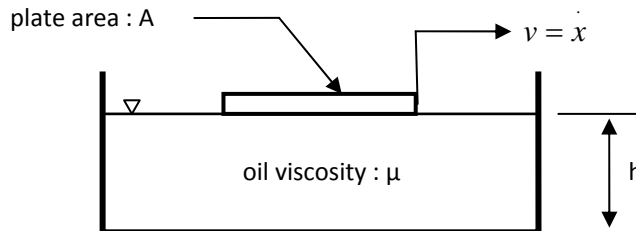


ME 302
Theory of Machines II

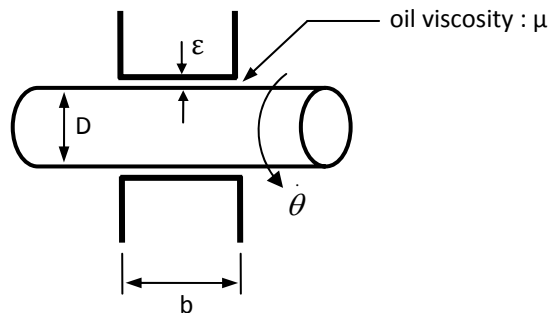
Viscous Friction Coefficients

1) Viscous Friction in Sliding Surfaces



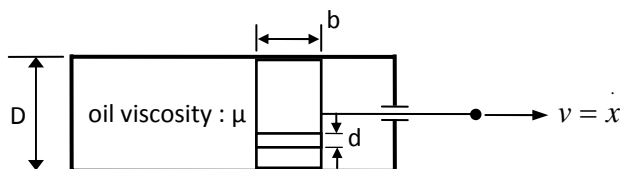
$$c = \frac{\mu \cdot A}{h}$$

2) Viscous Friction in Journal Bearings



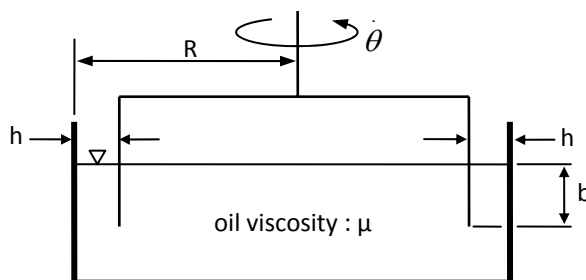
$$c_t = \frac{\pi \cdot D^3 \cdot b \cdot \mu}{4 \cdot \epsilon}$$

3) Translational Dashpot



$$c = 8 \cdot \pi \cdot b \cdot \mu \cdot \left[\left(\frac{D}{d} \right)^2 - 1 \right]^2$$

4) Torsional Dashpot



$$c_t = \frac{2 \cdot \pi \cdot \mu \cdot R^3 \cdot b}{h}$$