

## Insulation Installation & Repair

This five-day course is designed to provide participants with the basic knowledge and skills to safely complete pipe insulation repairs, removal and installation at the job site. The course provides both theory and practical application. The course is designed for 8-10 participants.

### I. Introduction

- Making Accurate Cuts
- Install Single-Layer and Double-Layer Pipe Insulation

### II. Theory of Heat Transfer and Moisture Effects

- Methods of Heat Transfer
- Moisture Migration
- Application of Various Types of Insulation

### III. Tools of the Trade

- Insulation Tools
- Proper Use and Care
- Safety Procedures

### IV. Material Handling and Storage

- Receiving
- Stacking
- Storage
- Movement

### V. Pipe Characteristics

- Types
- Sizes
- Uses
- Relationship of Pipe Size and Insulation Size

### VI. Installing Calcium Silicate Pipe Insulation

- Safe Handling
- Storage

### VII. Installing Flexible Foam Insulation

- Proper Tool Use
- Procedures for Installing

### VIII. Installing Fiberglass Pipe Insulation

- Insulation Characteristics
- Sizing Requirements
- Characteristics of ASJ Jacketing

### IX. Installing Rigid Foam Insulation

- Proper Tool Use
- Insulation Handling and Storage
- Measuring, Cutting, Installing, and Sealing
- Cryogenic Installation
- Expansion Joints
- Contraction Joints
- Vapor Stops

## **X. Cement and Fabric Finishes and Mastics**

- Proper Use of Finishing Tools
- Cleanup and Protection Procedures
- Limitations of Cements, Fabric Finishes, and Mastics

## **XI. Adhesives and Their Uses**

- Identification
- Application
- Uses

## **XII. Sheet Metal Lagging**

- Sheet Metal Tools Identification and Application
- Fabrication and Installation Methods
- Flashing and Sealing Techniques