

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE

BOILER INSPECTOR

DEFINITION

Performs technical work in the inspection of boilers and unfired pressure vessels throughout the state to ensure compliance with state safety laws and regulations; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Performs annual internal and external inspections of construction, installation, and maintenance on power boilers and unfired pressure vessels to ensure compliance with the Code of Iowa (Chapter 89) and the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

Examines and tests boiler and pressure gauges, safety devices, burner controls and related appliances in order to detect substandard performance of the equipment.

Performs hydrostatic tests by the use of a Hydrostatic Pressure Pump to discover leakages and malfunctions of boiler machinery under pressure.

Checks boilers for such factors as safety-valve operation, proper welding, corrosion, erosion, pitting, or cracking of heads and interiors of steam drums, securing of wash plates, splitting or cracking of tube ends, and blistering, cracking, erosion and leakage of combustion space.

Investigates boiler and pressure vessel explosions and accidents.

Prepares written reports regarding all inspections and/or accidents and their causes; files reports with the supervisor.

Inspects replacement or installation of new boilers for such factors as proper material strengths and specifications, proper use and installation of safety devices, proper welding and fitting of pipes and plating and internal and external boiler construction.

Notifies supervisor when boilers or pressure vessels fail to meet legal requirements in order to take appropriate action; prepares reports and maintains records regarding equipment defects.

COMPETENCIES REQUIRED

Knowledge of American Society of Mechanical Engineers Code pertaining to boilers and unfired pressure vessels.

Knowledge of welding practices as applied in boiler construction and repair, and stress and strength potentials of metals used in fabrication of boilers and pressure vessels.

Knowledge of boiler capacities and specifications regarding construction, modification and/or repair.

Knowledge of safety factors involved in the operation of high-pressure boilers and unfired pressure vessels, high pressure and exhaust piping, and other powerhouse equipment.

Knowledge of the construction of steam fittings, fluid transmitting systems, boilers, and steam engineering as it relates to this equipment.

Ability to operate all types of boilers and pressure vessels.

Ability to inspect and recognize causes of malfunctioning in high and low pressure systems.

Ability to express ideas clearly and concisely, both orally and in writing.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Follows policy and cooperates with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from high school or G.E.D. and five years of experience in the construction, installation, repair, or inspection of boilers or allied gauges, pumps, radiators equipment, or in the capacity of power plant engineer, or steam operating engineer, or boiler maker or boiler inspector;

OR

an equivalent combination of education and experience substituting one year of the required experience for each year of the required education, with a maximum substitution of four years.

NECESSARY SPECIAL REQUIREMENTS

All appointees to this classification must successfully complete registration as a National Board Commission member with the National Boiler Board of Boiler and Pressure Vessel Inspectors within one (1) year of hire.

NOTE:

Travel is required for positions in this class. Employees must arrange transportation to and from assigned work areas.

Effective Date: 9/08 TB