

Description

This 1-hour online seminar will introduce you to the basics of specifying, designing and inspecting hot-dip galvanized steel with an emphasis on its use in the mining industry. The basic hot-dip galvanized coating characteristics, corrosion resistance, durability, longevity, versatility, sustainability, life-cycle cost and aesthetics will be covered. This course will examine the hot-dip galvanizing process as well as other zinc coatings and detail the intrinsic benefits hot-dip galvanized steel provides. The best design practices to produce high-quality hot-dip galvanized coatings will be introduced along with the most commonly used industry specifications. The seminar will also investigate some real-world applications of hot-dip galvanized steel used in the mining industry.

Learning Objectives

- Identify various markets within the mining industry and their inherent corrosion issues.
- Determine how hot-dip galvanizing can protect against steel corrosion in mining applications.
- Understand how hot-dip galvanized steel can significantly reduce economic and environmental costs over the life of a mining project.
- Introduce common industry standard specifications and best design practices to produce high-quality hot-dip galvanized coatings.

I. Hot-dip Galvanizing & Other Zinc Coatings

- a. Overview of Zinc Coatings
- b. Hot-Dip Galvanizing Process

II. HDG Coating Benefits

- a. Corrosion Protection
- b. Durability
- c. Longevity in a Variety of Environments

III. Understanding Hot-Dip Galvanized Steel's Sustainability

- a. Environmental Advantages
- b. Life-Cycle Assessment (LCA)
- c. Economic Advantages
 - i. Life-cycle Cost Comparison of Steel Coatings

IV. Specification & Design

- a. ASTM Specifications
- b. Designing for High Quality Hot-Dip Galvanized Coatings

V. Hot-Dip Galvanizing in Mining Case Studies

VI. Summary