# QUALITY MANAGEMENT:

"IEM will meet our customer's needs with innovative products while we improve our business"

This formal Quality Policy drives IEM's commitment to providing a quality product or service to each of our customers. Our ISO 9001:2008 certified Business Management Plan sets forth nine Key Business Processes that are governed by explicit procedures and work plans to assure that we meet customer needs and that we continue to improve our business practices. The Key Business Processes include:

Engineering
Production
Organization Management
Business Development
Customer Relations

Purchasing
Administration
Infrastructure
Knowledge Innovation
and Management

## STRATEGIC PARTNERS:

IEM collaborates on virtually all projects with experts in relevant areas. Over the years IEM has established a large number of strategic alliances with universities, federal research laboratories, federal and state government agencies, and both small and large corporations.



IEM corporate headquarters located in a restored 19th Century industrial building in Troy, NY

International Electronic Machines Corporation has provided transportation safety and security solutions for more than 20 years. IEM serves freight rail, transit, intelligent transportation system, defense, and security markets with core technical competencies in machine vision and video analytics, non-destructive evaluation, thermal imaging, wireless sensors and sensor networks, and robotics. We invite you to explore IEM and discover the many ways we can meet your needs.

For additional information on IEM and how we can best serve your specific needs, please contact us at:

IEM Corporation 850 River St. Troy, NY 12180-1239 USA

518-268-1636 518-268-1639 (fax)

www.iem.net



International Electronic Machines Corporation
WISE Solutions for Transportation Safety & Security



# International Electronic Machines Corporation

WISE Solutions for Transportation Safety & Security

Experience.
Creativity.
Collaboration.
Innovation.
Responsiveness.

#### MISSION:

IEM develops, produces, and markets innovative imaging, optical and other sensor-based systems for safety and security applications for intelligent transportation system applications. By combining innovative sensor systems with advanced software, IEM creates intelligent solutions for use in vehicle inspection, security monitoring, maintenance activities, and more. IEM leverages research and development for the Department of Defense and other government and industrial partners to develop core technologies.

#### SERVICES PROVIDED:

IEM offers a complete range of services including:

- Research & Development
- Product Engineering
- Software Development
- Manufacturing
- Sales and Marketing
- System Installation
- Post Installation Service
- Remote Data Management



#### **Freight Rail**

In-Ground Systems WISE™ Wheel Profile Brake Measurement Wheel Flaw Detection Bearing Condition Flat Spot/Out of Round Portable Devices Electronic Wheel Gauge Laser Wheel Profilometer Laser Rail Profilometer Wheel Diameter Gauge Integrated Data Management WISE AQS Wheel Management Remote Client Car and Locomotive Monitoring

SmartCar<sup>™</sup> System

WISENet™ RailPower Suite™



#### **Transit and Passenger Rail**

In-Ground Systems WISE™ for Transit Wheel Profile Brake Measurement Wheel Flaw Detection Bearing Condition Flat Spot/Out of Round Portable Devices Electronic Wheel Gauge Laser Wheel Profilometer Laser Rail Profilometer Wheel Diameter Gauge Integrated Data Management WISE AQS Wheel Management Remote Client Ride Quality Sensor System

#### MARKETS SERVED:

IEM provides a combination of products based on proven technology and advanced research & development for the following primary markets:

- Freight Railroads
- Transit and Passenger Rail
- Intelligent Transportation Systems
- Defense
- Security Surveillance and Monitoring
- Robotics

#### CORE COMPETENCIES:

IEM meets our customer's needs through a combination of past experience, cutting edge research & development, and a deep understanding of technical challenges and solutions. IEM has developed core competencies in several important technologies relevant to our intended markets.

- Machine Vision and Video Analytics
- Infrared and Thermal Imaging
- Wireless Sensors and Sensor Networks
- Power Harvesting
- Robotics



## **Intelligent Transportation Systems**

Commercial Motor Vehicles SIRIS™ Thermal Inspection IDEAS™ Dimensioning System Advanced Weigh-in-Motion ComVIS™

Highway Safety

Smart Grade Crossing Monitor Video-Based Visibility System



#### **Defense**

Condition Based Monitoring

Smart Video Module

SAWS™ Smart Adaptable Wireless Sensors Intellipenny™ Dynamic Generation™ Torque Measurement Situational Awareness Panoramic Field of View Imaging Wide Angle Thermal Imaging

WISE Solutions for Transportation Safety and Security

#### FACILITIES:

IEM is headquartered in a 30,000 square foot restored historic building located in Troy, NY. IEM offers a variety of specialized laboratory spaces for product development and production, including:

- Railroad Room
- Machine Shop
- Manufacturing Space
- Sensor and Instrumentation Lab
- **Optics Laboratory**
- Robotics Lab

#### INTELLECTUAL PROPERTY:

IEM holds more than 15 US Patents and has numerous other pending patents. For specific information on IEM's IP Portfolio, please contact us. Patents include a broad range of technologies covering all areas of IEM core competencies and product lines.



# **Security & Environmental Monitoring**

TranSentry™ Yard Security

Bridge & Tunnel Security Platform Security **Trespass Detection** Smart Sensor Security System Aircraft Ground Sentinel In-Cabin Security for Aircraft Environmental Monitoring Intelligent Flamefinder Detection and Alert System Integrated Sensor Air Quality Control System Video Based Visibility System



# **Research & Development**

Machine Vision

Laser-based Metrology Smart Video Analytics Multispectral and Stereo Vision Smart Cameras

Thermal Imaging High Speed Infrared Imaging Smart Thermal Inspection Camera and Optical Design Wireless Sensors and Sensor Networks Smart Adaptable Wireless Sensors

> Wireless Sensor Network Architecture Power Harvesting

Robotics

Dynamic Obstacle Avoidance Specialized Manipulator Design