



POSITION DESCRIPTION
IMSA Traffic Signal Sr. Field Technician III

Employed by Gades Sales Company Inc.

Position Summary

The IMSA Traffic Signal Sr. Field Technician III is a senior-level technical position responsible for advanced installation, programming, diagnostics, optimization, and lifecycle management of traffic signal systems and Intelligent Transportation Systems (ITS).

This position serves as a technical authority in the field, providing leadership, mentoring junior technicians, ensuring regulatory compliance, and supporting complex signal operations across multiple jurisdictions.

The IMSA Traffic Signal Sr. Field Technician III Certification validates advanced knowledge of traffic signal technologies and operations, including system design, diagnostics, communications infrastructure, detection technologies, grounding systems, and regulatory standards.

This role requires a high level of independent judgment, technical expertise, and field leadership.

Department:

Traffic / Signal Field Operations

Reports To:

Traffic Signal Maintenance Supervisor / Director of Field Operations

FLSA Status:

Non-Exempt

Location:

Field operations across Gades Sales Company territory:
Kansas, Missouri, Oklahoma, Colorado, Utah, Wyoming, and New Mexico

Frequent regional travel required.

Essential Duties and Responsibilities

1. Advanced Technical Operations

- Independently diagnose, troubleshoot, repair, and optimize complex traffic signal systems
- Program and configure signal controllers (NEMA TS1/TS2, 170/2070 platforms, and related architectures)
- Perform advanced signal timing adjustments, coordination, and phasing modifications
- Install, configure, and test advanced vehicle detection systems (loops, radar, microwave, acoustic, video detection, etc.)
- Troubleshoot and maintain data communications infrastructure (copper, fiber optic, wireless systems)
- Install and maintain signal preemption systems (emergency vehicle, railroad, transit priority)
- Evaluate and implement lightning protection and grounding systems
- Conduct system-level operational testing and commissioning of new or upgraded intersections

2. Regulatory and Standards Compliance

Ensure compliance with:

- Manual on Uniform Traffic Control Devices (MUTCD) – Current Edition
- National Electrical Code (NEC)
- National Electrical Safety Code (NESC)
- ITE Traffic Control Devices Handbook – Current Edition
- NEMA TS1 / TS2 Standards
- CalTrans 170 / 2070 Standards (as applicable)
- State and local DOT specifications

Maintain awareness of regulatory updates and industry best practices.

3. Leadership and Mentorship

- Provide technical guidance and oversight to Level I and Level II technicians
- Assist in training and development of field personnel
- Lead field crews on complex repair or upgrade projects

- Serve as on-site technical decision-maker during critical signal failures
 - Promote and enforce company safety culture
-

4. Preventive Maintenance and Asset Management

- Develop and execute preventive maintenance strategies
 - Maintain and review documentation, asset inventories, and lifecycle records
 - Evaluate equipment performance trends and recommend upgrades
 - Support capital improvement and modernization initiatives
-

5. Safety and Risk Management

- Ensure full compliance with OSHA, company safety standards, and state work zone requirements
 - Implement and oversee safe work practices on active roadways
 - Conduct hazard assessments and mitigate electrical and traffic exposure risks
-

Minimum Qualifications

- High school diploma or GED (Associate's degree in electronics, electrical technology, or related field preferred)
 - Current IMSA Traffic Signal Field Technician II Certification
 - Minimum five (5) years of progressive experience in traffic signal operations
 - Demonstrated advanced troubleshooting and programming experience
 - Valid driver's license with acceptable driving record
 - Ability to travel extensively within company territory
-

Required Technical Knowledge

Candidate must demonstrate knowledge and experience in:

- MUTCD (current edition)
- NEC and/or applicable electrical code
- NESC standards
- ITE Traffic Control Devices Handbook

- NEMA TS1/TS2 controller standards
 - CalTrans 170/2070 platforms (where applicable)
 - Signal phasing and coordination principles
 - Multiple traffic detection technologies
 - Signal preemption systems
 - Grounding and lightning protection systems
 - Fiber optic, copper, and wireless communications networks
 - Advanced signal diagnostics and testing equipment
-

Preferred Qualifications

- Experience with central traffic management systems (ATMS/ITS platforms)
 - Experience supporting multi-agency or multi-state signal operations
 - Supervisory or crew lead experience
 - Formal electrical or electronics training
 - OSHA or advanced safety certifications
-

Key Competencies

- Advanced analytical and troubleshooting skills
 - Independent decision-making ability
 - Strong leadership and mentoring capabilities
 - Clear technical communication skills
 - High level of safety awareness
 - Strategic thinking regarding system performance and lifecycle
-

Work Environment

- Outdoor work on active roadways and intersections
- Exposure to traffic, electrical hazards, heights, and adverse weather
- Frequent travel throughout seven-state territory
- Possible emergency callouts and after-hours response

Physical Requirements

- Ability to stand, bend, climb, and lift up to 50 lbs.
- Ability to climb ladders and signal structures safely
- Manual dexterity for technical equipment operation
- Visual acuity for signal diagnostics and wiring inspection

IMSA Certification Path

- **Prerequisite:** Current IMSA Traffic Signal Field Technician II
- Minimum five years of experience in traffic signal operations
- Successfully pass IMSA Traffic Signal Sr. Field Technician III exam
- Demonstrated competency in advanced signal technologies and regulatory standards

Anthony V. Mohatt

Gades Sales Company, Inc.

Anthony V. Mohatt

President & CEO

Dated: January 1, 2026