

## TRACK WELDER

FC: MA655 PG: MW III

PC: 301 BU: 01 July 2003

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job.

#### **DEFINITION**

Under general supervision, performs grinding and precision field welding on rails, switch points, frogs and other appurtenances as found in an operating heavy rail transit system; and performs related duties as assigned.

### **CLASS CHARACTERISTICS**

This is a journey level classification, capable of independently performing the grinding and welding required for the field maintenance and repair of track and related appurtenances. This classification is distinguished from other welding classes by a focus on grinding and precision welding on track related items and that it does not work on structures or revenue vehicles.

#### **EXAMPLES OF DUTIES** – Duties may include, but are not limited to, the following:

- 1. Performs precision arc, exothermic and oxyacetylene welding on such track elements as switch points; frogs and rails, including the power-carrying third rail.
- 2. Grinds and smoothes finished welds and rough or out-of-alignment rail locations to precision tolerances, using hand and machine grinders.
- 3. Reads diagrams and prints and discusses work to be performed with the supervisor or foreworker.
- 4. Determines necessary approach, tools and equipment and loads them on a vehicle for transportation to the work site.
- 5. Operates both on and off track equipment to reach the job location.
- 6. Prepares surfaces to be welded by cutting, chipping, shaping and sanding.
- 7. Uses precision measuring devices to determine measurements.
- 8. Layouts and fabricates appropriate parts for field placement.
- 9. Sets up rigging to move heavy objects in preparation for welding.

- 10. Uses an overhead or mobile crane, forklift and other equipment and vehicles as required to complete work.
- 11. Completes records of work performed and materials used.
- 12. Reports the need for additional maintenance to the foreworker.
- 13. Maintains a supply of welding gasses, rods, tools and safety equipment and notifies supervisor of the need for replacements as needed.
- 14. Performs the work of a Track Equipment Operator as required.

# **QUALIFICATIONS**

## Knowledge of:

Methods and techniques of arc and oxyacetylene welding, particularly as applied to field situations. Types of welding rods and materials and their applications.

Types of welding gasses and mixtures.

Storage and handling requirements of various types of welding rods.

Safety practices pertaining to the work, including the use of eye, respiratory and hand protection.

## <u>Skill in:</u>

Performing field welding of track, rails and their appurtenances.

Preparing surfaces to achieve effective welds.

Grinding, smoothing and finishing welded or other metal surfaces.

Treating and tempering metals.

Fabricating parts to effect field welding repairs.

Using precision measuring devices accurately.

Reading and interpreting diagrams, blueprints, written instructions and welding symbols.

Working independently or in a crew situation.

Keeping basic written records of work performed.

Operating and maintaining equipment and vehicles as required to perform work.

# **MINIMUM QUALIFICATIONS**:

## **Education**:

Possession of a high school diploma, GED or recognized equivalent.

## Experience:

Two (2) years of (full-time equivalent) verifiable experience in welding of track, rails and their appurtenances; *or* journey level general welding experience which includes experience in welding frogs, exothermic welding of rails .

## **Other Requirements:**

Must possess and maintain a valid California Class A driver's license and have a satisfactory driving record.

Must be able to obtain and maintain District certification for the operation of high-rail vehicles.

Must have the physical ability to lift and carry various materials and equipment weighing up to 50 pounds for 100 yards or more.

Must have physical mobility to walk, climb, stoop, bend, crawl, twist, work in confined spaces, work underground, and heights up to 60 ft. and walk on uneven surfaces.

Must climb and work from ladders.

Must be able to perform strenuous labor both indoors and outdoors in all types of weather.

Must wear a respirator and work in dusty environment subject to various fumes and noise levels in the proximity of live voltage.

Must have physical capability to climb in and out of vehicles with steps up to 25" from the ground in close clearances.

Must be willing to work off-hours shifts.

## **WORKING CONDITIONS:**

#### **Environmental Conditions:**

Shop and construction site; exposure to dust, noises, confined spaces, fumes, heights, underground and electrical energy.

#### **Physical Conditions:**

Requires maintaining physical condition necessary for walking, climbing, stooping, bending, crawling, twisting, working in confined spaces, underground, heights up to 60 feet, walking on uneven surfaces, climbing and working from ladders, performing strenuous labor both indoor and outdoor in all types of weather, wearing a respirator, climbing in and out of vehicles with steps up to 25 inches from the ground in close clearances; lifting and carrying materials and equipment weighing up to 50 lbs.

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