CAREER OPPORTUNITIES FOR MECHANICAL HELPER

This information is being given to you to describe potential opportunities as a Mechanical Helper. The career ladders that Mechanical Helpers most commonly enter into are diagrammed below. The typical duties and requirements for the first promotional level of these career ladders are also described. However, these may be subject to change. You may review the class specifications and some job bulletins through the Personnel Department’s website at [www.lacity.org/PER](http://www.lacity.org/PER) or you may request a copy of this information from the Personnel Department, Room 100. We encourage you to examine the options open to you and to prepare yourself for the promotions for which you qualify.
Mechanical Helper

Instrument Mechanic

Air Conditioning Mechanic

Sheet Metal Worker

Welder

Machinist

Maintenance Manager I, II and III

Instrument Mechanic Supervisor I and II

Air Conditioning Supervisor

Machinist Supervisor

Welder Supervisor

Mechanical Helper
DUTIES AND REQUIREMENTS OF FIRST PROMOTIONAL LEVEL

Wastewater Treatment Mechanic

Duties: Performs a variety of skilled tasks in maintaining, overhauling and assembling mechanical equipment and auxiliaries associated with combustion equipment, boilers, steam and gas turbines, large diesel engines, pumps, compressors, barscreens, collectors, clarifiers, centrifuges, conveyors, heat exchangers, emissions control equipment, and other equipment found in a wastewater treatment plant; or performs the more difficult and skilled mechanical work with limited supervisory responsibility over a small crew.

Requirements:
1. Two years of full-time paid experience in a class at least at the level of Mechanical Repairer or Steam Plant Assistant in the repair of diesel, steam or gas-powered turbine generating equipment and auxiliaries or wastewater treatment equipment; or
2. Four years of full-time paid experience as a Mechanical Helper or Maintenance and Construction Helper which includes one year of experience assisting in the maintenance and repair of wastewater treatment equipment.

Pipefitter

Duties: Does skilled work in the installation, replacement, maintenance, and repair of industrial steam, oil, air, gas, water, steam heating and other pipe systems, including high pressure and high temperature systems.

Requirements:
1. Completion of a recognized apprenticeship as a pipefitter; or
2. Six years of full-time paid experience performing installation, replacement, maintenance and repair of industrial steam, oil, air, gas, water, steam heating and other pipe systems, including high pressure and high temperature systems.

Plumber

Duties: Does skilled work in the layout, installation, repair, and maintenance of sanitary and industrial plumbing systems, process piping, and fuel dispensing systems, including air, gas, water, industrial waste, gasoline, oil pipelines, and irrigation systems.

Requirements:
1. Completion of a recognized five-year apprenticeship as a plumber; or
2. A valid Certificate of Qualification as a journey-level plumber issued by the Los Angeles City Department of Building and Safety; or
3. Six years of full-time paid experience as a helper to a journey-level plumber.

Mechanical Repairer

Duties: Does a variety of tasks in maintaining and repairing mechanical equipment and tools.
Requirements:
1. Two years of full-time paid experience at the helper level in mechanical repair work.
2. Completion of the Los Angeles Trade Tech Air-Cooled Engine curriculum may be substituted for one year of the required experience.

Instrument Mechanic

Duties: Performs highly skilled field and shop work in inspecting, adjusting, calibrating, servicing, maintaining, overhauling, repairing, and testing various automatic controls and indicating and recording instruments and devices; analyzes instrumentation malfunctions to determine necessary repair; and analyzes problems and makes necessary repairs on instrumentation and controls required to interface with process control computers.

Requirements:
1. Three years of full-time paid experience as a Steam Plant Assistant, one year of which shall be as a controls mechanic or plant equipment operator; or
2. Two years of full-time paid experience at least at the level of Building Operating Engineer or journey-level Energy Recovery Operator which provides experience in the operation or maintenance of high temperature boilers or refrigeration equipment with a total capacity of 3,000 tons or more; or
3. Two years of full-time paid experience as an Electrical Tester with the City of Los Angeles; or
4. Two years of full-time paid journey-level instrument mechanic experience inspecting, adjusting, repairing and testing electronic and/or pneumatic control systems, including transmitting, indicating and recording instruments and controllers at oil refineries, chemical plants, water utility or wastewater treatment facilities; or
5. Three years of full-time paid experience as a Craft Trainee adjusting, servicing, maintaining, repairing or testing of various automatic controls and instruments in a plant facility.
6. Completion of four semesters of course work on Automated Instrumentation and Controls from a recognized college may be substituted for one year of the required experience.

Air Conditioning Mechanic

Duties: Installs, modifies, maintains, and repairs air-conditioning, refrigeration, heating, ventilating, and related equipment.

Requirements:
1. Completion of a recognized apprenticeship as a refrigeration and air conditioning fitter; or
2. Three years of full-time paid experience as a Building Operating Engineer, Electrical Repairer or Sheet Metal Worker with the City of Los Angeles, performing maintenance and repair of air conditioning equipment; or
3. Six years of full-time paid experience installing, modifying, maintaining, and repairing air conditioning, refrigeration, heating, ventilating, and related equipment.

**Sheet Metal Worker**

**Duties:** Performs skilled work in layout, fabrication, assembly, installation and repair of a variety of sheet metal parts and equipment including boxes, lockers, cabinets, shelves, table tops, sinks, range hoods, rain gutters, downspouts, flashings, fluid tanks and air-conditioning ventilating ducts; and in the maintenance, installation, adjustment and repair of duct work, filters, blowers and forced-air heating, cooling and ventilating control devices and systems; occasionally performs arc, gas, and MIG welding; and calibrates pneumatic controls and performs air balancing.

**Requirements:**
1. Completion of a recognized apprenticeship as a sheet metal worker; or
2. Five years of full-time paid experience in sheet metal work.

**Welder**

**Duties:** Performs skilled heating, welding, cutting, and brazing in a shop or in the field, using oxyacetylene and electric welding equipment.

**Requirements:**
1. Completion of a recognized apprenticeship as a welder; or
2. Four years of full-time paid experience in the following welding processes: shielded metal arc, tungsten inert gas, gas metal arc, and oxyacetylene cutting;
3. A valid Class B driver’s license is required for certain positions.
4. In accordance with Section 608 of the Clean Air Act, an Environmental Protective Agency approved Technician Certificate may be required for some positions prior to appointment.

**Machinist**

**Duties:** Cuts and shapes metals and other materials using precision conventional and computerized numerical control machine tools and hand tools in the fabrication of parts and the construction, assembly, installation or repair of various types of machinery, equipment, tools and dies; and disassembles, repairs, and reassembles machinery where fine alignment and close tolerances are required.

**Requirements:**
1. Completion of a recognized apprenticeship as a machinist; or
2. Six years of full-time paid experience performing machine shop work.

**Equipment Mechanic**

**Duties:** Does skilled mechanical work in the maintenance and repair of automotive transportation equipment and inspects such equipment to determine needed repairs.
Requirements:
1. Completion of a recognized apprenticeship as an automotive mechanic; or
2. Four years of full-time paid experience in automotive mechanic work; or
3. Satisfactory completion of a two-year community college-level program in auto or truck mechanics in a trade or technical school and two years of full-time paid experience in automotive mechanic work; or
4. Three years experience as a Craft Trainee with the City of Los Angeles in an automotive mechanics training program.

Heavy Duty Equipment Mechanic

Duties: Does journey-level work in the maintenance and repair of construction, road maintenance, or firefighting equipment; or builds and installs or modifies equipment for special purposes.

Requirements:
1. Completion of a recognized apprenticeship as a heavy duty equipment mechanic; or
2. Two years of full-time paid experience as a journey-level equipment mechanic which includes the repair of a variety of heavy duty gasoline and diesel powered vehicles or off road construction equipment; or
3. Five years of full-time paid experience in equipment maintenance and repair, of which two years must have been in the maintenance and repair of heavy duty gasoline and diesel powered vehicles or off road construction equipment.

Electric Distribution Mechanic Trainee

Duties: Works as a trainee under close supervision assisting journey-level workers in the construction, maintenance and repair of overhead and underground electric power transmission, subtransmission and distribution lines, cables and equipment.

Requirements:
Six months of full-time paid experience as a helper in mechanical, electrical or construction work.

Electrical Mechanic Trainee

Duties: Works as a trainee under close supervision assisting journey-level workers in installing and maintaining high and low voltage electrical and related equipment in pumping and chlorinating stations, electric generating stations and plants, and in electric substations, including receiving, distributing, and customer stations.

Requirements:
1. Six months of full-time paid experience with the City of Los Angeles in a class at least at the level of Electrical Craft Helper in the construction, installation, maintenance, or repair of electrical systems, facilities, and equipment; or
2. Successful completion of the Utility Craft Pre-training Program or the Pre-Electrical Craft Helper Training Program sponsored by the Department of Water and Power.
Note: The above information does not replace class specifications and examination bulletins.

**PREPARING YOURSELF FOR PROMOTION**

1. Broaden your work experience by taking advantage of job rotation and transfer opportunities. Take advantage of on-the-job training opportunities relating to your work.
2. Take advantage of formal education opportunities relating to your work.
3. Learn and stay abreast of laws, procedures, policies and practices relating to your career ladder.
4. Carefully review examination bulletins and class specifications for promotional classes to determine the kinds of skills, knowledges and abilities you need to develop for promotion.
5. Request for Notification cards may be completed in Room 100 of the Personnel Building (847-9240) to notify you by mail when a specific examination is open for filing. Familiarize yourself with the areas in your work location where weekly job bulletins are posted.

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