

ELECTRICAL/MECHANICAL TECHNICIAN 1

Job Code	Pay Grade
17232	CL12

Nature of Work

This is full performance Electrical/Mechanical Technician work specializing in the installation, modification, fabrication, repair, and maintenance of electrical and/or heavy mechanical equipment and systems. Work may utilize knowledge in electrical, plumbing, welding, or other trades to locate and correct industrial systems malfunctions and heavy operating equipment improvements, as well as county properties, facilities, equipment, pumping systems, conveyor systems, and lines or devices; electrical and mechanical equipment used in production facility/plant operations, treatment and transmission of potable water, wastewater and distribution of reclaimed water, large conveyor systems, hydraulic transportation screening/passenger and other industrial electrical/mechanical equipment. Tasks often require manipulative ability, utilizing job-acquired skills in specialized fields, traffic control and equipment for the design, placement and maintenance of traffic safety and security devices. Incumbents may be required to work independently in different but specific assigned areas from project to project, as business needs and skills match, utilizing a wide variety of equipment. The incumbent is supervised by a manager, plant operations supervisor, supervisor or designee.

Minimum Qualification Requirements

- Completion of a 2 year technical or vocational program in mechanical skilled or electrical trades in the assigned electrical/mechanical field; or
- 2 years of journeyman experience in the maintenance and repair of heavy mechanical equipment and machinery in the assigned electrical/mechanical field; or
- An equivalent combination of training, education, and/or experience.

Appointing Authority May Also Require

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Employee to acquire and maintain certification in designated areas according to area of assignment.
- Other highly desirable knowledge, skills, abilities, and credentials relevant to a position.

Illustrative Tasks (These are examples and are not all inclusive.)

- Installs, modifies, fabricates, repairs, and maintains a broad range of electrical and/or heavy mechanical equipment and systems for one or more highly advanced electrical/mechanical assignment locations for utilities, public works, and other agencies or departments.
- Installs, maintains, modifies and repairs a variety of heavy mechanical machinery, equipment and systems used in wastewater treatment plants or water treatment and distribution systems.
- Overhauls well pumping and lift station equipment through removal, repair and replacement of pipes, pumps and motors.
- Performs inspections and operational efficiency checks, conducting preventive maintenance service on the electrical and mechanical components of a variety of pumps and supportive equipment, machinery and facilities.
- Performs inspections and operational efficiency checks, conducting preventive maintenance service on the electrical and mechanical components of a variety of security, conveyor/transport systems, and machinery.
- Detects causes of electrical failures; interprets and ensures compliance with established codes; calculates data necessary for wiring instrument systems; requisitions supplies and materials needed to complete task.
- Disconnects, repairs, and reconnects and/or replaces electric motors; may install electric wiring, conduit and circuitry; repair switch gear equipment and performs other related electrical tasks.
- Installs, maintains and repairs chlorination systems, chemical feed pumps and metering equipment.
- Repairs and adjusts mechanical systems for vehicular equipment, hydraulic pump systems and high pressure line cleaning pumps; performs structural repairs on large cranes, pressure trucks and backhoes.

ELECTRICAL/MECHANICAL TECHNICIAN 1 (continued)

Job Code	Pay Grade
17232	CL12

Illustrative Tasks (continued)

- Repair and adjusts mechanical and hydraulic systems on passenger loading bridges, baggage belt systems, and other Airport equipment and systems.
- Installs and reroutes pipes at wastewater treatment facilities and pumping stations, or water production and distribution stations.
- Performs fabrication and welding to make required repairs or enhancements.
- Maintains records of services and maintenance.
- Performs related work as assigned or required.

Knowledge, Skills, and Abilities

- Knowledge of principles and practical application of electrical, plumbing, welding and possibly other trades.
- Knowledge of site safety and security requirements, such as potable water production /wastewater treatment processes or other location/mission specific security policies applicable to assignments.
- Knowledge of installation, modification, fabrication, repair and maintenance of electrical and/or heavy mechanical equipment used in water plant and/or wastewater plant or other assigned operations.
- Knowledge in controlling the production and distribution of potable water or collection of wastewater.
- Knowledge of types of potable water and wastewater handling equipment (motors, valves, pumps, electronic sensor).
- Knowledge in repair and operation of electrical monitoring equipment, pumps, chemical feeders, baggage conveyor systems boarding ramps, and other systems.
- Knowledge in the repair and operation of electrical monitoring equipment, computerized in-line baggage systems, passenger boarding bridges, and automated security systems/devices.
- Skill in applying knowledge of trade in assigned areas.
- Skill in using standard building trades tools and devices.
- Ability to apply computer applications and software.
- Ability to perform a combination of skilled trades tasks such as electrical, plumbing, mechanical, welding and other skill required to maintain, repair and improve potable water and wastewater operations.
- Ability to apply mechanical expertise for purpose of troubleshooting.
- Ability to understand and follow oral and/or written instructions.
- Ability to adjust and regulate a variety of automatic or manually controlled auxiliary equipment to ensure safe operations.
- Ability to repair and replace electrical and/or mechanical controls and parts, filters, pumps, chemical feeders and related equipment.

For official use only

Revised	EEOC Code	Overtime Code
4/13	Technicians	Classified