

# City of Fort Worth, Texas

## Job Description

<b>Classification Title</b>	Instrumentation Electrical Technician I		
<b>Job Code:</b>	TC5230	<b>Job Family:</b>	Technical/Para-Professional
<b>Pay Grade</b>	508	<b>Date Reviewed:</b>	6/25/15
<b>FLSA Status</b>	Nonexempt	<b>Date Revised:</b>	7/31/23

### GENERAL SUMMARY

Performs basic work related to the installation, maintenance, operation, inspection and testing of instrumentation and electrical equipment. Participates in on the job learning with direction from supervisory staff.

### ESSENTIAL DUTIES & RESPONSIBILITIES

*The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.*

1. Calibrates and repairs of instrumentation used for monitoring water and wastewater flows related to the treatment process.
2. Establishes and follows preventative maintenance schedule for equipment in assigned area of responsibility. Inspects and cleans tools daily after use. Orders and maintains basic supplies according to City and departmental procedures.
3. Completes all federal, state and city required paperwork. Files and updates all operational paperwork.
4. Assists with maintaining and troubleshooting uninterruptable power sources.
5. Assists with maintaining and troubleshooting single and three phase motors.
6. Assists with maintaining mechanical, electrical, and instrumentation of lift, pump and metering stations throughout Tarrant County.
7. Under general supervision, performs preventative maintenance in assigned area.
8. Performs other duties as assigned.
9. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

### KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
  - Fundamentals and operations of electrical components and electrical theory.
  - Water and wastewater treatment processes with associated equipment and machinery.
  - Basic tools used in the water and wastewater treatment process.
  - Methods and techniques of calibration.
  - Basic understanding of instrumentation and control systems.

- Basic understanding in the methods of circuitry analysis and test data interpretation.
  - Common safety precautions and practices.
  - General departmental policies and practices.
  - Computer network systems.
- **Skill in:**
    - Operating various hand, power, pneumatic, hydraulic and precision tools.
    - Following procedures with step by step instruction.
    - Multitasking.
    - Time Management.
    - Basic mathematical functions.
    - Performing analytical tasks.
    - Communicating with others.
  - **Ability to:**
    - Communicate clearly and effectively, both orally and in writing.
    - Utilize appropriate tools in performing instrumentation repair and installation.
    - Read and have a basic understanding of blueprints, drawings and electrical wiring schematics.
    - Follow written and verbal instructions.
    - Basic knowledge of different color-coded electrical components.
    - Test and diagnose motor controls, water process instrumentation, and electrical systems.
    - Aggregate and interpret data from multiple sources.
    - Establish and maintain effective working relationships.

## **MINIMUM JOB REQUIREMENTS**

High School Diploma/GED and one year of experience in the instrumentation or electrical fields of construction, motor control maintenance, or process control instrumentation.

## **OTHER REQUIREMENTS**

Valid Texas Driver's License.

## **WORKING CONDITIONS**

*The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on

assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting, intense noises, gases, vibrations, chemicals, oils and workspace restrictions.

### **PHYSICAL DEMANDS**

*The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Heavy Work – Depending on assignment, positions in this class typically exert up to 100 pounds of force occasionally, up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.