

W/WW INSTRUMENT CONTROL SPECIALIST

Job Code: 55902 / O*Net Code: 11-3051.01

SALARY GRADE: E13

NON-EXEMPT

(The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to successfully perform the job.)

Purpose:

Performs skilled tasks including installation, troubleshooting, repairs, modification, design, and calibration of instrumentation and metering equipment, SCADA, telemetry and electrical systems for water and wastewater facilities.

Essential Functions:

- Maintains and repairs a variety of water and wastewater appurtenances including electronic controls, electric equipment and monitoring and metering equipment;
- Install, maintain and repair all components of SCADA and telemetry system;
- Installs new PLCs and write programs for replacement of older, outdated models;
- Installs, configures and commissions variable frequency drives;
- Test, calibrate and maintain detailed records of electronic equipment;
- Modify and implement computer software programs for data logging and control;
- Use laptop computer to trouble shoot, document, modify or correct settings and parameters for logic, relays and motors;
- Performs troubleshooting duties identifies and diagnoses operational problems and/or malfunctioning of equipment throughout the water and wastewater systems;
- Tests, locates and repairs electrical circuits and equipment;
- Diagnose and repair equipment failures utilizing schematic diagrams and test equipment;
- Participates in variety of meetings to review, discuss, and address concerns, issues, and resolve problems;
- Works closely with water or wastewater plant managers and maintenance superintendents on maximizing plant efficiencies and operations;
- Assists in all aspects of new facility planning including renovations and new construction;
- Attend training as needed to ensure compliance with safety and regulatory requirements, as well as maintain required certifications;
- Assist in emergency operations as needed;
- Provide basic training and instruction to operations and maintenance staff;
- Additional duties as assigned;

Qualifications:

- Knowledge of PLC logic and programming with multiple manufactures;
- Knowledge with SCADA and telemetry communication & operation;
- Knowledge of VFD and HMI, language and programming;
- Knowledge of radios and antenna systems;
- Knowledge of LAN operation and troubleshooting;
- Knowledge electrical construction and maintenance, including installation for all sizes of electrical circuits, cables, wires, switches, telemetering circuits, motor starters, motors and related automatic equipment;
- Knowledge of materials, practices, and equipment used in water/wastewater transmission system operation, construction, maintenance, and repair activities; Knowledge of the safe and proper use of all equipment, tools, and machines;
- Knowledge and understanding of OSHA, TOSHA, AWWA, NFPA, and Building codes;
- Skill in communicating orally and in writing;
- Skill in establishing and maintaining effective working relationships with City staff and the public;
- Ability to work independently and exercise good judgement.

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Education and Experience:

- High school graduate or equivalent;
- Five years' experience in a relatable field required;
- Associate degree in electronics, instrumentation, electrical technology, or closely related field preferred;
- Training courses with instrumentation and controls preferred.

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Physical Requirements	Amount of time			
	None	Occasionally (Up to 33% of the time)	Frequently (33%-66% of the time)	Constantly (More than 66% of the time)
Standing			X	
Walking (including rough/uneven surfaces)		X		
Sitting			X	
Fingering or manual dexterity			X	
Repetitive finger motion		X		
Lifting or exerting force			X	
Up to 10 pounds			X	
Up to 25 pounds			X	
Up to 50 pounds			X	
Up to 100 pounds		X		
Over 100 pounds	X			
Reaching and stretching		X		
Climbing and balancing		X		
Squatting and bending		X		
Kneeling and crawling		X		
Speaking			X	
Hearing			X	
Tasting	X			
Smelling		X		
Seeing (with correction)		X		
Close vision			X	
Distance vision			X	
Color discrimination			X	
Peripheral vision			X	
Depth perception			X	
Focusing ability			X	
Work Environment	Amount of time			
	None	Occasionally (Up to 33% of the time)	Frequently (33%-66% of the time)	Constantly (More than 66% of the time)
Outdoor weather conditions			X	
Wet or humid conditions (weather)		X		
Extreme cold (weather)		X		
Extreme heat (weather)		X		
Fumes or air-borne particles		X		
Toxic or caustic chemicals	X			
Blood-borne pathogens		X		
Risk of fire or explosion		X		
Risk of electric shock			X	
Risk of radiation	X			
Risk of drowning		X		
Prolonged exposure to vibration		X		
Loud noise level		X		
Special/Unusual Working Conditions		X		