

Carnot's engine not a practical possibility:-

A Carnot's engine is not a practical possibility because

- (i) A Carnot's engine consists of a cylinder having perfectly non-conducting walls and perfectly conducting bottom. In it moves a perfectly non-conducting piston.
- (ii) The cylinder contains a perfect gas as a working substance.
- (iii) The source is a hot body at constant temperature T_1 K and Sink a cold body at constant temperature T_2 K. i.e. the source and Sink are large reservoirs of infinite heat capacity so that their temperature does not change during any transfer of heat to or from the cylinder.

iv) The reversible cyclic process occurring in the engine consists of a sequence of isothermal & adiabatic curves on a $p-v$ diagram.

All the above conditions are ideal and cannot be realized in practice. So, a Carnot's engine is only an ideal engine and is not a practical possibility.

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