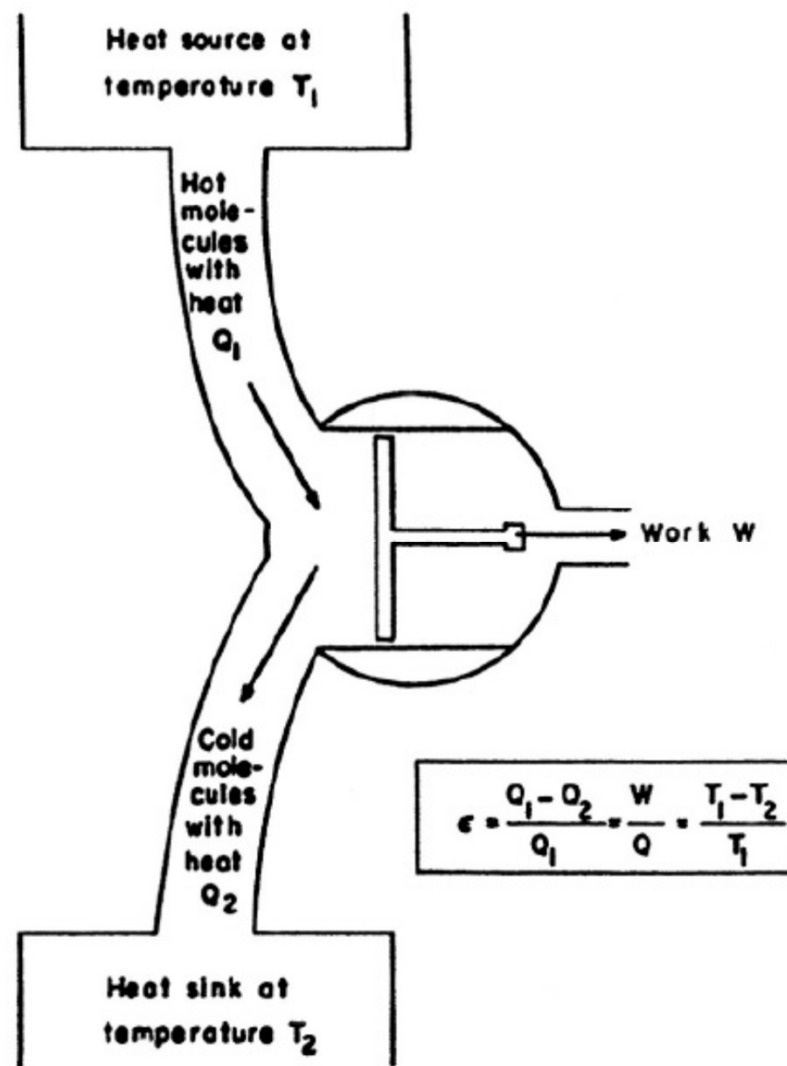
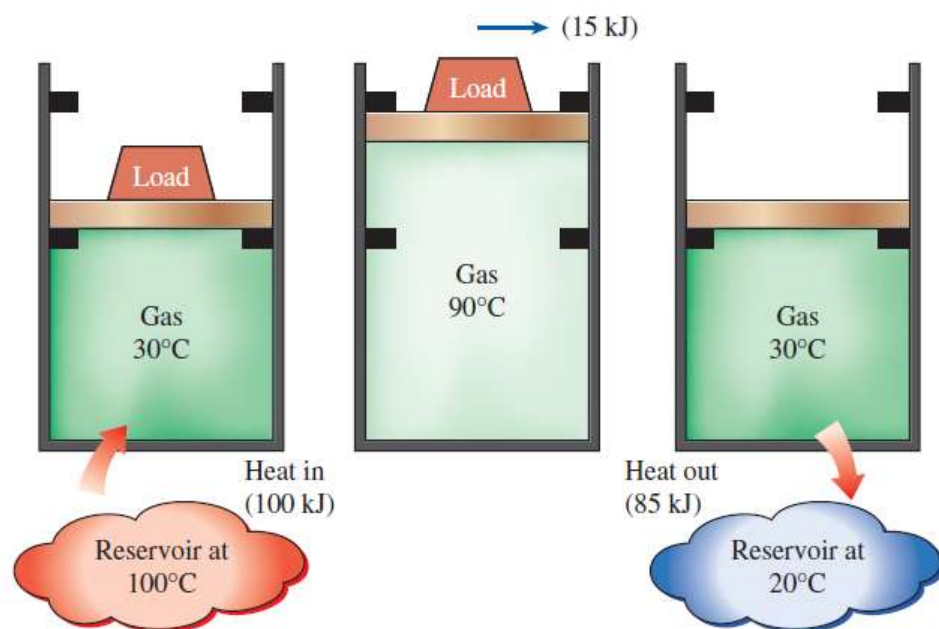
Second Law of TD by Kelvin-Planck

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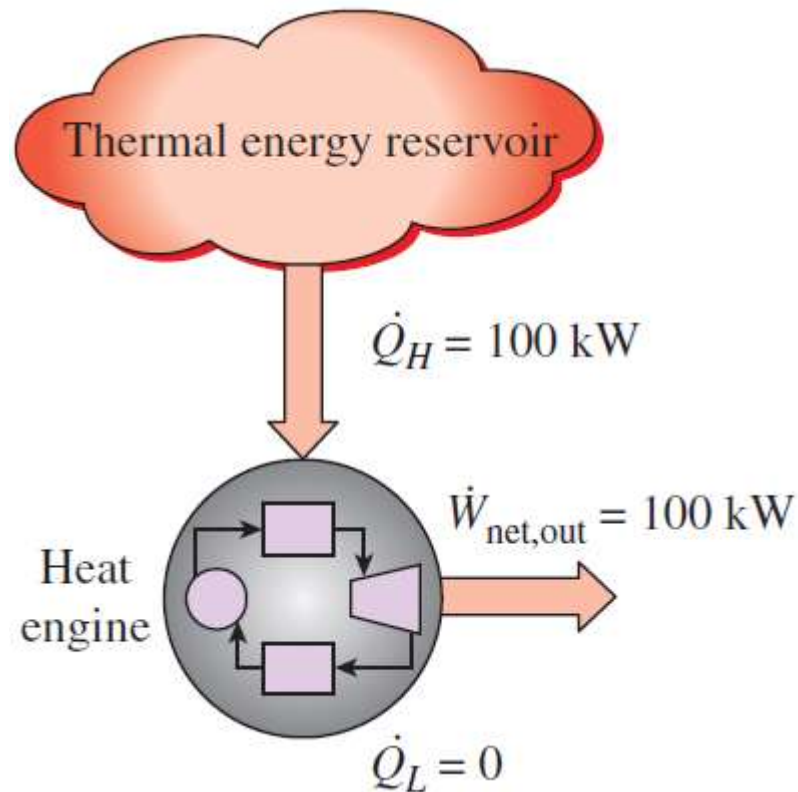
Previous lecture: Heat Engine, Heat \rightarrow Work conversion



- Impossibility of 100% efficiency is not due to friction & other losses

Kelvin-Planck statement of 2nd law of TD

“It is impossible for any device that operates on a cycle to receive heat from a single reservoir and produce a net amount of work”



What's next?

- Refrigerators and heat pumps leading the Clausius statement of 2nd law of TD