

# WELDER/FABRICATOR

# **DEFINITION**

Under general supervision, performs skilled welding duties in connection with the installation, maintenance, and repair of District water distribution pipelines and related facilities.

# **DISTINGUISHING CHARACTERISTICS**

This position is the advanced journey level in the Maintenance Worker series. Positions in this class are distinguished by the degree of skill and independent judgment required. Incumbents perform the more difficult tasks associated with welding and metals fabrication, pipe fitting and design, and the maintenance and repair of machinery and equipment.

#### EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Welds water distribution pipelines, valves, fixtures and equipment using oxyacetylene and electric arc welding equipment;
- designs and fabricates a variety of metal items and special parts for the repair of heavy construction equipment, vehicles, pumps and machinery;
- designs and fabricates special tools and equipment;
- operates lathes, pipe threading machines and a variety of related equipment;
- prepares surfaces for welding using a cutting torch, grinder, and other tools;
- reads and interprets plans and specifications;
- makes flags, bars, valve and curb cock keys, meter hooks, and metal lids for boxes;
- estimates labor, materials, and supplies needed to perform work and requisitions accordingly;
- uses a variety of hand tools such as grinders, drills, files, hammer, chisel, drill press, sandblasting machine, carbon arc, and micrometer;
- maintains records and logs of work performed;
- prepares clear and concise reports;
- follows applicable safety rules and regulations including appropriate ventilation in shop.

#### **QUALIFICATIONS FOR EMPLOYMENT**

Knowledge of:

- Methods, materials, tools, and equipment used in the welding repair of pipelines, equipment, and related facilities;
- the use of oxyacetylene, electric arc, MIG, and TIG welding equipment;
- lathe and machinist tools and equipment;
- basic mathematics;
- the welding properties of basic metals and alloys;
- safety regulations and precautions;
- basic record keeping.

# Ability to:

- Operate a variety of welding equipment and tools in a safe and effective manner;
- repair and maintain District pipeline, structures, machinery, vehicles, and equipment;
- fabricate special parts;
- read and interpret engineering plans and designs;
- maintain accurate records;
- direct and train others;
- work cooperatively with others;
- understand and carry out written and oral instructions;
- drive a District vehicle.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

- Completion of the twelfth grade or its equivalent;
- Three years of increasingly responsible welding experience and attainment of recognized journey status as a pipe fitter/welder.

#### **OTHER REQUIREMENTS**

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."
- work on an "on call" basis for emergency situations;

#### LICENSES AND/OR CERTIFICATIONS

- Possession of an appropriate California driver's license issued by the State Department of Motor Vehicles and satisfactory driving record;
- possession of, or ability to obtain within one year of employment in the position, an appropriate, valid pipe and plate welding certificate such as 6G SMAW.

# PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will perform heavy physical work and will need the mobility to operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks and pit areas, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is frequently required to lift and carry short distances objects such as materials or equipment weighing up to 10 to 50 pounds and occasionally lift 50 to 75 pounds. This position requires that the employee demonstrate adequate hearing to detect warning alarms and speech to converse in person and over the telephone or radio, and vision to read printed materials and detect color coded materials, and use a computer screen.

The noise level in the work environment is moderate to loud noise. The employee is exposed to moving vehicles and other moving equipment and machinery, excessive noise, extremes in temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

Employees who drive on District business to carry out job-related duties must possess a California driver's license for the class of vehicle driven and meet automobile insurability requirements of the District including review of a recent DMV history. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established:July 1985Revised:November 2008, March 2014, January 2025Approved by:Human Resources Manager