

## PIPEFITTER SERIES

<u>Code No.</u>	<u>Class Title</u>	<u>Occ. Area</u>	<u>Work Area</u>	<u>Prob. Period</u>	<u>Effective Date</u>	<u>Last Action</u>
3309	Pipefitter	14	023	6 mo.	00/00/00	Rev.
1962	Pipefitter Sub-Foreman	14	023	6 mo.	00/00/00	Rev.
1828	Pipefitter Foreman	14	023	6 mo.	00/00/00	Rev.

*Promotional Lines: 108 and 109*

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### Series Narrative

Employees in this series perform and/or supervise skilled work recognized in the pipefitter trade, including the fabrication, assembly, installation, replacement, and maintenance of pipe systems, pipe supports, and related hydraulic, pneumatic, and/or computerized systems/equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems.

### DESCRIPTIONS OF LEVELS OF WORK

#### Level I: Pipefitter (Refrigeration Mechanic) 3309

Employees in this class perform skilled work recognized in the pipefitter trade. They work under the direction of a designated supervisor.

A Pipefitter typically –

1. performs duties specific to and normally required in the pipefitter trade, following recognized procedures and techniques for such work
2. performs work needed to fabricate, assemble, install, or repair pipe systems, pipe supports, temperature control devices and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems
3. performs associated work by utilizing oxyacetylene or electric welding processes
4. diagnoses, repairs, and/or overhauls refrigeration equipment (such as compressors, evaporators, condensers, pumps, cooling towers, and heat exchangers), refrigeration systems, and/or temperature control systems (such as thermostats, relays, damper motors, pneumatic operated valves, small air compressors, fiber optics, and/or direct digital control systems)
5. assists in preparation of material orders for purchase of equipment or repair parts
6. assists in the preparation of estimates for projected overhaul, repair, or replacement of equipment or repair parts
7. maintains records and prepares reports on repairs completed or on units requiring future special service
8. assists engineers in planning modifications and/or new installation projects
9. makes assemblies or sub-assemblies thereof for installation by others
10. completes installations assembled by others

11. cuts and assembles such work from sketches, diagrams, detailed drawings or specifications
12. complies with accepted safety standards
13. may assign and direct the work of apprentices
14. performs other related duties as assigned

**Level II: Pipefitter Sub-Foreman (Refrigeration Mechanic Sub-Foreman) 1962**

Employees at this level perform skilled work recognized in the pipefitter trade and assist in the supervision of work for an assigned group of pipefitters, or other similar craft and trade personnel. They work under the direction of a designated supervisor.

A Pipefitter Sub-Foreman typically –

1. assists the primary supervisor in the direction and assignment of work for pipefitters and other similar craft and trade personnel; provides training and instruction in various phases of the work performed, and operation of equipment and systems
2. reviews and approves the requisition of materials/equipment by assigned employees; may tag and store material as necessary
3. coordinates and arranges for utility outages
4. performs duties specific to and normally required in the pipefitter trade and as outlined at the lower level of this series, including duties related to refrigeration equipment and systems, following recognized procedures and techniques for such work
5. may act for primary supervisor during absences
6. assists supervisor in his/her duties which may include:
  - a. acquisition of tools, equipment, and supplies
  - b. safety procedures
  - c. inspection of work
  - d. determining personnel matters (such as job progress, schedule changes, time sheet review, and work performance)
7. performs other related duties as assigned

**Level III: Pipefitter Foreman (Refrigeration Mechanic Foreman) 1828**

Employees in this class supervise the work of pipefitters, temperature control mechanics, or other similar craft and trade personnel. They work under the general direction of a designated supervisor.

A Pipefitter Foreman typically –

1. directs, coordinates, and supervises the work of pipefitters, or other similar craft and trade personnel; responsible for controlling work flow, tools, equipment, and materials used on the job and information necessary for the accomplishment of work assignments
2. reviews and approves the requisition of materials/equipment by assigned employees

3. provides control system design and estimates of labor and materials
4. participates in the management of personnel matters/activities
  - a. selection/hiring of employees
  - b. planning and conducting training programs for assigned employees or staff
  - c. evaluation and counseling of employee work performance; initiates disciplinary action as necessary
  - d. time card/sheets and leave approval
  - e. enforces safe working habits, including safe operation and handling of materials and equipment
5. works closely with project coordinators, administration, and/or other related staff to determine and coordinate projects, estimating and controlling craft-related project costs, operational needs, troubleshooting, etc.
6. may perform duties specific to and normally required in the pipefitter trade and as outlined at the lower levels of this series, including duties related to refrigeration or temperature control equipment and systems, following recognized procedures and techniques for such work
7. maintains records
8. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

Level I: Pipefitter (Refrigeration Mechanic)

3309

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) Certificate of completion of a Pipetrade apprenticeship under a registered Bureau of Apprenticeship and Training program.

OR

- (B) Experience sufficient to qualify as a journeyman Pipefitter, or other Pipetrade classification, with a minimum of five (5) years (60 months) of actual work in the trade, which may have included apprenticeship and/or applicable vocational training. The trade for this purpose shall include work normally performed by Pipefitters, Pipefitter Welders, Refrigeration Mechanics, Temperature Control Mechanics, Sprinkler Fitters, and/or Oil Burner Mechanics, ~~and Leadburners.~~

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge and ability to perform manual labor or mechanical operations (construction, installation, repair, and maintenance) customarily performed in the pipefitter trade
2. Knowledge of machines and tools, including their designs, uses, repair, and maintenance
3. Design- Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and model

4. Mathematics – Knowledge of arithmetic, algebra, geometry, ~~calculus, statistics~~, and their applications
5. Monitoring- Watching gauges, dials, or other indicators to make sure a machine is working properly
6. Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
7. Operation and Control – Controlling operations of equipment or systems
8. Equipment Maintenance – Performing routine maintenance on equipment and determining when and what kind of maintenance is needed
9. Troubleshooting – Determining causes of operating errors and deciding what to do about it.
10. Installation – Installing equipment, machines, wiring, or programs to meet specifications
11. Ability to communicate information and ideas verbally and in writing so others will understand
12. Ability to listen to and understand information and ideas presented through spoken words and sentences
13. Ability to read and understand information and ideas presented in writing
14. Ability to independently interact with clients and the public in a friendly, positive manner to achieve customer satisfaction including effectively resolving customer concerns

**Level II: Pipefitter Sub-Foreman (Refrigeration Mechanic Sub-Foreman) 1962**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) Certificate of completion of a Pipetrade apprenticeship under a registered Bureau of Apprenticeship and Training program **AND two (2) years** (24 months) of applicable experience.

OR

- (B) Experience sufficient to qualify as a journeyman Pipefitter, or other Pipetrade classification, with a minimum of seven (7) years **(84 months)** of actual work in the trade, which may have included apprenticeship and/or applicable vocational training. The trade for this purpose shall include work normally performed by Pipefitters, Pipefitter Welders, Refrigeration Mechanics, Temperature Control Mechanics, **Sprinkler Fitters, and/or** Oil Burner Mechanics, ~~and Leadburners.~~

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge and ability to perform manual labor or mechanical operations (construction, installation, repair, and maintenance) customarily performed in the pipefitter trade

2. Knowledge of machines and tools, including their designs, uses, repair, and maintenance
3. Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
4. Knowledge of human resource and supervisory activities, including the coordination and management of people and resources
5. Design- Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and model
6. Mathematics – Knowledge of arithmetic, algebra, geometry, ~~calculus, statistics,~~ and their applications
7. Monitoring- Watching gauges, dials, or other indicators to make sure a machine is working properly
8. Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
9. Operation and Control – Controlling operations of equipment or systems
10. Equipment Maintenance – Performing routine maintenance on equipment and determining when and what kind of maintenance is needed
11. Troubleshooting – Determining causes of operating errors and deciding what to do about it.
12. Installation – Installing equipment, machines, wiring, or programs to meet specifications
13. Ability to communicate information and ideas verbally and in writing so others will understand
14. Ability to listen to and understand information and ideas presented through spoken words and sentences
15. Ability to read and understand information and ideas presented in writing
16. Ability to independently interact with clients and the public in a friendly, positive manner to achieve customer satisfaction including effectively resolving customer concerns
17. Ability to use basic computer applications and learn appropriate or specialized software programs as related to position
18. Ability to apply general rules to specific problems to produce answers that make sense

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1. (A) Certificate of completion of Pipetrade apprenticeship under a registered Bureau of Apprenticeship and Training program AND four (4) years (48 months) of applicable experience.

OR

- (B) Experience sufficient to qualify as a journeyman Pipefitter, or other Pipetrade classification, with a minimum of nine (9) years (108 months) of actual work in the trade, which may have included apprenticeship and/or applicable vocational training. The trade for this purpose shall include work normally performed by Pipefitters, Pipefitter Welders, Refrigeration Mechanics, Temperature Control Mechanics, Sprinkler Fitters, and/or Oil Burner Mechanics, ~~and Leadburners.~~

#### KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge and ability to perform manual labor or mechanical operations (construction, installation, repair, and maintenance) customarily performed in the pipefitter trade
2. Knowledge of machines and tools, including their designs, uses, repair, and maintenance
3. Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction
4. Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources
5. Design- Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and model
6. Mathematics – Knowledge of arithmetic, algebra, geometry, ~~calculus, statistics,~~ and their applications
7. Monitoring- Watching gauges, dials, or other indicators to make sure a machine is working properly
8. Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
9. Operation and Control – Controlling operations of equipment or systems
10. Ability to supervise assigned staff effectively
11. Ability to communicate information and ideas verbally and in writing so others will understand
12. Ability to listen to and understand information and ideas presented through spoken words and sentences
13. Ability to read and understand information and ideas presented in writing

14. Ability to independently interact with clients and the public in a friendly, positive manner to achieve customer satisfaction including effectively resolving customer concerns
15. Ability to use basic computer applications and learn appropriate or specialized software programs as related to position
16. Ability to apply general rules to specific problems to produce answers that make sense
17. Ability to identify complex problems and review related information to develop and evaluate options and implement solutions

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