

# Freedom Technologies Manufacturing Execution System



Freedom Technologies delivers a flexible and comprehensive Manufacturing Execution System (MES) adaptable for all manufacturing environments. Error Proof® MES makes up-to-the minute manufacturing information available from the top floor to the shop floor which allows for a swift response to conditions and requirements. Error Proof® MES offers a foundation of real-time data and details for continuous improvement and decision support.



10370 Citation Dr Suite 200 Brighton, M 48116

810.227.3737 sales@freedomcorp.com www.freedomcorp.com



## ERROR PROOF® MES SOLUTION

Manufacturing management requires timely and accurate information from the shop floor to make good operational decisions. Error Proof® MES supplies that good data by offering uninterrupted visibility into production operations, gaining a complete overall view of the shop floor.

Error Proof® MES also provides the shop floor control and visibility needed to effectively deal with multifaceted traceability requirements. Using real-time good data collected from the shop floor, Error Proof® MES links supplier information, lot numbers, serial numbers, time/date or other traceable data to the appropriate finished goods.

Error Proof® MES increases visibility into your manufacturing operations, capturing data at the point of execution and making it accessible by touch screen, mobile computers or browser.

## Top Floor to the Shop Floor ~ Real Time Data and Details

### Resource Allocation and Status:

- Collects and supplies information of non-labor assets: machines, materials, tools, support documentation.
- Indicates equipment state: operational, down, set-up, maintenance required.
- Maintains historical record of resource use.
- Tracks resources that assist in preparation: documents, tools, fixtures.
- Provides resource history to determine if adjustments are needed.

### **Dispatch of Production Units:**

- Manages the flow of production units: jobs, orders, lots, work orders.
- Verifies at which operation and work center a unit should be at the present time.
- Presents unit at work center in the best sequence to be executed.
- Allows changes by supervisor in real time as events occur: rework, unplanned equipment maintenance, operator decision, etc.
- Tracks/traces rework and scrap processes.

### **Data Collection / Acquisition:**

- Produces serialized part labels or accommodates direct part markings.
- Manages count to container verification and Earn-a-Label™ for shipping.
- Tracks data accuracy, inventory accuracy, labor cost and efficiency goals.
- Streamlines and/or automates data collection activities.
- Records and tracks quality data and sends group notification by email/text of any issues.
- Tracks, traces and records by lot or serial ID all parts/components on manufacturing floor

### Labor and User Management:

- Tracks personnel status in an up-to-the-minute time frame.
- Provides time and attendance availability.
- Tracks indirect activities such as material preparation or tool room work.
- Tracks user certifications for approval for operations.
- Tracks operator ID of the employee who executed production at an operation.
- Simplifies labor distribution entries for cells involving work by multiple employees; a work cell charge methodology is provided.
- Reports multiple parts simultaneously and the time charges will be allocated equally to each of the parts reported.

### Quality Management:

- Stores and correlates all data to production unit including tracking and genealogy.
- Allows for immediate alert of specific conditions: when a device fails, a machine or line stops or quality problem found.
- Alerts allow immediate action to be taken to correct quality problems.
- Accommodates quality tracking of incoming materials per supplier, including data from tests performed.
- Sends quality alerts to an individual or group signaling a need for equipment maintenance, tooling calibration or other measurements.

### **Process Management:**

- Monitors production and provides decision support to management and/or operators to correct and improve in-process activities.
- Activities may be intra-operational and focus specifically on machines or equipment being monitored.
- Tracks the component/part processes from one operation to the next.
- Makes necessary personnel aware of process changes which are outside acceptable tolerances.
- Interfaces with intelligent equipment to collect output data.

### Product Tracking and Genealogy:

- Provides visibility to where work is at all times and its disposition and status.
- Includes status information such as: who is working on it, components by supplier, lot serial numbers, rework, alarms or other exceptions.
- Records materials used and operator/user work performed at each operation.
- Tracks/traces genealogy even if one child item is removed and a new one is added, history of parent/child relationship recorded.
- All production information stored with correlation to materials consumed.
- Multiple level traceability is available both forward and backward from receiving to finished goods.

Freedom Technologies has one of the highest levels of MES compliance.