



**YOUNGSTOWN
STATE
UNIVERSITY**

CLASSIFICATION SERIES:

Boiler Technician Occupation

CLASSIFICATION CODE/PAY GRADE:

54537/73

BARGAINING UNIT:

Excluded

Power Plant Energy Management Supervisor

SERIES PURPOSE: The purpose of the Boiler Technician occupation is to operate and maintain boilers to supply heat and air conditioning for the university as well as perform duties and responsibilities related to another of the main functional areas associated with the maintenance and upkeep of facilities. These functional areas may include maintenance repair, air quality, plumbing, and/or building supervision.

CLASS CONCEPT: The class works under direction and requires expert knowledge of boiler operation procedures and air conditioning, refrigeration, and heating technology, its processes, and blueprint reading in order to operate and maintain boilers and related mechanical equipment as well as perform repairs, preventative maintenance, and skilled installation on air conditioning, refrigeration, and heating equipment. In addition, the class must have an expert knowledge of the plumbing trade in order to operate and maintain boilers and related mechanical equipment as well as install new plumbing, repair plumbing equipment and maintain facilities and equipment.

Incumbents provide mechanical and electrical support, project management for maintenance and construction/renovation projects on campus. Supervise and manage Facilities employees in the maintenance and upkeep of the Central Utility Plant, Utility Distribution throughout campus, and the thermal storage tank.

JOB DUTIES: Incumbents may perform some or all of these duties or other job-related duties as assigned.

Supervises employees and students engaged in power plant maintenance and related activities; assigns and reviews work; establishes timeframes for the completion of assigned tasks; trains and orients employees; approves/disapproves requests for paid leaves; may interview candidates for employment and recommend personnel actions; evaluates employee work performance; receives and responds to grievances; provides assistance with the development of unit work procedures and policies.

Plans and implements the inspection and maintenance programs on steam distribution systems in power plant to include low pressure steam, hot water, heating lines, expansion joints, traps, regulators, valves, heat exchangers and coils.

Effective 05/16/2021

Performs preventative maintenance on power plant and auxiliary machinery and equipment.

Provides mechanical and electrical engineering support for maintenance issues and projects, as well as in-house construction and renovation projects.

Coordinates with consulting engineers retained for major construction/renovation projects.

Evaluates complex mechanical and electrical problems and implements solutions.

Directs emergency repairs on mechanical and electrical distribution systems.

Installs, programs, monitors, and maintains Direct Digital Control System components to include sensors, transducers, controllers, and network devices in campus buildings; troubleshoots system, identifies problems, and implements changes to system; adds, modifies and deletes computer programs for all energy management systems.

Provides training and technical assistance; instructs maintenance staff and students in the use and operation of direct digital controllers.

Coordinates and facilitates transition to energy management system in departments, interacts with faculty, staff, and students (e.g., explains energy management principles and procedures, schedules installations, etc.).

Administers performance contracts to ensure energy efficiency and operational cost savings.

Keeps daily project logs, negotiates change orders, inspects for compliance with contract specifications and performs final acceptance inspections.

Manages resources of tools, materials and manpower efficiently to complete work within established budgets. Provides technical assistance in all areas of building heating and cooling equipment. Determines priorities for maintenance and repair.

Develops and implements a preventative maintenance system for areas of responsibility. Supervises projects in area of responsibility.

Coordinates planning and scheduling for maintenance jobs. Prepares work order requests as needed. Assists with budget recommendations.

Follows established safety policies and procedures. Reports accidents on the job promptly; preparing and submitting incident reports. Promotes good housekeeping practices.

Administers and enforces work rules, rules of conduct, performance standards, University and departmental policies and procedures, etc., among assigned employees. Continually updates knowledge/skills through appropriate courses, seminars, publications and contact with others in the trade.

Establishes and maintains a positive and cooperative working relationship with members of the department and campus community. Demonstrates ability to work effectively in a service environment under pressure subject to frequently changing priorities.

Available to answer emergency questions 24-hours a day.

Other Functions and Responsibilities: Assists with training new hires.

Performs other duties as assigned and/or required that are within the level of responsibility for this classification at the discretion of the supervisor.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of: air conditioning, refrigeration, and heating technology; plumbing trade, blueprint reading; local, state, and federal regulations, policies, and procedures; safety practices and procedures in boiler operation; basic mathematic principles.

Skill in: heating, ventilation, air conditioning, and refrigeration maintenance, repair, and installation; minor welding*; operation of boiler equipment; use of common plumbing tools; building and equipment maintenance and repair; operation of hand and power tools.

Ability to: recognize unusual or threatening conditions and take appropriate action; interpret a variety of instructions in written, oral, picture, or schedule form; understand system of mechanical procedures; understand technical manuals; work alone on most tasks; use limbs, fingers or hands to operate equipment, machinery or tools; stand, bend or walk for long periods of time; apply principles to solve problems involving few variables within familiar context; read and understand simple sentences with common vocabulary

(*) Developed after employment.

MINIMUM QUALIFICATIONS: Associates degree in Engineering or other technical field (preferred studies include Thermodynamics, Hydronics, Environmental or Facility Operations) with two (2) plus years of experience in HVAC/Performance with JCI's Metasys. A proven track record of five (5) or more years' performance in Mechanical Systems and data collection/operation and building systems or operations.

PREFERRED QUALIFICATIONS:

Bachelor Degree in Electrical or Mechanical Engineering and LEED Certification; work experience with energy efficiency modeling and system performance evaluation.

REQUIRED CERTIFICATIONS, TRAINING, AND/OR LICENSURES: Clever Brooks Boiler Room Essentials or current third class license as a Stationary Steam Engineer issued by Ohio Department of Industrial Relations

PHYSICAL REQUIREMENTS: In accordance with the U.S. Department of Labor physical demands strength ratings, this position will perform heavy work.

HEAVY: work involves exerting 50 to 100 pounds of force occasionally, or 25 pounds of force constantly to move objects.

UNUSUAL WORKING CONDITIONS: Exposed to dirt, high and low temperatures, loud noise and dangerous equipment; may work in tight or confined area; may work outside in unpleasant conditions.