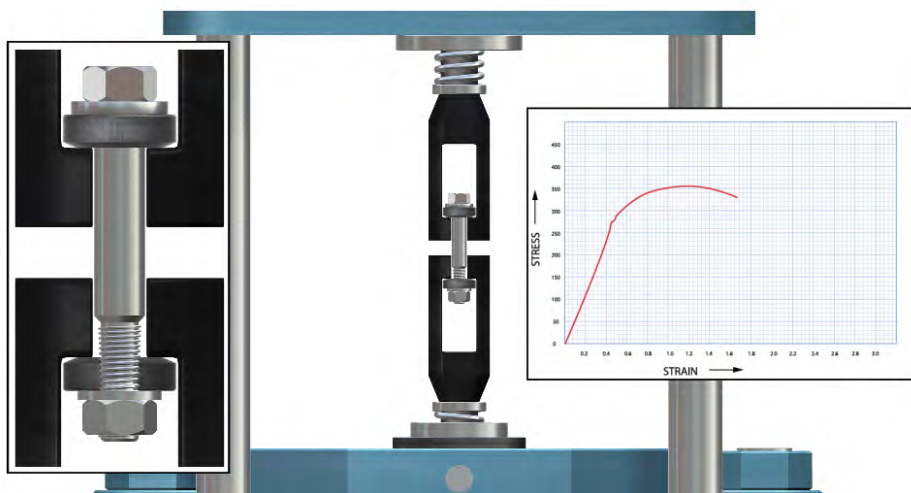


FASTENERS: THREADED FASTENER TESTING AND DEFECTS

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

Fasteners: Threaded Fastener Testing and Defects introduces learners to both the mechanical properties of threaded fasteners and failure modes that might occur in service. The way in which threaded fasteners perform in service is the most crucial requirement for both manufacturers and purchasers of threaded fasteners, especially in safety-critical applications.

Credit Hours **2**

Learning Objectives

- 💡 Identify the mechanical properties that are most relevant to threaded fasteners.
- 💡 Recall the prominent failure modes that threaded fasteners might encounter in service.

Table of Contents

I. Mechanical Properties

- Yield Strength
- Tensile Strength
- Proof Load
- Hardness
- Hardenability
- Shear Strength
- Torque

II. Failure Modes

- Overloading
- Underloading
- Liquid Metal Embrittlement (LME)
- Improper Fastener Length
- Surface Discontinuities
 - o Cracks
 - o Bursts
 - o Seams

