



## **INSTRUMENTATION TECHNICIAN**

Winchester, Kentucky

**Department:** Engineering and Technical Services  
**Reports To:** Senior Engineer, Electrical, Instrumentation & Control Systems  
**FLSA Status:** Non-Exempt

### **Job Summary:**

Responsible for maintenance, testing, troubleshooting, calibration and repair on a variety of circuits, components, analytical equipment and instrumentation for laboratory and manufacturing equipment in this food & biotech process oriented cGMP manufacturing facility including 4-20 mA transmitters, Delta-V control systems, stand-alone controllers, electrical circuits, motor controls and probe calibrations.

### **Essential Duties and Responsibilities:**

1. Complete assigned tasks and work orders in an efficient and safe manner while adhering to safety procedures.
2. Be conscious of and maintain a clean and safe cGMP work environment.
3. Troubleshoot, service, repair, replace, calibrate, adjust and test devices, instruments, and equipment that operate primarily by the use of electronic principles or are utilized in control applications.
4. Perform confined space entries, equipment preventative maintenance/calibrations, complete corrective (emergency) work orders, and maintain operability of production equipment in a SAFE manner.
5. Responsible for project assignments including electrical and control technical drawings, coordination and planning of contractors, and completing task oriented programming.
6. Specify and request purchase of components.
7. Utilize pressure, temperature, flow, pH and DO Calibration equipment.
8. Read and write Ladder Logic.
9. Troubleshoot Delta V control system problems.
10. Inspect equipment, structures, or materials to identify the cause of errors or other problems or defects.
11. Use and develop P&IDs and/or Electrical schematics.
12. Study manufacturers' manuals to determine correct installation and operation of equipment.
13. Diagnose equipment failures by analyzing test results, error messages, and information obtained from operators and recommend alternatives to minimize repair costs and equipment downtime.
14. Perform Preventive and Predictive Maintenance (PM) activities as scheduled.
15. Establish and maintain a good working relationship with production and other personnel to carry out duties effectively.
16. Provide excellent communication between shift/relief personnel and production.
17. Provide accurate, detailed, timely and documented turnovers of equipment to operations and others within the department while recording repairs and maintenance performed.
18. Provide feedback for needed spare parts or other anticipated needs by recording parts and materials used.

19. Cross-train whenever possible to help achieve a more efficient and well-rounded department.
20. May prepare or assist in the preparation of technical reports with recommendations for solutions to technical problems.
21. Assist in preparing and coordinating engineering design related to instrumentation specifications, selection and drawings.
22. Assist in preparation of control system hardware specifications, development of systems drawings including, but not limited too, schematics, loop wiring diagrams and hardware selection.
23. Assist in control system software development, configuration and start-up activities.
24. Coordinate details and design criteria with other disciplines.
25. All other duties as assigned.

**Supervisory Responsibilities:**

None

**Qualifications:**

Level I: Entry level; Associates degree in electronics or equivalent; 0 to 3 years directly related experience.

Level II: Fully trained and operationally efficient in assigned area and/or comparative; Associates degree in electronics or equivalent; plus 2 to 5 years directly related experience.

Level III: Fully trained and operationally efficient in assigned area and/or comparative; Associates degree in electronics or equivalent; plus 5 or more years directly related experience.

1. Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
2. Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
3. Good attention to detail.
4. Ability to multi-task and work on deadlines in a safe manner.
5. Be a self-starter and thrive in a fast paced, deadline oriented work environment.
6. Be prepared to take on new challenges and maintain a positive attitude.
7. Good written/oral communication skills, interpersonal, and organizational skills.
8. Strong computer proficiency in Microsoft Office Applications such as Word and Excel, Project, and experience with a Maintenance Management System (MMS).
9. Ability to read and develop schematics, P&IDs and other technical drawings using computer aided design CAD software.
10. Experience in the areas of computer controlled manufacturing systems, centrifuges, pumps, refrigeration, utilities, water testing and chemical applications.
11. Ability and desire to be trained/cross-trained in other trades/skill levels.
12. Prefer experience working in a cGMP, aseptic processes, and Class I Division I facilities.
13. Ability to work on call and overtime as needed.

**Requirements:**

**Physical Demands:**

N (N/A)	A (1 – 25%)	B (26 – 50%)	C (51 – 75%)	D (76 – 100%)
Sitting		<u>A</u> _____ %	Standing	<u>B</u> _____ %
Walking		<u>B</u> _____ %	Driving	<u>A</u> _____ %

Bending/Stooping	<u>B</u> %	Climbing	<u>A</u> %
Reach above shoulder	<u>B</u> %	Kneeling	<u>A</u> %
Pushing/Pulling	<u>B</u> %	Crawling/Crouching	<u>A</u> %
Lifting	<u>25</u> lbs		

Computer work	<u>    </u> N/A	<u>    </u> Minimal	<u>    </u> Moderate	<u>X</u> Significant
Temperature extremes	<u>    </u> N/A	<u>    </u> Minimal	<u>X</u> Moderate	<u>    </u> Significant
Noise	<u>    </u> N/A	<u>    </u> Minimal	<u>X</u> Moderate	<u>    </u> Significant

**Travel:**

Domestic	<u>&lt;5</u> %	International	<u>0</u> %
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**Other Exposures/Demands:**

This position requires the ability to:

- Work safely in manufacturing environment that utilizes audible signals and alarms
- Effectively communicate using radios and telephones in manufacturing environment
- Demonstrate visual recognition of workplace hazards
- Read and comprehend labels and MSDS sheets
- Work in high elevations and in enclosed spaces with proper permitting
- Utilize a harness and respiratory protection

Please submit your resume and/or application ([www.martek.com](http://www.martek.com)) to Human Resources at [kyjobs@martek.com](mailto:kyjobs@martek.com) or fax to 859-744-8364.

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M/F/V/D