

# Fire Detection

## Early detection of fires using sensors and interconnected systems.

**Fire Detection:** Smart manufacturing fire detection relies on interconnected devices and systems. Sensors, machines, equipment, and products connected through the Internet of Things (IoT), enabling data exchange, detection and response.



### Early Notification Smart Sensors

Gas/dust sensors are designed to identify the presence of smoke particles, which are often an early sign of a fire. In smart manufacturing, these detectors may be integrated into the facility's overall monitoring and control systems, allowing for real-time alerts and automated response.

### Thermal Smart Sensor Cameras

Sense small differentials in temperature (2 to 3 degrees) with FLIR Teledyne cameras that tackle the most complex remote monitoring, alarming, and analytics objectives.



### PLC Integration

We have lots of experience integrating with existing PLCs to get your machinery communicating to you and to each other. AI can determine what equipment needs to control process equipment to mitigate damage.

### Remote Monitoring and Control

Via proprietary dashboard monitor trigger levels, notifications, temperature trends. This allows for real-time data collection and remote control of the system, making it easier to manage and respond to incidents, even from off-site locations.



### Reduced Insurance Cost

Insurance providers assess the level of risk associated with insuring a particular property or business. A well-implemented fire detection system can significantly reduce the risk of a fire going undetected, leading to a faster response time and potentially less damage. This reduced risk can translate into lower insurance premiums/deductibles.

# Sequencing System

Minimizes setup times, reduces idle time for machinery, and maximizes the throughput of the production line

**Sequencing System:** Streamline production with real-time broadcasts, integrated schedules, quality control, and serialized traceability.

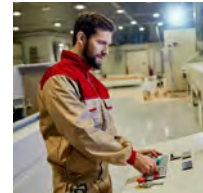


## Production Broadcasts

Broadcast from main production line informing the sub production lines/partners in order to build and ship in sequential order in real time. (production processes to the relevant personnel or teams within a manufacturing facility) (WIP)

## PLC Integration

With our extensive experience in integrating with existing PLC systems, we can ensure that your machinery communicates effectively. In the event of a fire, our PLC integration can swiftly identify the source effectively and prevent any potential damage by halting machines and conveyors.



## Production Based Schedules

Production-based work schedules, also known as output-based work schedules, are employment arrangements where an employee's working hours and compensation are primarily determined by the quantity or output of work they produce rather than fixed hours worked.

## Quality Control

With PLC or HMI integration we can track a shifts progress to trigger notification based on repeated quality issues, as well as providing root cause analysis to direct your resources to the source of the issue.



## Serialized Traceability

Serialized traceability throughout the entire process refers to the ability to track and trace individual items or products at a granular level throughout their entire lifecycle, from production or manufacturing to distribution and, in some cases, even through end-user consumption or disposal. This level of traceability involves assigning a unique identifier or serial number to each item, which allows for precise monitoring and documentation of each item's movement, location, and status as it progresses through various stages of the supply chain and production process.

## Part Inventory Reduction

Implementing a sequencing system can significantly reduce the need for excessive part storage, optimizing the utilization of square footage within the factory.

