



## Town of Oro Valley Classification Description

Title: **INSTRUMENTATION CONTROL TECHNICIAN**

Job Code: 3581

FLSA Status: Non-Exempt

Department: Water Utility

Salary Grade: 111

### **POSITION SUMMARY:**

Under general supervision by the Water Control System Supervisor, performs routine, skilled electrical maintenance, repairs and construction of new electrical and control systems for water equipment. Utilizes a variety of tools and test equipment used for the installation, maintenance, troubleshooting and repair of electrical and control systems. Under direct supervision, performs routine maintenance, repair and calibration of instrumentation equipment, and automatic process control equipment. This is a journey level class. Incumbents are expected to have the basic knowledge, skills, and abilities to perform the full range of required duties/responsibilities with limited direction and supervision.

### **ESSENTIAL JOB FUNCTIONS:**

- Recognizes abnormal operating equipment and uses troubleshooting methods and skills to diagnose, analyze and make the required repairs on electrical and Supervisory Control and Data Acquisition (SCADA) equipment, pump controls and light systems, electrical motors and control circuits; reads and interprets maps, schematics, plans, blueprints and specifications.
- Performs daily electrical/electronic, control system preventative maintenance of the water systems.
- Installs a variety of new and replacement electrical/electronic, and control equipment at water facilities.
- Safely works with a variety of voltages from 12VDC to 480VAC.
- Calibrates and repairs motors, motor control equipment, flow meters, level recorders, pressure devices, programmable logic controllers, electronic instruments, and telemetry equipment; performs electrical/electronic maintenance, repair and calibration to a variety of safety equipment.
- Observes safe work methods and safety practices related to the work; cones and flags work sites to secure from traffic; uses appropriate safety equipment.
- Maintains detailed records and may be required to write reports on equipment repaired, time spent and material usage.
- Formulates new standard operating procedures and records As-Built modifications.
- Maintains and is accountable for assigned tools and equipment. Keeps tools and equipment in good condition and has tools repaired as necessary.
- Responds to emergency situations during off hours as required.
- Familiar with and utilizes specialized test equipment including, but not limited to, digital and analog Volt-Ohm meters, Megohm-meters, Oscilloscopes, Rotation meters, Power

Quality Monitors, Ammeters, Pressure Calibrators, Milliamp simulators, motor winding testers, power tool fault analyzers, and cable/conduit locators.

- Follows and enforces NFPA70E requirements.
- Maintains regular and reliable attendance.

### **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of applicable Town, State and Federal statutes, ordinances, codes, rules and regulations governing the Water Utility.
- Ability to perform a variety of skilled, complex and technical electrical repairs and maintenance of equipment related to the operation of the water systems.
- Skill in diagnosing problems, recognizing worn or damaged parts and rebuilding equipment in field situations.
- Ability to troubleshoot, operate and properly repair electrical, SCADA, instrument systems and programmable logic controllers.
- Knowledge of Lock-out/Tag-out procedures.
- Ability to understand and enforce the Uniform Building Code, the National Electric Code, and NFPA 70E requirements.
- Ability to read, interpret and understand manuals, blueprints, construction drawings, schematics, electrical drawings and PLC ladder logic.
- Ability to work under routine and emergency conditions and perform a wide variety of physically strenuous tasks sometimes in severe weather.
- Skill in operating and maintaining a variety of hand, power tools, and diagnostic equipment.
- Skill in properly placing cones, barricades and warning devices.
- Ability to communicate and maintain effective relationships with other staff including contractors and vendors and assist in training personnel.
- Ability to follow verbal and written instructions.
- Ability to exercise independent judgment and initiative without close supervision.
- Ability to effectively use personal computer hardware, software and applicable database systems, maintain records and perform mathematical computations.

### **MINIMUM QUALIFICATIONS:**

- A high school diploma or GED.
- Four (4) years' experience in the installation, maintenance, repair and alteration of electrical and electronic equipment; **OR**
- An equivalent combination of education and experience.
- Must possess at time of application a valid Arizona Driver's License.

### **ENVIRONMENTAL FACTORS and WORKING CONDITIONS:**

- Work is performed in an indoor and outdoor environment.
- Position is subject to after-hours call out 24/7.