

Missouri Department of Transportation Job Description

Job Title: Materials Inspector

Title Code: R05787

Salary Grade: 7

Exemption Status: Non-Exempt

Supervisory Responsibilities: None

District/Division: District Offices - Materials

Effective Date: 05-01-2025

Replaces (Effective Date): 07-01-2022

General Summary

The materials inspector samples and tests general construction and maintenance materials to ensure that materials and products used in state highway construction and maintenance activities comply with specifications. Responsibilities are performed under moderate supervision.

Minimum/Required Qualifications

- Bachelor's degree in engineering from an ABET-accredited college or university curriculum.
- Certification to operate nuclear gauges may be required.
- OSHA 10-Hour Certification required within 90 days.
- Successful completion of a work simulation examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires moderate physical activity.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.
- Job may require operation of vehicles to plow snow and spread ice control materials.
- A postsecondary degree is the best measure to ensure candidates possess required engineering knowledge, including in applied physics and mathematics, drafting, engineering processes and procedures, project management, industry ethical standards, and analyzing and modeling data.

Examples of Work

1. Samples and tests general construction materials such as steel, pipe, paint, asphalt, and cement to determine if materials conform to specifications and approves/rejects material for intended use.
2. Samples and tests fine and course aggregate production for quality and gradation specification compliance at quarries supplying materials for department projects and approves/rejects material.
3. Prepares samples for bituminous trial mixes; coordinates with contractor on trial mix information.
4. May perform duties of inspector in charge at plants producing bituminous mixtures to determine if the material produced conforms to specifications and approves or rejects the material.
5. May perform inspections of prestressed or precast concrete and special sampling and testing of materials required on federal aid projects.
6. May maintain records of test results, production records, and reports of general materials and aggregates approved for each project or for maintenance use.
7. Performs other responsibilities as required or assigned.