



# Solumina Manufacturing Execution System (MES)

Overview

## Overview

# Solumina MES

Solumina Manufacturing Execution System (MES) by iBase-t enables new levels of visibility, velocity, and control for complex discrete manufacturers. It provides a platform for planning, executing, and tracking difficult work processes online, creating a paperless environment that drives first-time quality and immediate response to discrepancies.

Solumina MES is designed specifically for complex manufacturers in industries like aerospace and defense, electronics, industrial equipment, medical devices, nuclear, and shipbuilding.



## What sets Solumina MES apart?

Solumina MES radically improves discrete manufacturing productivity, quality, and compliance by giving operators, supervisors, and plant managers access to real-time digital data and integrated systems.

### Designed for complex discrete

Solumina MES was purpose-built for manufacturers of complex products with multiple levels of sub-assemblies, frequent engineering changes, and stringent regulatory requirements.

### Cloud-native architecture

Solumina is a cloud-native solution built on a microservices architecture that offers scalability, reliability, and lower upfront costs than on-premises solutions. Implementation is faster, leading to rapid realization of benefits and return on investment.

### Embedded quality management

Quality is too critical to your operations to be siloed from your MES. That's why an enterprise quality management system (EQMS) is embedded throughout the Solumina platform to enforce quality throughout your production operations.

### Part of a complete manufacturing operations platform

Native integration with Solumina Maintenance Repair and Overhaul (MRO) and Supplier Quality Management (SQM) solutions creates a seamless flow of data across the entire value chain and product lifecycle.



## Benefits of Solumina MES



### Fewer Defects

Ensure work is done correctly and reduce rework and waste with buyoffs linked with operator certifications and audits.



### Enhanced Visibility

Maintain real-time visibility of relevant metrics, expectations, and trends with role-specific dashboards.



### Closed-Loop Quality Management

Centralize all quality management data and processes to meet compliance and traceability requirements.



### Easier Change Management

Rapidly implement change orders as they are received without delaying production.



### Process Improvements

Standardize best practices around new product introductions, supply chain management, and more across the global enterprise.



### Integrated Systems

Integration with PLM and ERP syncs design information and business records with your production processes, driving accuracy and efficiency.

## Feature Highlights



### Digital Work Instructions

Supports the creation and distribution of complete digital work instructions supported by illustrations, 3D models, videos, animations, and more.



### Routing Control

Maintains detailed, country and plant-specific production routings to control the flow of work in the manufacturing process. Operation flow diagrams allow routing to be designed in parallel or in sequence with decision points and loops.



### Resource Management

Manages all resources in real time, ensuring correct setup and maintenance, machine and tooling compatibility, and proper tool calibration. It can also track materials and parts coming from other suppliers.



### Data Collection & Traceability

Built-in data collection supports traceability requirements by documenting all as-built information down the entire tree of production, providing a real-time single source of data to enforce quality control and mitigate risk.



### Embedded Enterprise Quality

Embeds enterprise quality processes, including non-conformance management, corrective actions, inspection planning and more into your production processes.



### Engineering Change Management

Allows engineering change to be communicated and implemented in real time during a production run while keeping operations moving, avoiding delays and maintaining visibility and traceability.



### Secure Access & Data

Application and database access are controlled by roles, privileges, and user login. Additional IP protection and ITAR security controls can be leveraged.



### Regulatory Compliance

Meets the strictest process management and integrity requirements of the industry including ISO9001, AS9100, ISO13485, FAA, and FDA Title 21 CFR Parts 11 and 820.

# Solumina Manufacturing Operations Platform

To learn more or book a demo, visit [www.iBaset.com](http://www.iBaset.com)

The Solumina Manufacturing Operations Platform by iBase-t consists of an integrated suite of MES, SQM, and MRO solutions. Designed for complex, highly regulated discrete manufacturers who seek to digitally transform their operations, Solumina connects manufacturing operations, quality, and sustainment management in a seamless flow of data across the value chain and product lifecycle.

The Solumina Manufacturing Operations Platform creates the technology infrastructure manufacturers need to harness advances in model-based functionality like augmented reality guidance for the workforce, IIoT connectivity for equipment, new levels of intelligence for decision making, and higher levels of customer and supply chain collaboration.