COMBINATION WELDER

DEFINITION

Under general supervision, provides journey-level work in the complex repair and fabrication of a variety of ferrous and non-ferrous parts and equipment.

SUPERVISION RECEIVED/EXERCISED

Receives supervision from Equipment Supervisor. This classification does not exercise supervision.

DISTINGUISHING CHARACTERISTICS

Combination Welder is the journey-level class in the Combination Welder series. The incumbent exercises independent judgment in the fabrication of complex projects including calculating required materials and costs, making working drawings, and determining appropriate methods to perform work. This class is distinguished from Welder in that incumbents of the latter perform entry-level welding and simple fabrication. Combination Welder is distinguished from Combination Welder Leadworker in that incumbents of the latter provide lead direction to assigned employees.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

*May include, but are not limited to, the following:*

Calculates required materials, hours and costs for fabrication jobs; makes working drawings; lays out work.

Determines appropriate and cost effective methods to repair broken or worn equipment, tools and parts.

Cleans parts, tools, and equipment using proper methods as necessary to prepare for welding, repair and fabrication.

Selects proper welding equipment and settings, electrode type, materials and preheat.

Performs routine maintenance, minor repairs, and improvements on welding and fabrication equipment.

Maintains records and reports on work progress and status.

Assists with cleaning up the shop and work areas in order to maintain and clean and orderly work environment and minimize safety hazards.

Provides technical assistance, training, and supervision to subordinates.
Combination Welder
Page 2

Performs metal forming, welding, and machine work per accepted industry practices.

Welds and brazes ferrous and non-ferrous metals using appropriate welding, such as, oxy-acetylene, arc, MIG, TIG.

Fabricates eyebolts, braces, and angle brackets; adds metal to tools, parts and equipment; and fabricates complex parts without existing drawings, sketches or plans.

Operates a variety of hand and electric tools, and equipment in performing metal fabrication and preparation, cutting, forming, fitting welding, and brazing. Fabricates parts from sketches and drawings.

Fabricates more complex parts such as bumpers, tow bars, ladder racks, tool boxes, and pipe railings.

Straightens and repairs bent and damaged parts, equipment and tools.

Drives truck with portable welding equipment to outside projects.

Performs related duties as required.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Knowledge of:**

Standard practices, methods, and materials; proper use of the tools and equipment used in the preparation, welding, brazing, forming, and cutting of ferrous and non-ferrous materials.

Proper setup and operation of fabrication and machining tools (e.g. press breaks, engine lathes, milling machines, etc.)

Properties of ferrous and non-ferrous metals encountered in welding work.

Occupational hazards, safety precautions, and CAL/OSHA requirements of the trade, including handling of hazardous materials..

**Skills to:**

Operate welding/brazing equipment.

Safely operate a motor vehicle.
Use and maintain tools and equipment common to the welding and machinist trades.

Operate modern office equipment including computer equipment and applicable software applications for basic data entry for completion of assigned duties.

**Ability to:**

Understand and carry out instructions, both in oral and written form.

Read and work from sketches and drawings.

Develop sketches, drawings or instructions.

Provide verbal and written instructions.

Adapt and modify welding and machine shop tools and equipment to fit the City’s needs.

Understand and perform related measurements and mathematical computations.

Establish and maintain effective working relationships with those contacted in the performance of assigned duties.

**MINIMUM QUALIFICATIONS**

Three (3) years of full time paid welding experience including experience in metal fabrication or machine shop operations.

**Special Requirement(s):**

Possession of a valid California Driver’s License at time of appointment.

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APPROVED: Signature on File DATE: 09/22/16

Director of Personnel Services

New Class Effective: 09/05/16