



Control Systems Technician

Position Details

Class Code: 7200

Job Family: Skilled Trades/Technicians

Classification: Support Professional

Terms of Employment: [Pay Grade 55 on the Support Professional Salary Schedule](#)

FLSA STATUS: NON-EXEMPT

Position Summary

Under general supervision, installs, repairs, overhauls, and maintains control systems, commercial heating, ventilation, air conditioning, and refrigeration (HVACR) equipment.

Essential Duties and Responsibilities

The list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

1. Troubleshoots and determines repairs needed on control systems.
2. Tests components with mechanical, pneumatic, and electronic field-testing equipment, and laptop/database computers.
3. Installs, repairs, and services commercial HVACR equipment and systems controls, including direct expansion (DX), multi-zone, variable air volume (VAV), and packaged units.
4. Installs, repairs, and services chillers (ranging from 50 tons and up), hydronic systems, electrical systems, variable frequency drives, air handlers, pumps, cooling tower fans, and pump alignments.
5. Aligns and adjusts control systems to specifications.
6. Provides outlines and schematics for HVACR equipment field installations.
7. Inspects new equipment installations performed by contractors; reports status of work performed to supervisor and/or project manager.
8. Assists the crane operator in rigging and placing equipment.

9. Reviews, programs, and reprograms HVACR control system software.
 10. Instructs maintenance/operations staff on operations, minor repairs, and safety standards of HVACR equipment.
 11. Initiates work orders and requests for shop supplies/equipment.
 12. Performs preventive maintenance on all equipment listed above.
 13. Provides outlines and diagrams for HVACR control system installations.
 14. Responsible for safely handling and disposing of hazardous materials, including refrigerants and refrigerant oils.
 15. Conforms to safety standards, as prescribed.
 16. Performs other tasks related to the position, as assigned.
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Distinguishing Characteristics

Installs, services, and repairs electronic/pneumatic control systems and commercial HVACR equipment operating at low/high voltages and pressures.

Knowledge, Skills, and Abilities (Position Expectations)

1. Knowledge of variable frequency drives (VFDs) and VAV HVACR systems (i.e., hydronic chillers and air handlers.)
2. Knowledge of Environmental Protection Agency (EPA) Clean Air Act practices/procedures.
3. Knowledge of HVACR trade practices/procedures.
4. Knowledge of control system repair practices/procedures, including pneumatic, electric, direct digital, and computerized systems.
5. Knowledge of building construction relative to HVACR equipment installation.
6. Knowledge of Occupational Safety and Health Administration (OSHA) procedural guidelines for electrical/mechanical lock out-tag out.
7. Ability to upgrade new HVACR equipment, computer control devices, and control systems.
8. Ability to troubleshoot electronic and pneumatic controls without schematics.
9. Ability to perform Eddy current tube analyses.
10. Ability to use air balance equipment.
11. Ability to recognize, understand, interpret, and apply all local, state, and national codes/regulations, including Uniform Building Code (UBC), Uniform Mechanical Code (UMC), Uniform Plumbing Code (UPC), National Electrical Code (NEC), EPA, etc.

12. Ability to learn computer operating systems (i.e., disk operating system (DOS), Operating System/2 (OS/2), etc.), software applications, and HVACR sequence of operations.
 13. Ability to meet predetermined deadlines.
 14. Ability to interpret written and verbal instructions.
 15. Ability to plan and organize work.
 16. Ability to read, interpret, and update building and electrical/pneumatic system blueprints, drawings, and schematics.
 17. Ability to operate hand/power tools and equipment.
 18. Ability to safely move and relocate heavy objects.
 19. Ability to perform heavy, strenuous, physical work.
 20. Ability to work flexible hours/shifts.
 21. Ability to work in confined areas.
 22. Ability to withstand heights and perform work safely.
 23. Ability to work cooperatively with employees and the public.
 24. Ability to recognize/report hazards and apply safe work methods.
 25. Possess physical and mental stamina commensurate with the responsibilities of the position.
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Position Requirements

Education, Training, and Experience

1. High school graduation or other equivalent (i.e., General Education Development (GED), foreign equivalency, etc.)
2. Five (5) years' experience with HVACR control systems and related equipment; or,
A combination of technician training and field experience (minimum three (3) years' field experience) in HVACR control systems and related equipment equivalent to five (5) years; or,
Journeyman certification as an HVACR technician, and one (1) additional year of experience with HVACR control systems; or,
Associate degree from an accredited college/university in electronics, computer technology, mechanical systems, or a related field, and three (3) years' experience with HVACR control systems; or,
Bachelor's degree from an accredited college/university in electrical/mechanical engineering, HVACR technology, or a related field, and one (1) year of experience with HVACR control systems.

Licenses and Certifications

1. A valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada. License must be maintained for duration of assignment.
2. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles (DMV) at time of application or Qualified Selection Pool (QSP) placement and at time of interview prior to final selection.
3. Clark County School District-issued forklift certification. If certificate is not in possession at time of application or QSP request, it must be obtained within five (5) months of hire into position. Certification must be maintained for the duration of the assignment.

Preferred Qualifications

Certification as a Universal Refrigerant Handler in accordance with Title 40 of Code of Federal Regulations (CFR) part 82, subpart F.

Document(s) Required at Time of Application

1. High school transcript or other equivalent (i.e., GED, foreign equivalency, etc.)
 2. Copy of a valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
 3. Copy of current driving history (dated within six (6) months) issued by the DMV.
 4. Journeyman certificate, if applicable.
 5. Transcript(s) from an accredited college/university, if applicable.
 6. District-issued forklift certificate, if applicable.
 7. Specific documented evidence of training and experience to satisfy qualifications.
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Examples of Assigned Work Areas

District facilities – schools (classrooms, cafeterias, etc.), offices, boiler rooms, facility rooftops, construction sites, etc.

Work Environment

Strength

Medium/heavy – exert force of 50-100 lbs., occasionally; 25-50 lbs., frequently; 10-20 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, pushing, pulling, stooping, kneeling, crouching, reaching, handling, and repetitive fine motor activities. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Vision: Frequent near acuity, occasional far acuity, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Exposure to outside weather conditions with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Furniture, office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment.)

Examples of Equipment/Supplies Used to Perform Tasks

District-issued vehicles, ladders, analog/digital temperature analyzers, eye/hearing protection, electronic refrigerant leak detectors, pressure/vacuum pumps, oxyacetylene welding/cutting equipment, megohmmeters, analog/digital volt-ohm/amp meters, pneumatic calibration gauge kits, motorized forklifts, chain hoists, refrigerant reclamation equipment, handheld radios, hand/power tools, etc.

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

- Revised: 08/10/23
- Created: 12/01/87