

## Track Worker Syllabus

**Time:** 40 hours

**Maximum Class Size:** 12

**Prerequisites:** None

**Course Description:** Laborers and Apprentices often will be called upon to work on rail projects. Working safely and efficiently on these projects is the focus of this course. Federal safety regulations will be presented as well as the different terms, tools and hardware commonly used on this type of project. In addition, the participants will learn the hazards associated with this scope of work and methods of controlling or eliminating each hazard. The participants will receive hands-on training in safely operating or using a rail saw, rail drill, tie tamp, track jack and rail tongs. They will learn to layout ties, drive and remove spikes and install and remove clips.

### Goals/Objectives/Student Learning Outcomes:

At the end of the 40-hour Track Worker course, the participant will be able to:

- Describe the four responsibilities of Individual Roadway Workers listed in 214.313
- Define the following terms: Fouling, ballast, gauge side, field side, standard gauge
- Identify 6-10 common tools used on rail projects
- Identify 6-10 pieces of hardware commonly used on rail projects
- List 3-5 hazards associated with working on or near railroad tracks
- Describe 1-2 methods of controlling or eliminating each listed hazard
- Safety and efficiently operate the following equipment: rail saw, rail drill, tie tamp, track jack, and rail tongs
- Demonstrate the ability to layout ties according to given dimensions
- Demonstrate the ability to safely and efficiently drive and remove spikes
- Safety and efficiently install and remove clips on a given project

### Standards Addressed

- |                             |                             |
|-----------------------------|-----------------------------|
| • 49 CFR Part 214 Subpart C | Roadway Worker Protection   |
| ○ 214.301                   | Purpose and Scope           |
| ○ 214.311                   | Responsibility of Employers |
| ○ 214.313                   | Responsibility of Workers   |

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- 214.315 Supervision and Communications
- 214.329 Train Approach Warning
- 214.343 Training and Qualification, General
- 214.345 5 Fundamentals of Training for all Roadway Workers

### Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE

### Textbooks/Readings/Materials

- *The Transcontinental Railroad* Video
- *Railroad Track Worker Safety* Expert Article
- *Track Worker* Student Handout Packet
- *Track Worker* Hands-On Evaluation
- *Track Worker* Exit Exam A & B

### Tools/Equipment/Other Materials

- tape measures
- offsets
- grade stakes
- laser
- rail saw
- tie-tamp
- track jack
- rail drill
- rail ties
- clips
- spikes

For Mock Up:

- Ballast
- 20' of concrete ties

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- E-Clips
- 20' of wood ties
- Double Shoulder Plates
- Spikes
- Pandrol Plates
- Screw Spikes
- 115# rail

### Personal Protective Equipment

- 12 pairs of gloves
- 12 pairs of Safety Glasses
- 20 pairs of Ear plugs
- 12 hard hats

### Course Requirements

To receive credit for the course, participants must:

- Be present for full forty hours
- Participate in all classroom exercises
- Pass a written exam
- Pass a hands-on exam

### Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment
- Participants who are on "light duty" are not allowed to take this course due to the physically demanding requirements.

### Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.

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### **Safety**

Failure to maintain and use PPE may result in dismissal from the course.