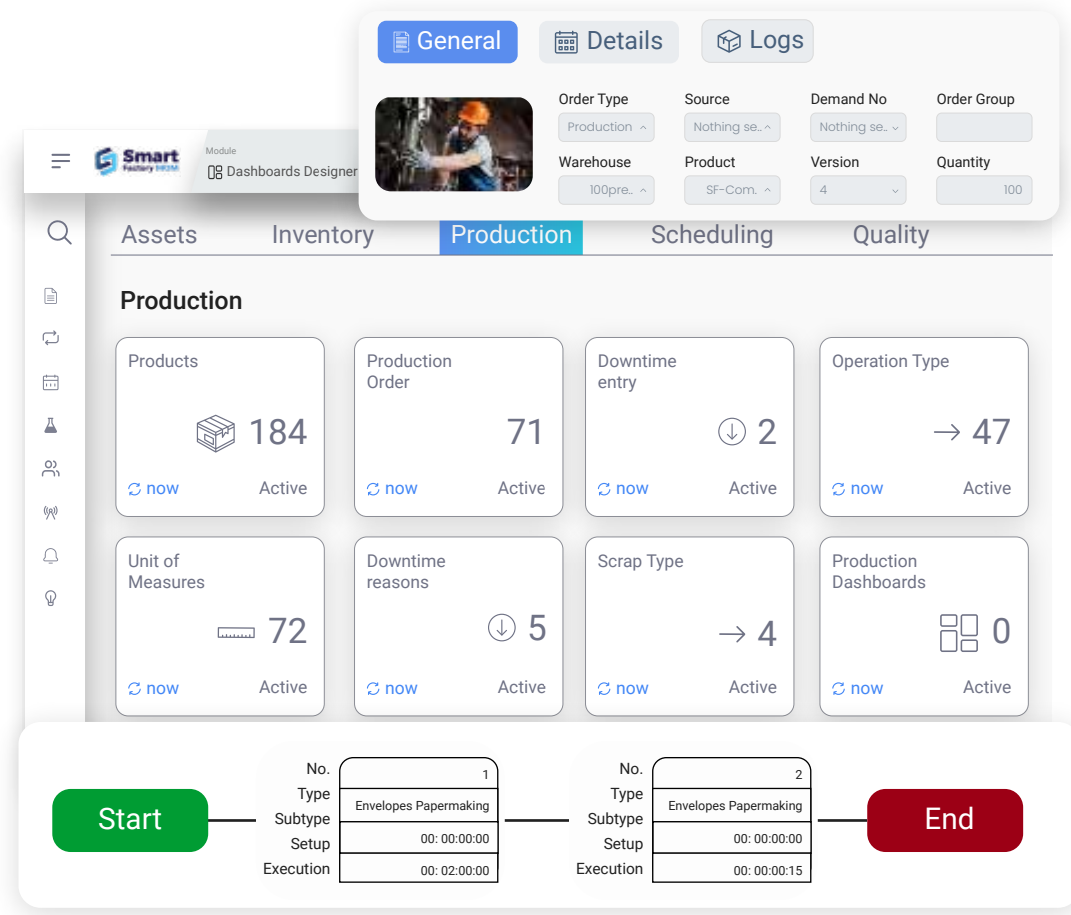
Smart Factory MOM

MES Module

Execute Production in Real Time. Gain Complete Visibility. Deliver Consistent Results.



Overview

The MES (Manufacturing Execution System) module of Smart Factory MOM enables manufacturers to monitor, control, and optimize shop floor operations in real time. Built for today's connected factories, the MES module helps manufacturers overcome production inefficiencies, data silos, quality risks, and a lack of real-time insight. By digitizing shop floor operations, manufacturers gain tighter control over execution, reduce downtime, and consistently achieve higher throughput and product quality.

MES acts as the execution layer between planning and production, ensuring seamless coordination of machines, materials, and workforce while providing complete visibility into manufacturing processes.

Key Challenges in Manufacturing Execution

Modern manufacturers often struggle with:

- Lack of real-time visibility into shop floor operations
- Manual tracking of production activities
- Disconnected systems between planning and execution
- Limited traceability across production processes
- Inconsistent production performance and quality
- Delayed response to production issues

Smart Factory MOM Manufacturing Execution System (MES)

Smart Factory MOM MES software provides a comprehensive execution platform that enables manufacturers to:

- Monitor and control production processes in real time
- Track production orders, materials, and operations
- Ensure seamless coordination between planning and execution
- Maintain complete traceability across the production lifecycle
- Improve efficiency, quality, and overall operational performance

Key Features

1. Real-Time Production Monitoring

Track production activities, machine status, and work-in-progress in real time, enabling better visibility and faster decision-making.

2. Digital Work Instructions (eSOPs)

Enable operators with digital, step-by-step instructions to ensure standardized and error-free execution on the shop floor.

3. Production Order Management

Manage and execute production orders efficiently, ensuring alignment with schedules and shop floor conditions.

4. Quality & Process Control

Monitor quality parameters during production to ensure consistent output and reduce defects and rework.

5. Shop Floor Visibility & Control

Gain complete control over shop floor operations with live dashboards and real-time insights into production performance.

6. Data Collection & Reporting

Automatically capture production data and generate reports for performance analysis and continuous improvement.

7. Traceability & Genealogy

Track materials, processes, and finished goods across the entire production lifecycle, ensuring full traceability and compliance.

8. Exception & Event Management

Identify and respond to production issues in real time, minimizing disruptions and improving operational efficiency.

Key Benefits

1. Improved Production Visibility

Gain real-time insights into shop floor operations, enabling better control and faster decision-making.

2. Reduced Downtime & Delays

Identify and address issues proactively to minimize disruptions and improve production flow.

3. Enhanced Operational Efficiency

Streamline execution processes to improve productivity and reduce inefficiencies across the production cycle.

4. End-to-End Traceability

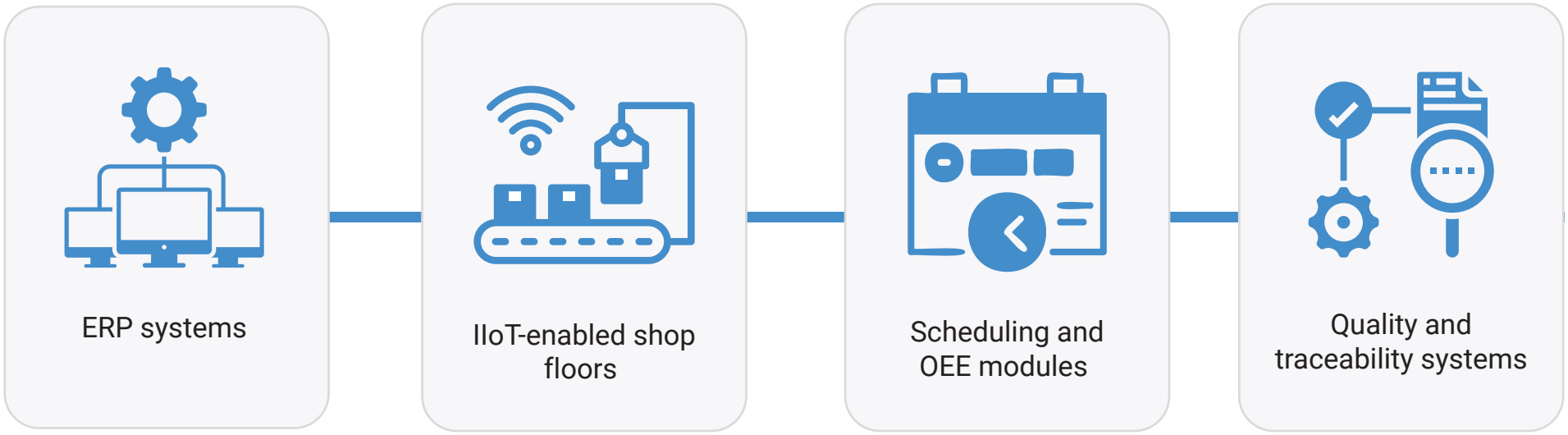
Maintain complete visibility of materials and processes, improving accountability and compliance.

5. Better Quality & Compliance

Ensure consistent product quality with standardized processes and real-time monitoring.

Seamless Integration

The MES module integrates effortlessly with the following:



This ensures end-to-end synchronization from planning to execution and performance analysis.

Take Control of Your Shop Floor Execution

Bridge the gap between planning and production with real-time visibility, control, and optimization using Smart Factory MOM MES software.

Request a Demo

