

William S. Hart Union High School District

Position Description

Position: Heating, Ventilation and Air Conditioning Technician	
Job Family: Maintenance and Operations	FLSA: Non-exempt
Approved by: Personnel Commission, April 20, 2011	Salary Range: 330

Summary

Under the direction of the Director of Maintenance and Operations or Maintenance Supervisor, performs a variety of skilled mechanical tasks and operations in the repair, installation, alteration and preventive maintenance of heating, ventilation, air conditioning and refrigeration systems.

Distinguishing Career Features

The Heating, Ventilation and Air Conditioning Technician requires journey level experience, competency and physical abilities in connection with heating, ventilation, air conditioning and refrigeration systems.

Essential Duties and Responsibilities

- Inspects, installs, services, maintains and repairs heating, ventilation, air conditioning (HVAC), refrigeration and control systems. Diagnoses malfunctions and determines repair needs. Assures maximum energy efficiency of systems. Assures safe and proper operating conditions in compliance with applicable codes.
- Troubleshoots malfunctions with various HVAC and refrigeration parts and equipment such as boilers, pumps, compressors, motors, transformers, condensers and chillers and performs appropriate repairs, adjustments or replacements.
- Performs routine safety checks, oversees inspections of facilities, and performs preventive maintenance on all HVAC devices and equipment including testing, installing, replacing, lubricating or otherwise maintaining gas valves, safety valves, filters, coils, fuses, switches, belts, bearings, pulleys, joints, thermometers, ducts, gauges and thermostats.
- Maintains and repairs boilers; calibrates electrical and pneumatic control systems including inspecting limits, water and pneumatic controllers and other monitored temperatures, pressures, voltages and amperes.
- Performs pipefitting work related to the installation or replacement of HVAC and refrigeration systems.
- Works from blueprints and diagrams to determine appropriate layout, replacement or repair of electrical wiring of HVAC equipment.
- Estimates materials and time needed to complete an assignment.
- Monitors inventory levels of materials, equipment and supplies. Orders, receives and maintains adequate inventory of materials, equipment and supplies.
- Responds to emergency calls on a 24-hour basis to keep the District safe and operational. Performs necessary repairs or adjustments.

- Maintains work areas, tools and equipment in a safe, clean and orderly condition.
- Oversees inspections of facilities and equipment for safety. Assists with scheduled preventive maintenance.
- Operates and maintains specialized equipment including testers, meters, gauges, pumps and a variety of hand and power tools. Utilizes computers and related hardware and software applications to diagnose system malfunctions. Drives a vehicle to conduct work.
- Stores, removes and disposes of oils, refrigerants and other hazardous materials in accordance with established laws, regulations and procedures.
- Communicates with District personnel and various outside agencies to exchange information and resolve issues or concerns.
- Plans, organizes, and lays out assigned tasks. Interprets plans, diagrams, blueprints, sketches and specifications. Works from verbal and written instructions and work orders.
- Maintains various records related to refrigerants, projects and assigned activities.
- May perform other general maintenance duties as assigned that support the overall objective of a skilled maintenance worker.

Qualifications

Knowledge and Skills

- Principles, practices, methods, techniques, materials, tools, equipment, layouts and set-ups used in HVAC/R systems and operations.
- Steam and hot water hydraulic systems.
- Electronics, including microprocessor operation, digital and pneumatic controls.
- Energy management and conservation systems, including remote computer-aided access.
- Safe work practices and the safety orders of the California OSHA related to area of specialty.
- Uses and purposes of general maintenance, hand and power tools and equipment.
- Pertinent Federal, State and local laws, codes and regulations in area of specialization.
- Knowledge of and skill at using a computer to access email and common office productivity and/or order processing software to access work related information.
- Math skills to calculate figures and amounts such as fractions, discounts, proportions, percentages, area, circumference and volume, and to apply concepts of basic algebra and geometry.
- Human relations skills to convey technical information to others and respond to customer requests.

Abilities

- Perform journeyman commercial HVAC work skillfully and in a timely manner.
- Install, maintain, repair and troubleshoot problems related to refrigeration systems, electrical equipment and electrical and pneumatic control systems.
- Balance air conditioning and heating systems.
- Read blueprints, diagrams and schematics as they relate to HVAC and refrigeration systems.
- Promptly respond to district emergencies.

- Use and maintain all of the tools, equipment, vehicles used during routine performance of duties.
- Estimate materials and labor for assignments.
- Observe safe work practices and handle hazardous materials according to accepted procedures.
- Complete training within a reasonable amount of time in handling, storage, and disposal of hazardous materials, asbestos awareness, OSHA standards, and blood borne pathogens.
- Ability and initiative to independently develop methods and techniques in the interest of effectiveness and efficiency.
- Understand, follow and interpret oral and written instructions, safety rules, policies and procedures and instruction manuals.
- Communicate effectively both orally and in writing.
- Maintain routine records.
- Maintain productive and cooperative working relationships with others.

Physical Abilities

- Function indoors in a shop environment and/or outdoors in the field engaged in work of primarily an active nature.
- Ambulatory ability to walk and carry tools and apparatus for 400 yards.
- Sufficient strength and agility to lift load, move, push and pull objects of heavy weight (up to 70 pounds). Requires the ability to bend, stoop, and work in awkward positions.
- Hand and finger dexterity to operate specialized equipment and tools.
- Balance to work above ground.
- Climb (e.g. ladders and poles), stoop, bend, crawl, kneel, and crouch on a regular basis.
- Visual acuity to read and observe diagrams, manuals, work conditions, and recognize color-coded wires and connections.
- Auditory ability to carry on conversations in person and with communications devices.
- Speaking ability to carry on ordinary conversations.
- Work in extreme temperature conditions.

Education and Experience

High school diploma or equivalent plus specialized higher education or industry training in the HVAC trade, and four years of journey-level experience in the installation, maintenance and repair of HVAC systems and equipment.

Licenses and Certificates

Valid California driver's license. Requires appropriate certification in area of specialization for handling and recycling of refrigerants.

Mandatory Requirements

Safe driving record. Must be insurable and maintain insurability by the District's insurance carrier(s).

Working Conditions

Work is performed indoors and outdoors in extreme weather conditions where significant health and safety considerations exist from physical labor, handling of materials, exposure to machinery with moving parts, risk of electrical shock and possible exposure to blood borne pathogens.