— Quasistatic

* a quasistatic process is a sequence of equilibrium states.

- small changes are made slowly enough compared with thermal relaxation time such that a system can reach equilibrium.

- a process can be quasistatic from one point of view. but not from another.

— Reversible

* a thermodynamically reversible process is defined as a process such that a system can be restored to its initial state without any net change in the rest of the universe.

* the direction of the process can be reversed by an infinitesimal change in the conditions.

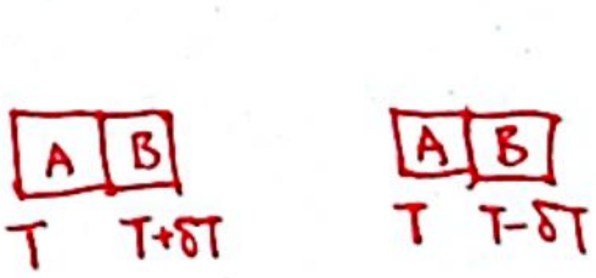
No hysteresis.

eg. 

$F = pA + \varepsilon$. piston goes down

$F = pA - \varepsilon$ piston goes up.

Tiny change. process reversed.

eg. 

Energy flow reversed.

NB: if a process is thermodynamically irreversible, it doesn't mean it's irreversible in the daily sense.

eg. sliding a book on a desk.