

JOB DESCRIPTION
Fabrication Mechanic I (Flex)
Fabrication Mechanic II
Code Number: 42012, 42013

GENERAL PURPOSE

Under general supervision, performs a wide variety of skilled and difficult combination welding tasks in the maintenance, repair, modification and fabrication of equipment, vehicles, tools, machinery and facilities; repairs construction and agricultural tractors, engine driven water pumps, and gear heads; installs and services diesel particulate traps; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Fabrication Mechanic I is the entry-level class. Initially under immediate supervision, incumbents learn and perform a variety of skilled welding tasks in the maintenance, repair, construction and installation of water mains, services and related appurtenances, vehicles and equipment. Assignments and/or projects are performed in the shop, field and/or plants. As experience is gained, duties become more diversified and are performed under more general supervision. This class is alternately staffed with Fabrication Mechanic II, and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meet the qualifications of the higher level class.

Fabrication Mechanic II is the experienced/journey level class in the series, fully competent to independently perform duties. This class is distinguished from the lower classification of Fabrication Mechanic I by the relative independence with which duties are performed.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

Designs and fabricates specialized tools and equipment; fabricates a wide variety of supports, brackets, ladders, racks, tanks, cages, railings, small bridges and other metal structures.

Straightens shapes, brazes, tempers, cuts and welds varied metals in repair tasks.

Diagnoses and performs major repairs and overhauls to tractors, pumps, and gear heads.

Repairs and rebuilds high pressure water pumps on the Vacon and Vactor sewer cleaning trucks and other specialized pumps.

Installs catalysts and particulates emission filter, and operates the communication software; installs and repairs vehicle mounted equipment such as electric cranes, hoists, hydraulic lift equipment, welders, and compressors.

Repairs and replaces clutches on trucks, tractors, and other equipment.

Fabricates pipe saddles and special pipe fittings used in the water distribution system, including the layout of angled connectors.

Operates Plasma cutter, pattern cutter, bridge crane, Metco metal spray equipment, sheet metal tools, sheet metal brake, cutting torch, band saws, presses, hoists, grinders, buffers, electrical (arc), oxyacetylene (gas), MIG and TIG welders, air arc, sheet metal spot welder, Scotsman iron worker, Hossfield bender, portable welders, lathe, milling machines and related power tools and equipment.

Reads and interprets diagrams and blueprints for fabrication assignments.

Schedules and coordinates activities with other sections, divisions and field and treatment facilities.

Maintains records of maintenance and inventory of all assigned equipment; orders and stocks welding related parts, supplies and equipment; interprets drawings and specifications to determine materials and parts required for assigned projects.

Specifies and orders stock for the fabrication shop and maintains steel supply for use by other departments.

Ensures proper safety precautions are observed.

Constructs prototypes; makes "as built" sketches.

Directs and instructs other employees in the work.

May lead the work of others as project leader in property maintenance and construction; lead others in the selection of metals and alloys for projects.

Operates, inspects and performs minor maintenance of assigned vehicles and equipment. Builds racks and other fixtures for holding tools on service vehicles; performs welding repairs to vehicle bodies, vehicles and equipment.

Responds to emergency situations as necessary.

Performs related duties as assigned.

DESIRED MINIMUM QUALIFICATIONS

Knowledge of:

Methods, practices, tools and equipment used in the oxyacetylene, MIG, TIG, Plasma cutter and electric arc welding trade; safe work methods and safety regulations pertaining to the work; practices and procedures of shop and field welding; welding properties of the various metals and alloys used in the water utility field; methods, practices, techniques, tools and materials used in the overhaul, maintenance and repair of construction equipment, tractors, pumps and gear heads.

Ability to:

Operate and maintain a wide variety of hand, power and shop tools and equipment used in the work; operate lathe, milling machines and use metal spray equipment where required; estimate necessary materials and equipment to complete assignments; prepare basic records and reports; read and interpret manuals, specifications and drawings; use shop mathematics to make calculations; fabricate and repair a wide variety of metal parts, equipment and tools; establish and maintain effective working relationships with those contacted in the course of work; follow and apply written and oral work instructions; communicate effectively, orally and in writing; make sound independent judgments within established guidelines.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined is graduation from high school or G.E.D equivalent; and satisfactory completion of a recognized apprenticeship in welding and two years of skilled welding experience as well as experience in the maintenance and repair of heavy vehicles or construction equipment.

A Fabrication Mechanic I may be considered for advancement to Fabrication Mechanic II after demonstrating proficiency to perform the full range of duties of the latter class.

Typically, a Fabrication Mechanic I is expected to be capable of meeting the proficiency criteria within a 6–24 month period, depending on an individual's prior experience and progression in performing the full range of Fabrication Mechanic II duties as described in the established performance criteria.

Licenses; Certificates; Special Requirements:

A valid California driver's license and the ability to maintain insurability under District's Vehicle Insurance Policy.

Achieve and maintain forklift operators permit; competence in crane operations, lock out/tag out procedures, respiratory protection, confined space entry, and HAZCOM areas.

ASME, AWS or LA welding certification is required in order to flex to Fabrication Mechanic II.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this class, an employee is frequently required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee is frequently required to stand and talk or hear. The employee is frequently required to walk; sit; climb or balance; stoop, kneel, crouch or crawl.

The employee must frequently lift and/or move up to 50 pounds and occasionally lift and or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

Mental Demands

While performing the duties of this class, employees are frequently required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; use math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; work under deadlines with constant interruptions; and interact with dissatisfied or quarrelsome individuals.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee frequently works outside in a wide range of weather conditions, near moving mechanical parts, and on slippery and uneven surfaces. Employees may, at times, be required to wear appropriate personal protective equipment including respiratory protection while performing work in environments that could have the potential to contain wet or humid conditions, vapors or particulates, hazardous chemicals, and the risk of electric shock. The noise level in the work environment is frequently loud.

FLSA DETERMINATION: Non-exempt.

Eastern Municipal Water District

Date Adopted: **01/09/2012**

Date Revised:

FLEX REQUIREMENTS

Fabrication Mechanic I (Flex) Fabrication Mechanic II

LENGTH OF TIME REQUIRED

A Fabrication Mechanic I may advance or “flex” to the Fabrication Mechanic II class after **6-24 months** of experience in the Fabrication Mechanic I class.

PERFORMANCE RATING

The incumbents must receive an overall performance rating of “meets expectations” or better on their most recent annual performance evaluation in order to flex to the higher class.

COMMENTS

The Fabrication Mechanic I must also demonstrate proficiency to perform the full range of duties as described in the Fabrication Mechanic I/II job description. This includes demonstrating proficiency in independently setting up and operating TIG Welder, and the ability to weld with special alloy welding rods.

Possession of AWS, ASME, or LA welding certification is required.