CLASS TITLE: STEAMFITTER

CHARACTERISTICS OF THE CLASS

Under supervision, performs journey-level steam-fitting work in the installation, repair, and maintenance of pipes and pipe systems and related equipment, and performs related duties as required

ESSENTIAL DUTIES

• Reads documents (e.g., blueprints, specifications, work orders) to assess work required and to determine the proper installation and repair methods to use
• Removes damaged, defective, or obsolete pipes and pipe systems and related equipment
• Ensures adequate supplies of tools, equipment, and materials at work sites to complete job
• Uses tools to measure, cut, bend, weld, and thread lengths of pipe and to install and repair pipe systems
• Installs, removes, repairs, and maintains low and high pressure boilers, radiators, compressors, and pumps for steam, hot water, and heating systems
• Repairs, installs, and adjusts thermostats and pneumatic and hydraulic controls to ensure proper functioning
• Inspects and tests installed systems and equipment to ensure proper working order, detect and plug leakages, and to ensure compliance with safety and municipal standards
• Cleans and replaces worn safety valves, air vents, steam traps, pressure gauges, gaskets, filters, and fittings and related appurtenances of the piping system
• Operates specialized equipment and tools (e.g., cutters, hacksaws, torches, arc welders, threaders) to cut, weld, solder, braze, and thread pipes to specification
• Prepares work activity reports
• Loads, transports, and unloads equipment and supplies
• Cleans equipment and work sites after projects

NOTE: The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.

MINIMUM QUALIFICATIONS

Education, Training, and Experience

• Successful completion of a US Department of Labor registered steam fitting apprenticeship training program and journeyman status; or an equivalent combination of education, training, and experience

Licensure, Certification, or Other Qualifications

• Some positions may require certification as a Universal technician as required by 40 CFR part 82 subpart F of the EPA
• Some positions may require or prefer candidates to possess additional certifications (e.g., pipe welding, soldering, brazing, rigging, etc.) depending on department assignment
• Some positions may require a valid State of Illinois Driver’s License
WORKING CONDITIONS

- Exposure to outdoor weather conditions
- Exposure to loud noise, fumes or dust, hazardous chemicals, oily or wet environment
- Exposure to hazardous conditions (e.g., construction sites, heavy machinery)
- Work performed in cramped or confined locations
- Work performed above or below ground level
- Work performed using scaffolds and ladders

EQUIPMENT

- Hand tools (e.g., hammer, screwdriver, wrench, pliers)
- Power tools (e.g., electric, pneumatic)
- Personal protective equipment (e.g., hard hat, shoes, glasses, gloves, vest, pads, self-contained breathing apparatus)
- Safety devices or equipment (e.g., cones, barricades, metal plates, scaffolding, ropes)
- Measuring tools (e.g., tape measure, ruler, calipers, measuring wheel)
- Standard tools and equipment of the steam fitting trade (e.g., pipe cutters, threaders, welding equipment)
- Ladders

PHYSICAL REQUIREMENTS

- Substantial lifting (up to 75 pounds) is required
- Ability to stand for extended or continuous periods of time
- Ability to quickly bend, stretch, twist, or reach out with one's body, arms, and/or legs
- Ability to climb staircases, ladders, and/or step stools
- Ability to access difficult to enter spaces (e.g., roofs, basements, tanks, field equipment, cramped quarters)
- Ability to operate applicable hand tools, power tools, and equipment

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Moderate knowledge of:

- *steam fitting principles, theory, methods, and procedures
- *steam fitting safety and code standards, including OSHA standards
- use of safety equipment and protective gear

Some knowledge of:

- *steam fitting tools and equipment
- *properties and characteristics of steam fitting materials, including pipe yard materials and supplies
- *steam fitting repair, maintenance, and preventative maintenance methods, practices, and procedures
- applicable emergency operations
Knowledge of applicable City and department policies, procedures, rules, and regulations

Skills

• *ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
• *COORDINATION WITH OTHERS - Adjust actions in relation to others’ actions
• EQUIPMENT MAINTENANCE - Perform routine maintenance on equipment and determine when and what kind of maintenance is needed
• *INSTALLATION - Install equipment, machines, wiring, or programs to meet specifications
• *REPAIRING - Repair machines or systems using the needed tools
• *TROUBLESHOOTING - Determine causes of operating errors and decide what to do about it

Abilities

• COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
• SPEAK - Communicate information and ideas in speaking so others will understand
• COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
• RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
• REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense

Other Work Requirements

• INITIATIVE - Demonstrate willingness to take on job challenges
• STAMINA - Demonstrate energy and stamina to accomplish work tasks
• COOPERATION - Be pleasant with others on the job and display a good-natured, cooperative attitude
• DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
• ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City’s Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.