



HVAC MECHANIC (5301 Series)

Responsibilities

- Investigates, troubleshoots and repairs nonfunctioning and under-performing heating, cooling, humidifying and dehumidifying systems. Work is often performed on complex systems used in large office buildings or explosive processing buildings. A variety of testing techniques is used to explore probable reasons for equipment failure including direct digital controls (DDC).
- Installs a variety of heating cooling and air conditioning systems.
- Repairs and maintains ice machines, freezers, and refrigerators. Balances systems using electronic and pneumatic controls.
- Dismantles repairs and reassembles pumps, impellers, compressors, chillers, receivers, and evaporators. Installs and fits connecting rods, crank shafts, piston rings, bearings, and bushings. Overhauls valves by adjusting or replacing gaskets, springs, floats, diaphragms, valve fittings, seals, and couplings. Aligns motors and flywheel drives.
- Installs or replaces pipes and ducts.
- Compressors worked on include gear, reciprocation, centrifugal and rotary pump with a variety of refrigerant controls such as those with low and high pressure side floats, automatic thermostatic expansion valves, capillary or choke types, and those based on volume or quantity changes.
- Repairs motor controls including hermetically sealed motors and pressure controls, thermostatic motor controls (remote and double remote), full and semi-automatic defrosting controls, relays and other controls to protect against overloading or overheating.
- Maintains, troubleshoots, repairs and installs cascade and multi-stage ultra-low temperature cooling systems. Overhauls and retrofits environmental chambers. Investigates and repairs HVAC systems using complex digital and pneumatic controls.
- All information for work orders, assets, specifications, and condition assessments is captured in the NAVFAC's MAXIMO - therefore, candidates must be able to learn and utilize this software platform.
- Emergency/On-Call: may be required to respond to job related emergencies, within 1 hour of notification.

Qualifications

- Must have two years of experience with Cascade Refrigeration Systems which have temperature ranges between 100°F and 450°F is desired. Training on or working knowledge of CFC-12 refrigeration recycling.
- Two years of experience and significant knowledge of electric, pneumatic and direct digital controls. Two years of experience and knowledge of and ability to install, maintain or repair, integrated dehumidification systems (IDS) used to control temperature and humidity in buildings that process sensitive explosives is desired.
- EPA Universal Refrigerant Certification required (CFC handling and disposal).
- Periodic hearing and vision testing required.



- Must have Lockout/Tag out and CPR certification.
- Physical Effort
- Heaviest weights handled are approximately 100 pounds. Most of the time handles apparatus weighing 25 to 50 pounds and carries these for distances of approximately 25 to 50 feet. Heavy exertion is required frequently, as in mounting and removing equipment and moving gas cylinders. Kneels, crouches, stoops, and works from ladders.

Working Conditions

Work is often outdoors, sometimes in extreme heat or cold. Incumbent is exposed to noise vibration and frequently to dirt, dampness, and occasionally to poor illumination. Incumbent will wear appropriate safety gear for the task at hand. There is a possibility of exposure to toxic refrigerants. Subject to large amount of escaping gases when making emergency repairs.