

**BOARD OF REGENTS  
STATE OF IOWA  
REGENT MERIT SYSTEM**

**Class Title: Utility Plant Maintenance Mechanic III**

**Class Code: 5466**

**Pay Grade: 214**

**GENERAL CLASS DESCRIPTION:**

Under general supervision installs and repairs all types of utility plant piping systems, performing precision coupling alignments, disassembly and re-assembly of large steam turbines, and analysis of equipment by use of ultrasonic testers.

**CHARACTERISTIC DUTIES AND RESPONSIBILITIES:**

1. Performs all duties of Utility Plant Maintenance Mechanic I and II.
2. Installs and repairs all types of utility plant piping systems including piping systems covered by ASME Code B31.1 standards.
3. Performs precision coupling alignments and alignment of precision internal equipment components.
4. Directs mechanical maintenance crews in disassembly, inspection and repair of large steam turbines, water tube boilers, and other complex equipment (over 300 horsepower) and systems.
5. Rigs and lifts large complex components (over 5 tons) safely into position.
6. Performs analysis of equipment condition using information obtained through the use of various predictive maintenance tools, which may include vibration analyzers, thermography analyzers, ultrasonic thickness testers, lubricating oil analyzers, etc.
7. Provides training and instruction to other staff.
8. Completes site specific utility plant training program for Utility Plant Maintenance Mechanic III within assigned time period.

The tasks listed under the heading of Characteristic Duties and Responsibilities are examples of the variety and general nature of duties performed by employees in positions allocated in the class. The list is descriptive only and should be used for no other purpose. It is not intended that any position include every duty listed, nor is it intended that related duties cannot be required.

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**KNOWLEDGE, SKILLS AND ABILITIES:**

1. Knowledge of utility plant systems and equipment.
2. Knowledge of tools and methods necessary to troubleshoot and maintain the most complex utility plant equipment and buildings.
3. Knowledge of principles of electricity.
4. Knowledge of OSHA regulations and the ability to comply with OSHA procedures.
5. Skill in pipefitting – steam, water, and air.
6. Skill in the cutting and fabrication of metal components.
7. Skill in the fabrication and repair of all utility plant piping systems.
8. Skill in structural welding
9. Skill in the carpentry.
10. Skill in the use of rigging equipment for complex components that weigh over 5 tons.
11. Skill in the use of precision measurement tools.
12. Skill in the use of machining tools.
13. Ability to read and understand blueprints, control system drawings and repair manuals.
14. Ability to perform basic math computations.
15. Ability to communicate effectively.
16. Ability to follow oral and written instructions.
17. Ability to provide training and instruction in the repair of all major utility plant equipment.
18. Ability to withstand constant high noise, dust, fumes, poor lighting and ventilation, and high temperature levels.
19. Physical requirements: Must be able to move and lift at least 80 lbs. Must be able to climb stairs and work in an industrial environment.

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**CLASS SPECIFICATIONS:**

1. Must have a high school diploma or equivalent, and
2. Possession of a state-sponsored stationary engineers license similar to the State of Minnesota Second Class Engineer license or ability to become licensed within 6 months, and
3. Four years experience in an industrial plant, process plant or utility plant maintenance environment involving rotating equipment maintenance, and including a minimum of two years experience with boilers and other steam equipment; and certification for welding of utility plant piping systems according to ASME B31.1 standards, or
4. A two year post high school technical degree in industrial maintenance and two years experience in an industrial plant, process plant or utility plant maintenance environment involving rotating equipment maintenance, and including a minimum of two years experience with boilers and other steam equipment; and certification for welding of utility plant piping systems according to ASME B31.1 standards, or
5. Journey level skills in two or more of the following trades: boilermaker, millwright, or welder, and certification for welding of utility plant piping systems according to ASME B31.1 standards, and
6. Basic certification in one or more predictive maintenance skills, such as thermography, vibration analysis, or lubricating oil technician.

**REVISION EFFECTIVE August 1, 2006**

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