

## • CASE #2

C.V., multi stream, SSSF, adiabatic process,  
where  $\Delta KE = \Delta PE = 0$

(with  $\dot{Q}_{c.v.} = 0$  b/c adiabatic)

$$-\dot{W}_{12} = \sum_e \dot{m}_e h_e - \sum_i \dot{m}_i h_i$$

if work is zero

$$\sum_e \dot{m}_e h_e = \sum_i \dot{m}_i h_i$$

Remark: for ideal gas when  $C_p$  can be seen  
constant.

$$\Delta h = C_p \Delta T$$