

$$\boxed{B_{iso} = P} \quad \text{--- (10)}$$

Bulk Mod. of gas in Isothermal Process is equal to the pressure of the gas.

For adiabatic Process

$$\begin{aligned} B_{adia} &= -V \cdot \left(\frac{dP}{dV} \right)_{adia} \\ &= -V \left(-\gamma \frac{P}{V} \right) \end{aligned}$$

$$\boxed{B_{adia} = \gamma P} \quad \text{--- (11)}$$

Note: In isobaric Process : $dP = 0$ ($P = \text{const}$)

$$B_{isobaric} = 0$$

In isochoric Process : $V = \text{const}$

$$dV = 0$$

$$B_{isochoric} = -V \left(\frac{dP}{dV} \right) = \infty$$