## 9724

# FACILITIES/EQUIPMENT MAINTENANCE TECHNICIAN

### **Nature of Work**

Under general supervision, performs experienced journey level work maintaining and repairing a variety of equipment used in heating, cooling and general operation of public buildings. Uses OHM meters, volt meters, AMP meters, thermometers, hydrometers, conductivity meters, light meters, sound meters, dial indicators, micrometers, and calipers. Calculates and orders material. May be required, with proper training, to work in asbestos or other environmental issues. Must have a valid drivers license. Shift work and call-back work may be required. Performs related work as required.

#### **Examples of Work**

- Installs, operates, maintains and repairs building environmental control equipment such as centrifugal and reciprocating chillers and associated control equipment, steam and hot water boilers and associated equipment, and air handling and ducting systems.
- Installs, operates, maintains and repairs high and low voltage electrical distribution equipment such as high voltage switch gear, power distribution transformers, motor control centers and power distribution panels, gas and diesel powered emergency generators.
- Installs, operates, maintains and repairs building plumbing and piping systems such as steam, hot water, heating, cooling, gas, freon, pneumatic, fresh water, waste water and sewage piping; rest room equipment; kitchen and ice making equipment.
- Installs, operates, maintains, and repairs interior and exterior lighting systems, electrical circuits and portable equipment.
- Operates, maintains, installs, and overhauls pumps for fluid systems.
- Uses dial indicators to align pumps, motors and compressors.
- Performs chemical analysis of water in chilled water, cooling tower water, hot water and steam closed loop systems according to prescribed instructions; adds needed chemical agents to the water as indicated by test results.
- Performs preventive maintenance on heating and cooling equipment such as tightening fan belts, changing filters, and providing lubrication.
- Effects routine repairs to equipment by replacing motors, belts, seals, bearing blades, fuses, contractors and packing.
- Records data such as temperature, hours of operation and fuel consumed; requests supply of fuel in advance of running out, may use computer information for data.
- Practices safety techniques and procedures on the job and in the shop to prevent fires and provide safety for self and others in the area; applies knowledge of the trade, knowledge of safety standards, signs, barricades and safety equipment (glasses, shoes, belts and masks).
- Uses and interprets non-destructive predictive maintenance equipment.
- Maintains necessary materials and time-man-hour accounting records of work performed; enters information on time card and job/work order.
- Uses computerized work station to determine status of the heating and cooling systems and at regular intervals to insure continuous, proper temperature throughout buildings or complexes and takes appropriate action to correct deficiencies when discovered.
- Uses electrical or gas welding, brazing and cutting equipment to accomplish various plumbing and structural repairs or modifications.
- Inspects heating and cooling equipment such as meters, safety valves, and pipes for loose connections, corrosion, or other defects and makes necessary repairs.

## FACILITIES/EQUIPMENT MAINTENANCE TECHNICIAN (CONT'D)

## Examples of Work (cont'd)

Reads meters and gauges to verify specified operating conditions.

- Orders parts and materials necessary for installation, preventive maintenance, and repair of equipment.
- Fabricates and installs basic HVAC ducts and fixtures.
- Completes preventive, predictive, and scheduled maintenance records.
- May occasionally participate in the snow removal plan by removing snow and ice from building entrances, walks, runways, taxiways, roadways, parking areas, and other designated areas assigned by supervisor using motorized equipment and hand tools.
- May occasionally perform grounds maintenance including grass cutting and sod repair; uses hand mowers, riding mowers, backhoe, and dozer to complete assigned duties.

## **Knowledge, Skills and Abilities**

Knowledge of heating, ventilating, and air-conditioning equipment.

Knowledge of plumbing, carpenter, electrician, drywall and finishing trades.

- Ability to use micrometers, calipers, dial indicators, and various digital and analog test or diagnostic equipment.
- Knowledge of the operational characteristics of building equipment and repair procedures. Knowledge of various types of heating, ventilation, and cooling systems.

Ability to paint and do drywall.

Ability to follow oral and written instructions.

Ability to read prints, schematic circuits and diagrams used in repairing equipment.

Ability to use power and plumbing tools in the repair of building fixtures and facilities.

- Ability to install, perform preventive maintenance and repair air conditioners, air compressors, generators, pumps and oilers used in heating and cooling of buildings and washers, dryers and refrigerators.
- Ability to read and interpret the information from gauges and meters to monitor heating and cooling systems proper operation and to keep simple records of the readings and daily maintenance activities.
- Knowledge of safety practices and procedures when maintaining building electrical and mechanical equipment.

## **Minimum Qualifications**

- Training Graduation from a standard four-year high school or GED or four year apprenticeship program or two year post-secondary technical school.
- Substitution Experience in air-conditioning, heating or refrigeration may be substituted for the required training on a year-for-year basis.
- Experience Four years of full-time or equivalent part-time paid experience in heating, cooling, ventilation or the mechanical or building trades such as plumbing, electrical, carpentry, plasterer, painter, welder, machinist, mechanic or masonry work.
- Special Requirement Specific positions may require certification from a federal EPA approved testing organization as a certified technician required by the clean Air Act on refrigerant recycling.

Established:	2/18/93
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