

**MAINTENANCE SPECIALIST – PLUMBER/WELDER****DEFINITION**

Under direction, performs skilled trades work pertaining to plumbing and welding; assembles, installs, maintains and repairs pipes, fittings and fixtures pertaining to heating, water, water treatment, and drainage systems; repairs work or damaged fabricated, machined, cast, forged or welded parts using electric arc and oxygen-acetylene welding equipment; performs semi-skilled duties related to other maintenance trade areas; and performs related work as assigned.

**DISTINGUISHING CHARACTERISTICS**

This is a specialist level, skilled maintenance class in the Maintenance Support Series within the Yosemite Community College District (YCCD). Incumbents in this class perform specialized duties related to plumbing and welding. Incumbents utilize specialized skills that have generally been obtained through technical education and/or substantial on-the-job experience.

This class can be distinguished from the lower-level class of Maintenance Technician because incumbents in that class perform semi-skilled maintenance duties that often span multiple maintenance trade areas. It can be distinguished from higher-level Maintenance Lead classes because incumbents in those classes serve as lead workers by assigning, directing and monitoring the work of subordinate skilled and semi-skilled staff on a regular, project or assignment basis.

**SUPERVISION RECEIVED AND EXERCISED**

Incumbents in this class work under the direction of a manager, receiving occasional supervision while working toward a definite objective that requires use of a wide range of procedures. Incumbents plan and/or determine specific procedures or equipment required to meet assigned objectives and solve non-routine problems, referring only unusual matters to the supervisor.

An incumbent in this class does not directly lead or supervise other full-time employees, but may assign, direct and/or monitor the work of subordinate full time and/or part time employees on a project or assignment basis.

**EXAMPLES OF DUTIES** (*Illustrative Only*)

- Installs general plumbing systems and maintains/repairs existing systems.
- Installs, maintains and repairs various types of water treatment, heating and low-pressure boiler units and systems, water heaters, and water softeners.
- Installs water and waste piping.
- Taps water and sewer mains and laterals.
- Repairs and replaces pipes and control valves, fittings and a variety of other fixtures and devices.
- Cuts and threads pipes; joins pipes and lines using a variety of techniques.
- Cleans and removes obstructions from drains, water and sewer systems.
- Tests safety equipment, water treatment and boiler water for proper mineral content and proper chemical levels.

- Tests and maintains eye wash stations and ice machines.
- Installs and maintains backflow devices to ensure that potable water lines are protected from backflow contamination.
- Inspects, reviews and examines materials that need to be welded.
- Chips or grinds out cracks or holes in preparation for welding.
- Positions, fits and welds machinery frames, gates, fences and a variety of other equipment and materials, using and applying skilled knowledge of metal properties and the effect of heat, and allowing for thickness and weld shrinkage; chips or grinds off excess weld; inspects and examines weld for bead size and penetration.
- Cleans and applies flux as necessary to assist in the brazing process.
- Uses a jig, vice or other equipment to assist with welding and/or straightening bent pieces of material.
- Plans, organizes and lays out assigned tasks; estimates labor and material project costs.
- Maintains a variety of records including those related to preventive maintenance and service performed.
- Monitors supply and equipment inventories and recommends/requisitions purchases.
- Performs semi-skilled duties related to other maintenance trade areas.
- Performs other related duties as assigned.

## TYPICAL WORKING CONDITIONS

- Work typically occurs in both indoor and outdoor environments. Duties may involve exposure to hot, cold, wet, humid, or windy conditions caused by weather; travel from site to site; and exposure to potentially hazardous chemicals, noise, dust and fumes.

## MINIMUM QUALIFICATIONS

*To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The knowledge and ability requirements are representative of essential duties. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions of the position.*

### **Knowledge of:**

- Skilled methods, techniques, supplies, materials, and equipment utilized in plumbing and welding work pertaining to facility, building, and equipment maintenance, repair, and construction.
- Legal mandates, policies, regulations, and guidelines pertaining to the maintenance, repair, and construction of public facilities, office buildings, and equipment.
- Principles and procedures of routine preventive maintenance.
- Occupational hazards and standard safety practices.

### **Ability to:**

- Drive a service vehicle to and from work sites.
- Operate a variety of manual and motorized tools.
- Accurately estimate time and material costs.

- Perform highly skilled and complex craft maintenance functions.
- Interpret blueprints, plans, drawings, schematics, and other data pertaining to the maintenance, repair, and construction of facilities, office buildings, and equipment.
- Maintain a data management, storage, and retrieval system.
- Understand and carry out oral and written directions with minimal accountability controls.
- Communicate effectively, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted during the course of the work.

**Licenses and Certificates:**

- A valid license to drive in California is required.

**Physical and Mental Standards:**

- **Mobility:** ability to ascend and descend ladders, stairs, scaffolding, and ramps; walk or stand for extended periods.
- **Dexterity:** must have a full range of motion in the upper extremities; manual dexterity to operate equipment and use hand tools, and handle and work with various materials and objects.
- **Lifting:** frequently lift, carry, push, pull, or otherwise move objects up to 50 pounds; occasionally lift objects up to 75 pounds.
- **Visual Requirements:** close vision sufficient to read files, documents, and computer screens and do close-up work; ability to adjust focus frequently.
- **Hearing/Talking:** ability to hear normal speech, speak and hear on the telephone, and speak in person.
- **Emotional/Psychological Factors:** ability to make decisions and concentrate; frequent contact with others including some public contact.

**Education and Experience:**

*Any combination of education, experience and/or training that would likely provide the above-required knowledge, skills and abilities is qualifying. Typical background patterns that would provide the knowledge, skills and abilities are:*

- Education: Possession of a High School diploma or GED.
- Experience: Two years performing semi-skilled duties as a plumber or welder.
- Substitution: Completion of an approved vocational training course in commercial painting techniques may substitute for one of the above-required years of experience.

**Special Requirements:**

- Within 60 days of employment, must obtain a Backflow Testing Certificate approved by the California Department of Health Services, and must maintain certification for continued employment.