



American Galvanizers Association

Galvanize It! Seminar Program Outline



1-Hour Core Seminar

- I. Introduction and Learning Objectives**
- II. Tour of the City: The Corrosion Problem**
- III. Hot-Dip Galvanizing (HDG): The Solution**
 - a. Hot-Dip Galvanizing Process
 - i. Surface Preparation
 - ii. Galvanizing
 - iii. Inspection
- IV. Hot-Dip Galvanized Coating Characteristics**
 - a. Metallurgical Bond
 - b. Complete Coverage
 - c. Barrier & Cathodic Protection
 - d. Zinc Patina
 - e. Time to First Maintenance
 - f. Sustainability
 - g. Additional Benefits
- V. Other Zinc Coatings**
- VI. Design & Fabrication**
 - a. Suitable Materials
 - b. Steel Chemistry
 - c. Venting & Drainage
 - d. Material Handling
 - e. Appearance & Weathering
- VII. Specifications & Inspection**
- VIII. Duplex Systems: Painting/Powder Coating Hot-Dip Galvanized Steel**
 - a. Why Paint or Powder Coat
 - b. Surface Conditions/Preparation
 - c. Synergistic Effect
- IX. Costs Less, Lasts Longer**
 - a. Initial Cost
 - b. Life-Cycle Cost
- X. Galvanized Steel Projects**



American Galvanizers Association

Galvanize It! Seminar Program Outline



2-Hour Core Seminar

- I. Introduction and Learning Objectives**
- II. Tour of the City: The Corrosion Problem**
- III. The Corrosion Process**
- IV. Hot-Dip Galvanizing (HDG): The Solution**
 - a. History of Galvanizing
 - b. Hot-Dip Galvanizing Process
 - i. Surface Preparation
 - ii. Galvanizing
 - iii. Inspection
- V. Hot-Dip Galvanized Coating Characteristics**
 - a. Metallurgical Bond
 - b. Steel Chemistry
 - c. Complete Coverage
 - d. Sustainability
 - e. Additional Benefits
 - f. Barrier & Cathodic Protection
 - g. Zinc Patina
- VI. Hot-Dip Galvanized Steel Performance**
 - a. Time to First Maintenance (atmosphere)
 - b. HDG in Soil
 - c. HDG in Water
- VII. Other Zinc Coatings**
- VIII. Design & Fabrication**
 - a. Suitable Materials
 - b. Cold-working
 - c. Welding
 - d. Venting & Drainage
 - e. Material Handling
 - f. Marking & Masking
- IX. Specifications & Inspection**
 - a. ASTM & Other Specifications
 - b. Inspection
 - i. Visual
 - ii. Coating Thickness
 - iii. Adherence
 - c. Proper Storage & Weathering
- X. Duplex Systems: Painting/Powder Coating Hot-Dip Galvanized Steel**
 - a. Why Paint or Powder Coat
 - b. Surface Conditions/Preparation
 - c. Synergistic Effect
- XI. Costs Less, Lasts Longer**
 - a. Initial Cost
 - b. Life-Cycle Cost
- XII. Galvanized Steel Projects**



American Galvanizers Association *Galvanize It!* Seminar Program Outline



4-Hour Core Seminar

- I. **Introduction and Learning Objectives**
- II. **Tour of the City: The Corrosion Problem**
- III. **The Corrosion Process**
- IV. **Hot-Dip Galvanizing (HDG): The Solution**
 - a. History of Galvanizing
 - b. Hot-Dip Galvanizing Process
 - i. Surface Preparation
 - ii. Galvanizing
 - iii. Inspection
- V. **Hot-Dip Galvanized Coating Characteristics**
 - a. Metallurgical Bond
 - b. Steel Chemistry
 - c. Complete Coverage
 - d. Sustainability
 - e. Additional Benefits
 - f. Barrier & Cathodic Protection
 - g. Zinc Patina
- VI. **Hot-Dip Galvanized Steel Performance**
 - a. Time to First Maintenance (atmosphere)
 - b. HDG in Soil
 - c. HDG in Water
- VII. **What is Zinc?**
- VIII. **Other Zinc Coatings**
- IX. **Design & Fabrication**
 - a. Suitable Materials
 - b. Cold-working
 - c. Welding
 - d. Venting & Drainage
 - e. Material Handling
 - f. Marking & Masking
- X. **Specifications & Inspection**
 - a. ASTM & Other Specifications
 - b. Inspection
 - i. Visual
 - ii. Coating Thickness
 - iii. Adherence
 - c. Proper Storage & Weathering
- XI. **Duplex Systems: Painting/Powder Coating Hot-Dip Galvanized Steel**
 - a. Why Paint or Powder Coat
 - b. Surface Conditions/Preparation
 - c. Synergistic Effect
 - d. Duplex Projects
- XII. **Galvanized Rebar**
 - a. Corrosion in Concrete
 - b. Zinc Corrosion Products & Mechanisms
 - c. Accelerated Testing vs. Real-World Performance
 - d. Benefits of HDG Rebar
 - e. Cost Comparison
 - f. HDG Rebar Projects
- XIII. **Costs Less, Lasts Longer**
 - a. Initial Cost
 - b. Life-Cycle Cost
- XIV. **Galvanized Steel Projects**