



Air Conditioning and Boiler Operator

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
AIR CONDITIONING AND BOILER OPERATOR I	9034	A13	\$35,439 - \$52,388
AIR CONDITIONING AND BOILER OPERATOR II	9035	A15	\$38,976 - \$58,045
AIR CONDITIONING AND BOILER OPERATOR III	9036	A17	\$42,976 - \$64,469
AIR CONDITIONING AND BOILER OPERATOR IV	9037	A19	\$48,244 - \$76,028

GENERAL DESCRIPTION

Performs work in the operation and maintenance of steam-generating equipment, turbines, compressors, and auxiliary equipment, involving maintaining proper operating levels and conditions of boilers and boiler room equipment, operating refrigeration equipment, and performing repairs and adjustments.

EXAMPLES OF WORK PERFORMED

Operates and maintains air conditioning and boiler equipment.

Monitors boiler water and adds chemicals and fuel to maintain appropriate levels.

Inspects and maintains various types of gauges, instrumentation, and indicators; and ensures operations of refrigeration and associated equipment.

Performs mechanical adjustments, greases and oils pumps and operating equipment, repairs leaky valves, and completes preventative maintenance.

Cleans air filters and spaces around air conditioning units and boilers.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level IV may also perform work listed within the previous levels.

Note: *Factors that may distinguish between levels include the degree of independence in performing the work, the complexity of the work, the scope of responsibility, and the employee's related work experience and education.*

Employees at the journey levels (levels I-III) may independently perform the full range of work identified within current or previous levels and may assist others in performing work of greater complexity. Senior-level employees (level IV) may serve in a lead role and provide guidance to other operators.

AIR CONDITIONING AND BOILER OPERATOR I: Performs routine (journey-level) work in the operation and maintenance of steam-generating equipment, turbines, compressors, and auxiliary equipment. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment.

AIR CONDITIONING AND BOILER OPERATOR II: Performs moderately complex (journey-level) work in the operation and maintenance of steam-generating equipment, turbines, compressors, and auxiliary equipment. Works under general supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may:

- Operate and maintain refrigeration equipment.
- Maintain water levels in boilers; operate turbines, compressors, fans, pumps, and auxiliary equipment; and switch chillers as needed to cover load requirements.
- Monitor the performance of turbines, motors, and pumps.
- Inspect and repair pumps, turbines, compressors, boilers, gauges, instrumentation, and other auxiliary equipment.
- Maintain records and logs detailing equipment performance, malfunctions, and maintenance.
- Clean boilers and turbine blades, insert new tubes in boilers, fit pipes, and repack valves.

AIR CONDITIONING AND BOILER OPERATOR III: Performs complex (journey-level) work in the operation and maintenance of steam-generating equipment, turbines, compressors, and auxiliary equipment. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may:

- Coordinate the inspection and maintenance of various types of gauges, instrumentation, and indicators; and ensure the proper operation of boilers, refrigeration equipment, and auxiliary equipment.
- Monitor, adjust, and maintain feed water and hot water pumps, as well as water levels in boilers, to optimize performance.
- Maintain records on fuel and water consumption, steam generation, temperatures, pressures, and other measures.
- Interpret meters, gauges, and thermometers; maintain log sheets; and check the operation of turbines, pumps, compressors, motors, and other equipment.
- Monitor condensers and other equipment, open valves, and adjust controls.
- Monitor the operation of chillers.
- Perform equipment repairs; clean and oil equipment.
- Regulate steam pressure and water levels.

AIR CONDITIONING AND BOILER OPERATOR IV: Performs highly complex (senior-level) work in the operation and maintenance of steam-generating equipment, turbines, compressors, and auxiliary equipment. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Review records on fuel and water consumption, steam generation, temperatures, pressures, and other measures; and interpret and record various temperatures and pressures.
- Oversee the firing of pressure gas-fired boilers.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in the operation and maintenance of steam-generating, air conditioning, and refrigeration equipment. Graduation from a standard senior high school or equivalent is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

For all levels

- Knowledge of air conditioning principles and operations, and pressure steam boiler principles and operations.
- Skill in the use of tools and in the reading and monitoring of gauges and instrumentation.
- Ability to operate compressors, turbines, and pressure steam boilers; to understand and follow instructions; to troubleshoot and resolve equipment issues; and to communicate effectively.

Additional for Air Conditioning and Boiler Operator II – IV levels

- Knowledge of the functions and mechanics of stationary plant equipment such as turbines, compressions, pumps, and motors; and the fundamental principles of electricity.
- Ability to operate plant equipment, to detect defects or malfunctions in equipment while in operation, to determine and take proper action quickly in emergencies, and to make mechanical repairs.

Additional for Air Conditioning and Boiler Operator III – IV levels

- Knowledge of pressure steam heating and refrigeration plant operating principles, practices, tools, and equipment; properties of fuel, air, water, and steam; the operation and maintenance of equipment, including steam turbines, compressors, pumps, valves, and motors; the operation, adjustment, and maintenance of controlling, indicating, metering, and recording devices used in plant operation; and the principles of steam and refrigeration.
- Skill in the adjustment of electrical and mechanical equipment.
- Ability to interpret meters; to operate and adjust boilers, turbines, compressors, pumps, and other equipment; and to analyze operating difficulties in the equipment.