

Missouri Department of Transportation Job Description

Job Title: Senior Fabrication Inspector

Title Code: R03536

Salary Grade: 9

Exemption Status: Non-Exempt

Supervisory Responsibilities: None

District/Division: Central Office - Bridge

Effective Date: 02/01/2025

Replaces (Effective Date): 09/16/2024

General Summary

The senior fabrication inspector inspects steel fabrication shop work for complicated structures to ensure the work meets the department's specifications and provisions. Responsibilities are performed under general supervision.

Minimum/Required Qualifications

- Two years of college or Associate's Degree: Computer Aided Drafting, Drafting, or engineering related field with additional training in welding inspection, structural steel shop practices, and non-destructive testing
- Eight years of experience, consisting of four years in structural detailing and four years in structural materials fabrication inspection. Structural welding experience may be substituted for structural detailing experience.
- Certification by the American Welding Society as a Certified Welding Inspector, or American Society of Nondestructive Testing (ASNT) Level II Magnetic Particle Testing, or ASNT Level II Ultrasonic Testing.
- AMPP Basic Coating Inspector or acquired within six months.
- Successful completion of a range of motion examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires continuous, statewide and/or national, overnight travel.
- Job requires significant physical stamina and endurance.

- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment including carrying out duties from elevated heights, near heavy machinery or equipment in hazardous areas, and exposure to loud noises.
- A postsecondary degree is the best measure to ensure candidates possess required knowledge in computer aided drafting; trigonometry, geometry, and physics; statics and strength of materials; surveying concepts; material quantity calculations, takeoffs, and unit pricing; and dimensioning concepts.

Examples of Work

1. Acts as the department's primary on-site contact and representative with the fabricator in making and communicating operating decisions concerning the quality and acceptability of structural fabrications.
2. Conducts prefabrication meetings and periodic progress meetings with the fabricator's representatives; interprets specification, special provisions, and other contract documents.
3. Initiates, reviews, and responds to questions, letters, memorandums, and meeting minutes (in addition to daily diaries) to ensure effective documentation and communication of the department's positions concerning fabrication and structural performance issues.
4. Ensures successful utilization of the quality assurance inspection mode in the fabrication shop.
5. Witness non-destructive testing (such as dye penetrant, magnetic particle, ultrasonic, and reviews x-ray films) done by shop personnel, and performs visual inspection of shop welds and general workmanship for conformance to shop and design drawings.
6. Reviews material mill test certifications, welder qualifications and welding procedures, nondestructive test records, and qualification of shop personnel for conformance to requirements of the contract documents.
7. Observes shop assembly of bridge steel and drilling of field connections for conformity to the contract documents.
8. Assists fabrication plan reviewers in the review process for fabricator detail shop drawings to ensure conformance to construction plans, special provisions, standard specifications, welding codes, and accepted shop practices.
9. Provides assistance and guidance to fabricators and department personnel in solving special material, welding, and fabrication problems.
10. Assists in resource management by coordinating, scheduling, and directing the efforts of other fabrication inspection personnel assigned to provide support for the project; provides input to the section supervisor relating to performance management for these activities.

11. Recommends specification and policy revisions as they relate to structural welding and fabrication quality control and quality assurance.
12. Acts as a coach and/or partner in the training and orientation of new fabrication inspection personnel concerning technical aspects and also their expected role as a member of the fabrication team.
13. May perform supervisor's duties in his/her absence.
14. Performs other responsibilities as required or assigned.