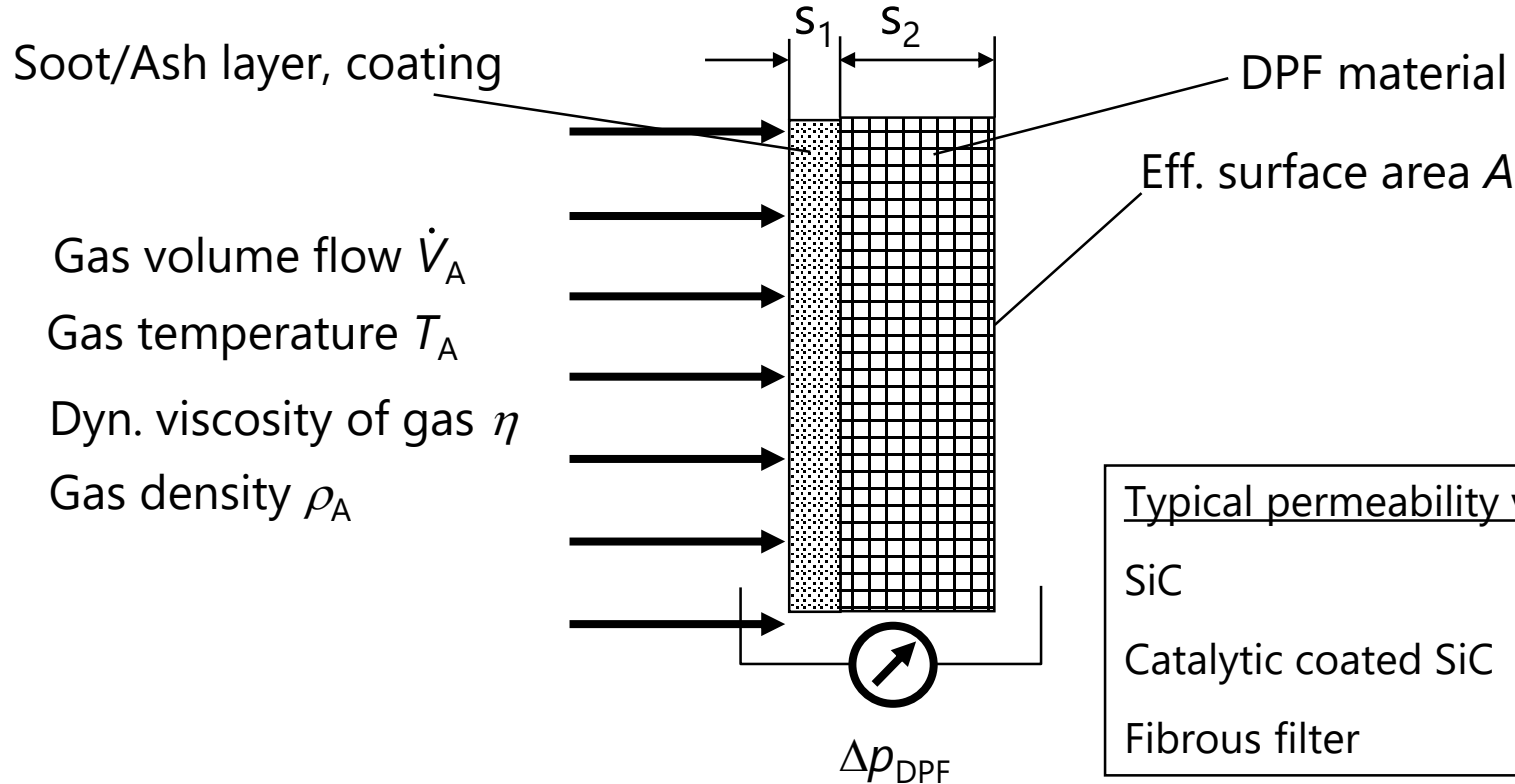


$$\Delta p_{\text{DPF}} = (w_{\text{Wall}} \cdot \eta \cdot s) / \varepsilon$$

Darcy's law

$$\varepsilon = (w_{\text{Wall}} \cdot \eta \cdot s) / \Delta p_{\text{DPF}}$$

Permeability  $\varepsilon$



Typical permeability values:

SiC  $\sim 5.4 \times 10^{-13} \text{ m}^2$

Catalytic coated SiC  $\sim 2.6 \times 10^{-13} \text{ m}^2$

Fibrous filter  $\sim 6.5 \times 10^{-10} \text{ m}^2$