

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Optional Requirements for Interim Credentials for Residential Sprinkler Fitter

Level 1 1,700 – 2,000 Hours OJL and 1st Year RI

- OSHA 10- or 30-Hour Course – Smart Mark is an OSHA approved safety and health training program. It is a standardized and intensive program that was developed in 1998 by the Construction Industry Partnership (CIP) that prepares construction industry workers to identify hazards and prevent on-the-job accidents.

- First Aid/CPR – The student will learn basic life support, which includes Cardiopulmonary Resuscitation, Automated External Defibrillation and related subjects such as initial care for Angina, Stroke and Foreign Body Airway Obstruction. The basic first aid portion includes procedures for emergency moving of the injured, wounds/bleeding, traumatic shock, fractures, burns with special emphasis on accidental electrical contact, eye injuries, allergic reactions, seizures, drug overdoses, temperature-related problems and many other job related emergencies.

- Confined Space – This training is a combination of OSHA’s 2260 three-day classroom-based confined space course on OSHA’s General Industry Standard with CPWR’s two-day hands-on simulated entry training. The OSHA 2260 course is designed to direct students to first determine if a space is a confined space, then to properly classify each confined space as either permit-required or a non-permit space. The course also allows students to determine which options are effective at protecting workers entering permit spaces. Topics include legal issues; permit programs, ventilation and rescue. CPWR’s hands-on training includes air-monitoring, ventilation, supplied-air respiral (SARs), self-contained breathing apparatus (SCBAs) entry procedures, retrieval and other aspects of permit-required confined space entry.

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA -Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

- Forklift Certification – Upon successful completion of this course, the member will be able to differentiate the different types of forklifts and powered industrial equipment, understand materials handling techniques, understand operating techniques, determine hazards associated with powered industrial equipment and implement and maintain a forklift/powered industrial equipment safety program. The student will take a comprehensive online exam at the end of the course. A score of 80% is required to receive certification.

Level 2 3,400 – 6,000 Hours OJL and 2nd and 3rd Year RI

- Backflow Prevention Certification – This course presents guidelines for the acceptable practices of testing, annual inspection, and the repair of backflow prevention assemblies used in cross-connection control programs. Course materials include information needed for identifying cross-connections, understanding how backflows occur, and the dangers they present, methods used to control backflows and recommended applications for each type of backflow assembly, laws and liability, and hands-on testing and maintenance procedures for various assemblies. Students who successfully pass the voluntary certification exam administered at the conclusion of the course will be certified as Backflow Prevention Testers.

The apprentice must complete each level of the aforementioned requirements and certifications to be eligible to receive an Interim Credential Certification from the United States Department of Labor's, Office of Apprenticeship. The Interim Credential will read the following for each level:

Level 1 – OSHA 10- or 30-Hour Course

 First Aid/CPR

 Confined Space

 Forklift Certification

Level 2 – Backflow Prevention Certification

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA -Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

The Certificate of Completion of Apprenticeship will be issued when the last year of apprenticeship is completed with all remaining requirements.

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA -Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

DESIGNATED TRAINING TOPICS

10-HOUR CONSTRUCTION INDUSTRY OUTREACH TRAINING PROGRAM

10-HOUR MANDATORY COURSE TOPICS

The 10-hour Construction Industry Outreach Training Program is intended to provide an entry-level construction worker's general awareness on recognizing and preventing hazards on a construction site. The training covers a variety of construction safety and health hazards which a worker may encounter at a construction site. OSHA recommends this training as an orientation to occupational safety and health. Workers must receive additional training on hazards specific to their job. Training should emphasize hazard identification, avoidance, control and prevention, not OSHA standards. Instructional time must be a minimum of 10 hours.

Breakdown of topics is as follows:

- **Mandatory – 4 hours:** Four topics to be taught, ranging from one-half to two hours each (Introduction to OSHA; OSHA Focus Four Hazards; Personal Protective and Lifesaving Equipment; Health Hazards in Construction)
- **Elective – 2 hours:** Choose at least two of these topics for a minimum of one-half hour each. Must cover at least two hours.
- **Optional – 4 hours:** Learn any other construction industry hazards or policies and/or expand on the mandatory or elective topics, minimum of one-half hour each

10-HOUR CONSTRUCTION INDUSTRY REQUIREMENT COURSE TOPICS

Introduction to OSHA – One Hour

- OSH Act, General Duty Clause, Employer and Employee Rights and Responsibilities, Whistleblower Rights, Recordkeeping basics
- Inspections, Citations, and Penalties
- General Safety and Health Provisions, Competent Person, Subpart C
- Value of Safety and Health
- OSHA Website, OSHA 800 Number and Available Resources

OSHA Focus Four Hazards – Two Hours (must cover all four areas – minimum 15 minutes on each)

- Fall Protection, Subpart M (e.g., floors, platform, roofs)
- Electrical, Subpart K (e.g., overhead power lines, power tools and cords, temporary wiring, grounding)
- Struck by (e.g., falling objects, trucks, cranes)
- Caught in/between (e.g., trench hazards, equipment)

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Personal Protection and Lifesaving Equipment – 30 Minutes, Subpart E

Health Hazards in Construction – 30 Minutes (e.g., noise, hazards communication and crystalline silica)

ELECTIVES

Choose at least two of the following topics – Must add up to at least two hours:
Minimum one-half hour each:

- Materials Handling, Storage, Use and Disposal, Subpart H
- Tools – Hand and Power, Subpart I
- Scaffolds, Subpart L
- Cranes, Derricks, Hoists, Elevators, and Conveyors, Subpart N
- Excavations, Subpart P
- Stairways and Ladders, Subpart X

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

DESIGNATED TRAINING TOPICS

30-HOUR CONSTRUCTION INDUSTRY OUTREACH TRAINING PROGRAM

30-HOUR MANDATORY COURSE TOPICS

The 30-Hour Construction Outreach Training Program is intended to provide a variety of training to worker's with some safety responsibility. Workers must receive additional training on hazards specific to their job. Training should emphasize hazard identification, avoidance, control and prevention, not OSHA standards. Instructional time must be a minimum of 30 hours. OSHA subpart references are provided for informational purposes; training should emphasize hazard awareness.

Breakdown of topics is as follows:

- **Mandatory – 12 hours:** Five topics to be taught, ranging from one to five hours each
- **Elective – 12 hours:** Choose at least six of these topics for a minimum of one-half hour each
- **Optional – 6 hours:** Learn any other construction industry hazards or policies and/or expand on the mandatory or elective topics, minimum of one-half hour each

30-Hour Construction Industry Course Topics

Introduction to OSHA – at least Two Hours

- OSH Act, General Duty Clause, Employer and Employee Rights and Responsibilities, Whistleblower Rights, Recordkeeping basics
- Inspections, Citations, and Penalties
- General Safety and Health Provisions, Competent Person, Subpart C
- Value of Safety and Health
- OSHA Website, OSHA 800 Number and Available Resources

OSHA Focus Four Hazards – at least Five Hours (must cover all four areas – minimum 30 minutes on each)

- Fall Protection, Subpart M (e.g., floors, platform, roofs)
- Electrical, Subpart K (e.g., overhead power lines, power tools and cords, temporary wiring, grounding)
- Struck by (e.g., falling objects, trucks, constructing masonry walls)
- Caught in/between (e.g., trench hazards, unguarded machinery, equipment)

Personal Protection and Lifesaving Equipment – at least Two Hours

Health Hazards in Construction – at least Two Hours

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeyworkers receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Stairways and Ladders, Subpart X – at least One Hour

ELECTIVES

30-Hour Elective Course Topics

Choose at least six of the following topics – Must add up to at least 12 hours:

- Fire Protection and Prevention, Subpart F
- Materials Handling, Storage, Use and Disposal, Subpart H
- Tools – Hand and Power, Subpart I
- Welding and Cutting, Subpart J
- Scaffolds, Subpart L
- Cranes, Derricks, Hoists, Elevators, and Conveyors, Subpart N
- Motor Vehicles, Mechanized Equipment and Marine Operations; Rollover Protective Structures and Overhead Protection; and Signs, Signals and Barricades, Subpart O, W, and G
- Excavations, Subpart P
- Concrete and Masonry Construction, Subpart Q
- Steel Erection, Subpart R
- Confined Space Entry
- Powered Industrial Vehicles
- Ergonomics

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

First Aid Course Syllabus

Course Intros

- Course, Instructor, and Student Introductions
- Facility Orientation
- General Course Information, Course Completion Requirements
- Emergency Action Plan (EAP)

First Aid

- Initial Assessment vs. Secondary Assessment
- Emergency Moves: Clothes Drag, Seat Carry
- Physical Exam and SAMPLE History
- Documentation and Legal Considerations
- Sudden Illness
- Wounds
- Water Sterilization Steps
- Bleeding
- Caring for Shock
- Burns
- Injuries to Muscles, Bones, and Joints
- Splints
- Bites and Stings
- Administering Epinephrine
- Assisting with Bronchodilators (inhalers)
- Heat Related Emergencies
- Cold Related Emergencies
- In-line stabilization for Head, Neck and Back Injuries
- Backboard Techniques
- Common Types of Injuries in Your Area
- First Aid Kits

Course Review

- First Aid

Course Written Exams

- First Aid

References: American Heart Association Guidelines, American Red Cross Guidelines

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Adult CPR Course

Course Duration

Approximately 45-60 minutes

Note: It is strongly recommended that you read the entire course before taking the exam. However, we understand that many of our clients are trained professionals who simply need a quick refresher. If you are familiar with the material you can proceed directly to the exam immediately after registration in which case you may be certified within a few minutes.

Lesson 1: Introduction

Brief History of CPR

Mechanics of Artificial Life Support

Fundamentals of Human Physiology (circulatory system) and CPR Applications

What is Expected During an Emergency (including EMS response)

Lesson 2: Adult CPR

Definitions

Scene assessment and appropriate response

A-B-Cs of Adult CPR for 1 rescuer

A-B-Cs of Adult CPR for 2 rescuers

Exam

Eight multiple choice and true-or-false questions

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Confined Space Rescue Technician

Orientation Module

Introduction to Confined Space Rescue

Course Introduction - Preface
Confined Space Identification - Chapter 1
OSHA Regulation - Chapter 2
Confined Space Hazards - Chapter 4
Atmospheric Monitoring - Chapter 5
Hazard Control - Chapter 6
Personal Protective Equipment - Chapter 7
Phases of Confined Space Rescue - Chapter 8
Rescue Rope and Related Equipment - Chapter 9
High Point Anchor Systems - Chapter 10
Communications - Chapter 11
Permitting Confined Spaces - Chapter 12

Skills Module

Knots

Chapter 9
How to Tie a Figure Eight Stopper
How to Tie a Figure Eight on a Bight
How to Tie a Figure Eight Follow Through
How to Tie a Figure Eight Bend
How to Tie a Square Knot
How to Tie an Overhand Bend
How to Tie a Double Overhand Bend (Double Fisherman Knot)
How to Attach a 3-Wrap Prusik to a Rescue Rope
How to Construct a Modified Trucker's Hitch

Skills Module

Anchor Systems

Chapter 9
How to Tie a Single Loop Anchor Sling
How to Tie a Basket Sling
How to Tie a Multi-Loop Anchor Sling (Wrap Three, Pull Two)
How to Tie a Tensionless Hitch
How to Construct a Back-Tied Anchor System

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Skills Module

RPM

Chapter 9

How to Attach and Operate a Brake Bar Rack as Part of the RPM

How to Construct and Operate a Load Release Hitch as Part of the RPM

How to Attach a Prusik Loop to the RPM for Use in a Haul System

How to Construct and Operate the RPM

Skills Module

Belay Systems

Chapter 9

How to Construct and Operate a Tandem Prusik Belay System

How to Convert a Tandem Prusik Belay System to a Retrieval Line

Skills Module

Raising Systems

Chapter 9

How to Construct and Operate a 2:1 Ladder Rig Mechanical Advantage System

How to Construct and Operate a 3:1 Z-Rig Mechanical Advantage System Through a High Point Anchor

How to Construct and Operate a 3:1 Piggyback Mechanical Advantage System Through a High Point Anchor

How to Construct and Operate a 4:1 Mechanical Advantage System

How to Construct and Operate a 4:1 Pre-Rig Mechanical Advantage System

Skills Module

Rescuer and Victim Packaging

Chapter 9

How to Tie Two Half Hitches

How to Tie a Round Turn and Two Half Hitches

How to Tie and Attach a Hasty Chest Harness (Double Locking Lark's Foot) to a Victim

How to Tie and Attach Wristlets and Anklets

How to Secure a Victim to a Rescue Litter

How to Rig a Litter for Vertical Rescue

How to Rig a Victim in a SKED Litter

How to Rig a Victim in a LSP Half Back or Equivalent

How to Don a Pre-Sewn Class III Rescue Harness

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Skills Module

Respiratory Equipment

Chapter 7

How to Don and Operate a Self-Contained Breathing Apparatus (SCBA)

How to Don and Operate a Supplied Air Respirator (SAR) and Escape Pack

How to Operate a Supplied Air Respiratory System

How to Lay Out and Deploy Supplied Air Lines

How to Provide Victim Respiratory Protection

Skills Module

Communication Systems

Chapter 11

How to Perform a Verbal Communication System

How to Perform a Hand Signal Communication System

How to Operate a Rope Signal Communication System

How to Operate a Light Signal Communication System

How to Operate a Tapping and Rapping Communication System

How to Operate a Portable Radio Communication System

How to Operate a Hardwire Communication System

Skills Module

Hazard Control

Chapter 6

How to Lock-Out/Tag-Out an Electrical Equipment Switch

How to Lock-Out/Tag-Out an Electrical Circuit Switch

How to Lock-Out/Tag-Out a Gate Valve

How to Operate a Ventilation Ducting

How to Deploy Ventilation Ducting

How to Deploy a Manhole Saddle Vent

How to Perform Positive Pressure (Supply) Ventilation

How to Perform Negative Pressure (Exhaust) Ventilation

How to Perform Combination Ventilation

How to Perform Local Supply Ventilation

How to Calculate Ventilation Air Exchanges

Skills Module

Atmospheric Monitoring

Chapter 5

How to Perform Instrument Start-Up

How to Determine the Instrument Target Gases

How to Bump Test the Instrument

How to Check the Peaks on the Instrument

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

How to Clear the Peaks on the Instrument

How to Perform Remote Sampling

How to Use a Conversion Chart to Assess Flammability

How to Perform Instrument Shut-Down

Skills Module

High Point Anchor Systems

Chapter 10

How to Construct and Operate a Ladder Gin System

How to Construct and Operate a Ladder “A” Frame System

How to Set-Up and Operate a Tripod System

How to Operate Cable and Winch Systems

Confined Space Entry Module

Confined Space Entry

Confined Space Rescue – Vertical Entry

Confined Space Rescue – Horizontal Entry

Confined Space Rescue – Tapered Cross Section

Confined Space Rescue – In-Pipe

Confined Space Rescue – Non-Entry

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Forklift Safety Course Outline

Powered Industrial Trucks

Definition

Scope of Standard

Forklift Accidents

Forklift Fatalities

Industries Where Powered Industrial Truck Accidents Occurred

Nonfatal Occupational Injuries and Illnesses by Source

Overview of Forklift Hazards

Four Major Areas of Concern:

--General Hazards That Apply to the Operation of All or Most Powered Industrial Trucks

--Hazards Associated with the Operation of Particular Types of Trucks

--Hazards of Workplaces Generally

--Hazards of the Particular Workplace Where the Vehicle Operates.

Training Requirements

Performance-Oriented

Safe Operations

Training Program Implementation

Training Program Content

Refresher Training and Evaluation

Evaluation of Powered Industrial Truck Operator's

--After Initial Training,

--After Refresher Training, and

--At Least Once Every Three Years

Employer Certification Shall Include:

--Name of Operator

--Date of Training

--Date of Evaluation

--Identity of Person(s) Performing the Training or Evaluation

Avoidance of Duplicative Training

Components of a Forklift

Certification

Classes of Commonly-Used Powered Industrial Trucks

Explanation of Types of Powered Industrial Trucks

Class I – Electric Motor Rider Trucks

Counterbalanced Rider Type, Stand Up

Three-Wheel Electric Trucks, Sit-Down

Counterbalanced Rider Type, Cushion Tires, Sit-Down (High and Low Platform)

Counterbalanced Rider, Pneumatic Tire, Sit-Down (High and Low Platform)

Class II - Electric Motor Narrow Aisle Trucks

High Lift Straddle

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Order Picker

Reach Type Outrigger

Side Loaders, Turret Trucks, Swing Mast and Convertible Turret/Stock Pickers

Low Lift Pallet and Platform (Rider)

Class III -Electric Motor Hand or Hand/Rider Trucks

Low Lift Platform

Low Lift Walkie Pallet

Reach Type Outrigger

High Lift Straddle

High Lift Counterbalanced

Low Lift Walkie/Rider Pallet

Class IV - Internal Combustion Engine Trucks - Cushion (Solid) Tire

Class V - Internal Combustion Engine Trucks - Pneumatic Tires

Class VI - Electric & Internal Combustion Engine Tractor

Rough Terrain Straight Mast Forklifts

Rough Terrain Extended-Reach Forklifts

Stability of Powered Industrial Trucks

Definitions

General

Basic Principles

Stability Triangle

Longitudinal Stability

Lateral Stability

Dynamic Stability

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA -Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Backflow **Course**

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA -Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeymen receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

Instructional Objectives Checklist

1. **Introduction**
 - Types of cross-connections, definitions
 - Historical background
 - Plumbing water distribution
 - Plumbing cross-connections
 - Cross-connection incidents
 - Industry and public health significance of cross-connections
2. **Drinking Water Regulations**
 - Safe Drinking Water Act
 - Primary and secondary standards and MCL's
 - Toxicology
3. **Cross connection programs**
 - Responsibilities (Purveyor, Tester, Surveyor, Repairer)
 - Cross-connection control surveys
 - Security for Backflow Prevention Assemblies
4. **Definitions, vocabulary & terminology pertaining to:**
 - backflow preventers
 - devices
 - hydraulics
 - plumbing & cross-connection control industry
5. **Hydraulics & science pertaining to:**
 - backsiphonage
 - backpressure
 - atmospheric pressure
 - absolute pressure
 - gauge pressure
 - backflow
 - thermal expansion
 - Venturi principle
6. **Laws, rules, regulations, codes - federal, state & local levels:**
 - EPA
 - City ordinances
 - State or Model Plumbing Code
 - State, County & City Ordinances
7. **Knowledge & identification of the following:**
 - listing agencies
 - testing laboratories
 - professional associations
8. **Assembly test gauge equipment - knowledge & operation**

04/2004

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials

To ensure that all United Association (UA) apprentices and journeyworkers receive the appropriate skills and knowledge from any of the 330 UA authorized training centers (covering 284 registered apprenticeship programs and over 36,000 registered apprentices), the International Pipe Trades Joint Training Committee (IPTJTC) has committed tremendous resources to the development of curriculum, standards and certifications (including 3rd party groups¹). The IPTJTC works in partnership with government, education, and industry groups (private and non-profit) in the development and validation of this material to assist in preparing these individuals for a successful career in the piping industry.

-
9. **Parts, terminology & identification, and application & installation for the following:**
 - Air Gap
 - Atmospheric Type Vacuum Breakers (ASSE 1001)
 - Reduced Pressure Principle Backflow Preventers (ASSE 1013)
 - Double Check Backflow Prevention Assemblies (ASSE 1015)
 - Pressure Vacuum Breaker Assembly (ASSE 1020)
 - Reduced Pressure Detector Fire Protection Backflow Prevention Assembly (ASSE 1047)
 - Double Check Detector Fire Protection Backflow Prevention Assemblies (ASSE 1048)
 - Hose Connection Backflow Preventer (ASSE 1052)
 - Spill Resistant Vacuum Breaker (ASSE 1056)
 - Backflow Prevention Assembly Field Test Kits (ASSE 1064)
 10. **Test Procedures for Backflow Prevention Assemblies:**
 - Reduced Pressure Principle Backflow Preventers (ASSE 1013)
 - Double Check Backflow Prevention Assemblies (ASSE 1015)
 - Pressure Vacuum Breaker Assembly (ASSE 1020)
 - RPDF (ASSE 1047)
 - DCD (ASSE 1048)
 11. **Troubleshooting backflow prevention assemblies, failures & causes:**
 - Reduced Pressure Principle Backflow Preventers (ASSE 1013)
 - Double Check Backflow Prevention Assemblies (ASSE 1015)
 - Pressure Vacuum Breaker Assembly (ASSE 1020)
 - RPDF (ASSE 1047)
 - DCD (ASSE 1048)
 - Components
 - Check valves
 - Relief valve
 - Air inlet
 - Test cocks
 - Shut-off valves
 12. **Documentation of information**
 13. **Tester responsibilities**
 14. **Safety**

I verify that the above mentioned instructional objectives have been covered in this course of instruction.

SIGNATURE

DATE

04/2004

¹NITC - National Inspection Testing Corporation; EPA - Environmental Protection Agency; OSHA - Occupational Safety and Health Administration; EPRI - Electric Power Research Institute; ESCO Institute; ASSE - American Society of Safety Engineers; NCCCO - National Commission for the Certification of Crane Operators; ASME - American Society of Mechanical Engineers; IAPMO - International Association of Plumbing and Mechanical Officials