

**MICHIGAN CIVIL SERVICE COMMISSION  
JOB SPECIFICATION**

**BOILER INSPECTOR**

**JOB DESCRIPTION**

Employees in this job function as inspectors of boilers, attachments, accessories, and related equipment to insure safety and compliance with state laws, regulations, rules, and codes.

There are three classifications in this job.

**Position Code Title – Boiler Inspector-E**

**Boiler Inspector 10**

This is the intermediate level. The employee performs a limited range of boiler inspection assignments in a developing capacity.

**Boiler Inspector E11**

This is the experienced level. The inspector performs a full range of boiler inspection assignments and exercises considerable independent judgment in applying and interpreting the laws, regulations, rules, and codes to specific situations.

**Position Code Title – Boiler Inspector-A**

**Boiler Inspector 12**

This is the advanced level. The employee either functions as a lead worker overseeing the work of others or as a senior worker. Senior-level employees consistently perform complex assignments beyond those expected at the experienced level that have been approved by Civil Service.

**NOTE:** Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

**JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Inspects steam and hot water boilers and related equipment through visual observation of external and internal parts, review of blueprints, and hydrostatic testing to observe and report on potential violations of the Boiler Act and ASME code.

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Conducts inspections of new boiler installations; orders corrections if the construction or installation is found to be unsafe and/or not in compliance with state regulations.

Inspects boilers that are currently in use, determines necessary repairs, and reviews design and materials required for the repair.

Reviews proposed construction plans and documents to determine compliance with applicable laws, regulations, and codes.

Determines whether boiler repairs have been properly completed; approves or disapproves the reinstallation of repaired boilers.

Documents violations through notes, sketches, measurements, and/or photographs.

Investigates boiler accidents to determine the cause; orders repairs and/or makes recommendations to prevent future accidents.

Advises builders, contractors, boiler owners, boiler trades workers, and others regarding state regulations and safe methods of constructing, installing, maintaining and repairing boilers.

Maintains records, prepares reports, and conducts correspondence related to the work.

Performs related work as assigned.

### **Additional Job Duties**

#### **Boiler Inspector 10**

Performs routine boiler inspections which include low pressure boilers used for hot water heat, hot water supply, and steam heat with inputs of less than 5,000,000 BTU/hr.

#### **Boiler Inspector E11**

Performs routine boiler inspections and inspections of high pressure boilers, all new boiler installations (initial inspection), repairs to boilers and accident investigations.

#### **Boiler Inspector 12 (Senior Worker)**

Performs on a regular basis the most complex and difficult investigations, projects, accident investigations, evaluations, complaints, and issues of a sensitive nature.

#### **Boiler Inspector 12 (Lead Worker)**

Determines work priorities, assigns work, and oversees the work of lower-level Boiler Inspectors.

Provides instruction and training in the proper methods and processes necessary to carry out boiler inspector assignments.

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### **JOB QUALIFICATIONS**

#### **Knowledge, Skills and Abilities**

**NOTE:** Developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of state laws, regulations, rules, and codes relating to the use, construction, installation, and repair of boilers.

Knowledge of the standard practices, processes, tools, equipment and materials related to the construction, installation, maintenance, and repair of boilers.

Considerable knowledge of boiler inspection techniques and practices.

Knowledge of the occupational hazards and safety precautions applicable to the work.

Knowledge of investigative techniques and methods.

Ability to interpret and apply codes, laws, rules, and regulations relative to the work.

Ability to read and interpret blueprints.

Ability to observe critically, obtain accurate data, and prepare reports.

Ability to communicate effectively.

Ability to operate a motor vehicle.

#### **Additional Knowledge, Skills, and Abilities**

##### **Boiler Inspector 12 (Senior Worker)**

Ability to perform the most complex boiler inspector assignments.

##### **Boiler Inspector 12 (Lead Worker)**

Ability to prioritize and evaluate the work of others.

Ability to train and instruct others in the work.

Ability to organize and coordinate the work of the unit.

Ability to assign work.

#### **Working Conditions**

Work is normally performed in a boiler room, which exposes the inspector to heat, dust, dirt, noise, dampness, and noxious fumes and odors.

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The inspector must frequently crawl into and out of boilers, stoop while in the boiler, climb to considerable heights while inspecting very large boilers, and to work in tunnels and crawl spaces.

The inspectors may be exposed to unsafe boilers and toxic substances in poorly ventilated conditions.

Considerable travel by automobile may be required.

### **Physical Requirements**

The job duties require an employee to bend or stoop for extended periods in confined spaces.

### **Education**

Educational level typically acquired through completion of high school.

### **Experience**

#### **Boiler Inspector 10**

Three years of experience in the inspection, construction, maintenance, repair, or operation of high pressure or low pressure boilers, as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector.

#### **Boiler Inspector E11**

Five years of experience in the inspection, construction, maintenance, repair, or operation of high-pressure boilers, as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector.

#### **Boiler Inspector 12**

Six years of experience in the inspection, construction, maintenance, repair, or operation of high pressure boilers, as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector, including one year equivalent to a Boiler Inspector E11.

### **Alternate Education and Experience**

#### **Boiler Inspector 10**

Possession of a valid Michigan Boiler Installer or Repairer license for 3 years may be substituted for the experience requirement.

### **Special Requirements, Licenses, and Certifications**

Successful completion of the Boiler Inspector examination conducted by the Michigan Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety, is required for Boiler Inspector 10 positions.

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Possession of a commission issued by the National Board of Boiler and Pressure Vessel Inspectors is required for Boiler Inspector E11 and 12 positions.

Possession of a valid Michigan driver's license.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

**JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

**Job Code**  
BOILERISP

**Job Code Description**  
Boiler Inspector

**Position Title**

**Position Code**

**Pay Schedule**

Boiler Inspector-E

BOLRISPE

A02-019

Boiler Inspector-A

BOLRISPA

A02-024

ECP Group 1  
Revised 6/1/06  
TeamLeaders