

ANTELOPE VALLEY COMMUNITY COLLEGE DISTRICT

HVAC TECHNICIAN

Salary Range 19

BASIC FUNCTION:

Under the direction of the Maintenance Supervisor performs skilled mechanical maintenance duties in the construction, diagnosis, repair, installation and alteration of District heating, ventilation, air conditioning and refrigeration systems and related equipment and facilities; performs preventive maintenance and routine servicing of equipment to assure efficient operation. Performs other related duties as may be assigned.

REPRESENTATIVE DUTIES: *E = indicates essential duties of the position*

- Repairs/rebuilds mechanical drive systems to include but not limited to replacement of drive bearings, shafting, blower wheel assemblies, multi-pulley and belt drives, and exhaust blower assemblies and motors for HVAC equipment. (E)
- Maintains and repairs hot and cold water pumping systems including motor replacement, bearing and shaft seal replacement, mounting and alignment techniques for proper operation, replacement of rubber and chain drive couplings; repair and rebuild triple duty valve, Y strainer assemblies; check valves, air and sludge separators, air bleeds and water treatment, air scavenging and sludge removal. (E)
- Maintain and repairs cooling tower, evaporator condenser and air cooled condenser; maintains, repairs, and replaces fills elements, water distributor, filter screening, piping, electrical components and control operation. (E)
- Maintains hot water boiler operation including electronic and mechanical safeties, primary and secondary pump systems and boiler ignition controls, chilled water systems operations, water flow dynamics, piping-pumping configurations. (E)
- Maintains and repair as necessary, gas fired furnaces, infrared heaters, hydronic systems including safeties. (E)
- Maintains and repairs as necessary, electronic and electrical sequencing and controls. (E)
- Installs and replaces condensers, evaporators, compressors, pumps, air handlers specifying equipment. (E)
- Diagnoses, removes, replace, field services variable frequency drives. (E)
- Interprets blue prints and provides recommends on equipment for mechanical engineers, works with contractors, architects, and distributors.
- Determines and recommends equipment manufacturers to engineers. (E)
- Evaluates equipment and recommends replacement equipment as needed.
- Communicates with administrators, skilled maintenance personnel, contractors and others concerning construction, maintenance and repair issues.
- Trains, assigns, and reviews the work of student workers, summer helpers or other maintenance personnel as assigned; assists other skilled maintenance personnel as required.
- Performs other related duties as may be assigned.

EDUCATION AND EXPERIENCE: Any combination equivalent to: graduation from high school supplemented by completion of an HVAC apprenticeship program and three years journey-level operation, maintenance and repair experience in the commercial HVAC and refrigeration trade.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

Incumbents must qualify for a valid Forklift Certificate within the first year in this classification.

Valid EPA Retrieval and Reclamation Certification issued by an authorized agency.

KNOWLEDGE OF:

Standard practices of the HVAC and refrigeration trade.
Theory of HVAC and refrigeration systems.
Materials, methods and tools used in the operation and repair of HVAC and refrigeration systems.
Applicable building codes, ordinances and regulations of State and local authorities pertaining to HVAC, refrigeration and boilers.
Air compressors and pneumatic controls.
Principles and practices of Direct Digital Control Electronics related to HVAC equipment operation.
Cooling tower and boiler water treatment.
Manual and electrical tools and equipment applicable to the HVAC and refrigeration trade.
Welding and soldering techniques.
Health and safety regulations.
Basic record-keeping techniques.
Proper methods of storing equipment, materials and supplies.
Computer operation and related software applications.

ABILITY TO:

Perform skilled mechanical maintenance duties in the inspection, repair, installation and alteration of District heating, ventilation, air conditioning and refrigeration systems and related equipment and facilities.
Calibrate systems.
Perform preventive maintenance and routine servicing of equipment.
Diagnose defects, and install, repair and maintain heating, ventilating, refrigeration, and air-conditioning units.
Interpret and work from plans, diagrams, and specifications.
Follow oral and written instructions.
Operate specialized machinery, equipment and tools utilized in the repair, installation and maintenance of heating, ventilation, air conditioning and refrigeration systems.
Read and work from blueprints, shop drawings and sketches.
Communicate effectively both orally and in writing.
Understand and follow oral and written directions.
Work cooperatively with others.
Work independently with little direction.
Meet schedules and time lines.
Maintain routine records and prepare reports.
Observe legal and defensive driving practices.
Lift heavy objects.

WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES: Not applicable – no permanent full-time staff to supervise.

CONTACTS: Security, co-workers, contractors, architects, engineers, manufacturers, and vendors.

PHYSICAL EFFORT:

Lifting and carrying heavy objects.
Pushing and pulling.
Dexterity of hands and fingers to operate specialized tools.
Bending at the waist, kneeling or crouching.
Reaching overhead, above the shoulders and horizontally.
Climbing ladders and stairs and working from heights.
Walking over rough or uneven surfaces.

WORKING CONDITIONS:

Indoor and outdoor environment

Driving a vehicle to conduct work.