

Quasi-isothermal process

@wikipedia

Thermodynamic process in which the temperature $T(\mathbf{r})$ is varying in space but its variation in time is much slower than other dynamic processes so that temperature can be considered as constant at any spatial location \mathbf{r} :

$$(1) \quad T(\mathbf{r}, t) = T(\mathbf{r}) \Leftrightarrow \frac{\partial T}{\partial t} = 0$$

In specific case when the temperature $T(\mathbf{r})$ is not varying in space: $T(\mathbf{r}) = T = \text{const}$ the Quasi-isothermal process is called Isothermal.

See also

Natural Science / Physics / Thermodynamics / Thermodynamic process

[Isothermal process]