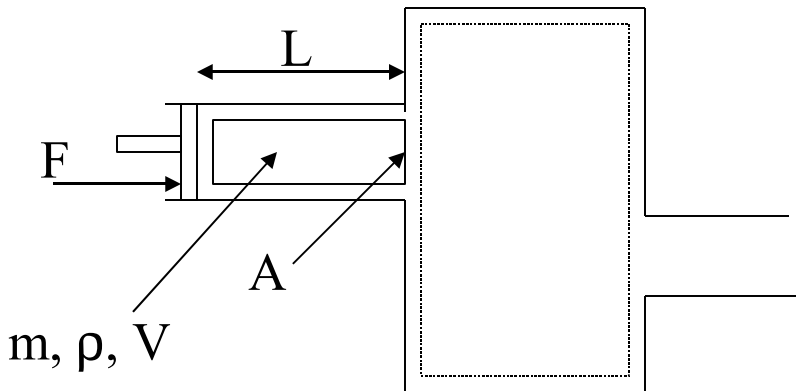


Flow Work

For an amount of mass to cross a boundary, it needs a force (work) to push it; called

Flow Work , w_{flow}



The force that pushes the fluid; $F = PA$

Work that is involved;

$$W = \int F \cdot ds$$

$$W_{\text{flow}} = F \cdot L$$

$$= PA \cdot L$$

$$= PV$$

$$w_{\text{flow}} = pv$$