

Topic

# Bending Stresses

Governing Equations and Assumptions

Equilibrium

$$\sigma = - \frac{My}{I}$$

Max & mins  $\frac{dM}{dx} = 0$

Process

- ① Create the Shear and Bending Moment Diagram
- ② Calculate the bending stresses
  - => Positive Bending
  - => Negative Bending
  - => Moment of Inertia

> Four stresses
- ③ Determine the maximum tensile and Compressive stresses