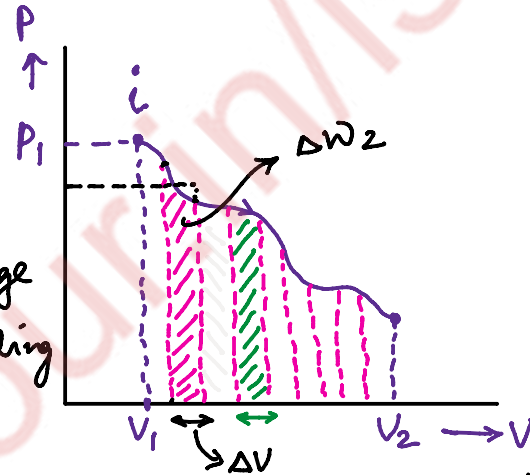


(b) When $P \neq \text{constant}$:

area of each vertical strip = work done by the system for the small change in volume corresponding to that strip



Total area between the graph and the volume axis = sum of area of all these vertical strips

$$= \Delta W_1 + \Delta W_2 + \Delta W_3 + \Delta W_4 + \dots$$

$$= \underline{\underline{\text{Total work done.}}}$$