

STEEL FUNDAMENTALS [2ND ED.]

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

Steel Fundamentals examines the various steel properties, the chemical composition of steel, the four different types of strengthening mechanisms, along with the different steel phases and microstructures, as well as the different steel grades and classifications of both American and European standards. Presented in THORS' visual and interactive format, this course is relevant for learners who are new to the industry, as well as experienced learners that require a deeper knowledge of steel properties, microstructure, and grades.

Credit Hours **2.5**

Learning Objectives

- Understand the different types of steel and various steel properties.
- Demonstrate an understanding of the chemical composition, microstructure, and phases of steel.
- Display an understanding of the various strengthening mechanisms of steel.
- Identify the different types of steels and the steel grades for both European and American standards.

Table of Contents

I. Steel Basics

- Types of Steel
- Forms of Steel
- Mechanical Properties of Steel

II. Chemical Composition of Steel

- Alloying Elements in Steel
- Microstructure
- Strengthening Mechanisms
- Ductile and Brittle Steel
- Phases in Steel

II. Steel Grades

- Steel Grading Systems
- Steel Classification

