



# Mechanics of Materials II:

## Thin-Walled Pressure Vessels and Torsion

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## Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion

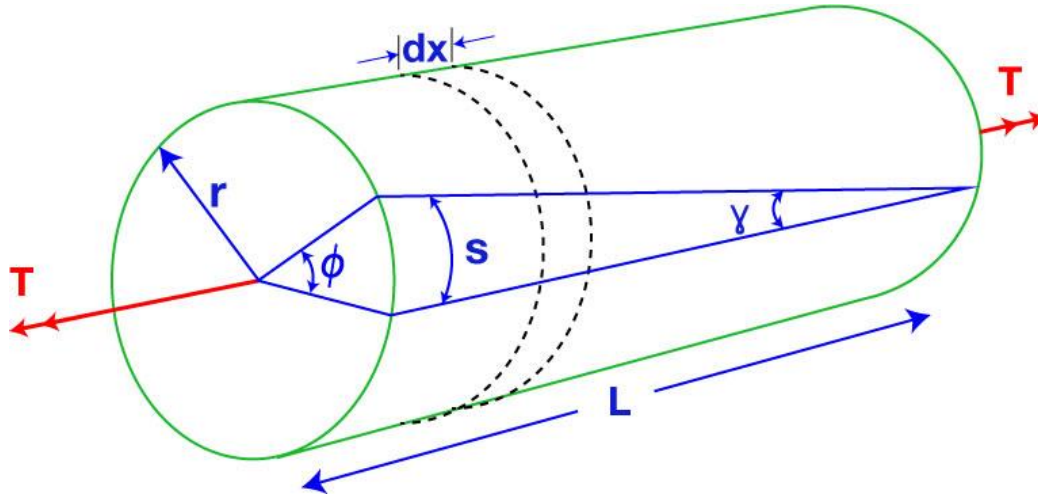
- ✓ Thin-Walled Pressure Vessels - Internal Pressure
- ☐ Torsional Shearing Stress and Strain
- ☐ Elastic Torsion Formula
- ☐ Elastic Torsion of Straight, Cylindrical Shafts
- ☐ Inelastic Torsion of Straight, Cylindrical Shafts
- ☐ Statically Indeterminate Torsion Members

## Module 9 Learning Outcomes

- Define torsional loading of engineering structures
- Give examples of real world torsional engineering applications

# Torsional Loading of Engineering Structures

Torsion is the twisting of an object due to an applied torque or moment. The units for torsion are N-m or ft-lb.



# Torsional Loading of Engineering Structures

**Examples:** Torsion bar suspension systems



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# Torsional Loading of Engineering Structures

**Examples:** Torsion bar suspension systems



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# Torsional Loading of Engineering Structures

**Examples:** Turbines



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# Torsional Loading of Engineering Structures

**Examples:** Bone Spiral Fractures



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