

UTILITY CONTROL/INSTRUMENTATION TECHNICIAN

NATURE OF WORK

This is technical work assisting in electronic and electrical maintenance of utility control/instrument equipment rated to 480v.

Work involves responsibility for assisting with the installation, alteration, maintenance, calibration and repair of electrical/electronic control systems and related instruments rated to 480v. Work also involves assisting in troubleshooting of water/wastewater plant instrumentation and control systems. Supervision is received from and work is generally performed under an administrative or technical superior, with work being inspected in progress and upon completion.

EXAMPLES OF WORK PERFORMED

Assists in installation, removal, repair, maintenance, troubleshooting and calibration of radios and control and instrumentation devices rated to 480v.

Assists in furnishing data and information necessary to update the preventive maintenance program and document spare parts needed.

Assists in diagnosing malfunctions on various mechanical/electronic instruments and control systems; assists in repairing, overhauling and calibrating instrument and control devices.

Performs preventive maintenance and calibration to ensure accuracy of plant instrumentation consistent with the preventative maintenance program.

Programs and repairs PLCs, computers and other equipment used with SCADA systems, or other treatment process controllers.

Installs and tests new electronic components independently or under supervision, depending upon the nature of equipment.

Uses electronic testing and diagnostic tools necessary to maintain electronic telemetry and control systems; repairs and calibrates shop testing and calibration equipment, as needed.

Prepares schematic "as-built" and installation diagrams for telemetry and control equipment.

Completes work order reports and compiles test data related to routine tasks and special assignments.

Performs clean-up of control/instrumentation work areas and areas where repair and maintenance tasks have occurred.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of computers and their application to process control.

Knowledge of basic electronic, radio and control system circuit theory.

Knowledge of basic mathematics.

Knowledge of hazards involved with work and safety measures to be taken.

Knowledge of hand tools and test equipment used in the repair of electronic equipment and instruments.

Ability to read and apply specifications and read circuit diagrams.

Ability to communicate effectively, both orally and in writing.

Ability to follow oral and written instructions.

Ability to establish and maintain effective working relationships with co-workers.

Ability to solve problems logically.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from a senior high school or equivalent supplemented by vocational/technical training or college level coursework in electronics or related field plus some experience in electronic control and instrumentation maintenance preferably with components as related to the control and telemetry of water/wastewater treatment and production or related equipment.

MINIMUM QUALIFICATIONS

Graduation from a senior high school or equivalent plus some experience in repair and maintenance of control and instrumentation equipment; or any equivalent combination of training and experience which provides the desirable knowledge, abilities and skills.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid driver's license when operating a vehicle is necessary to the satisfactory performance of assigned duties.