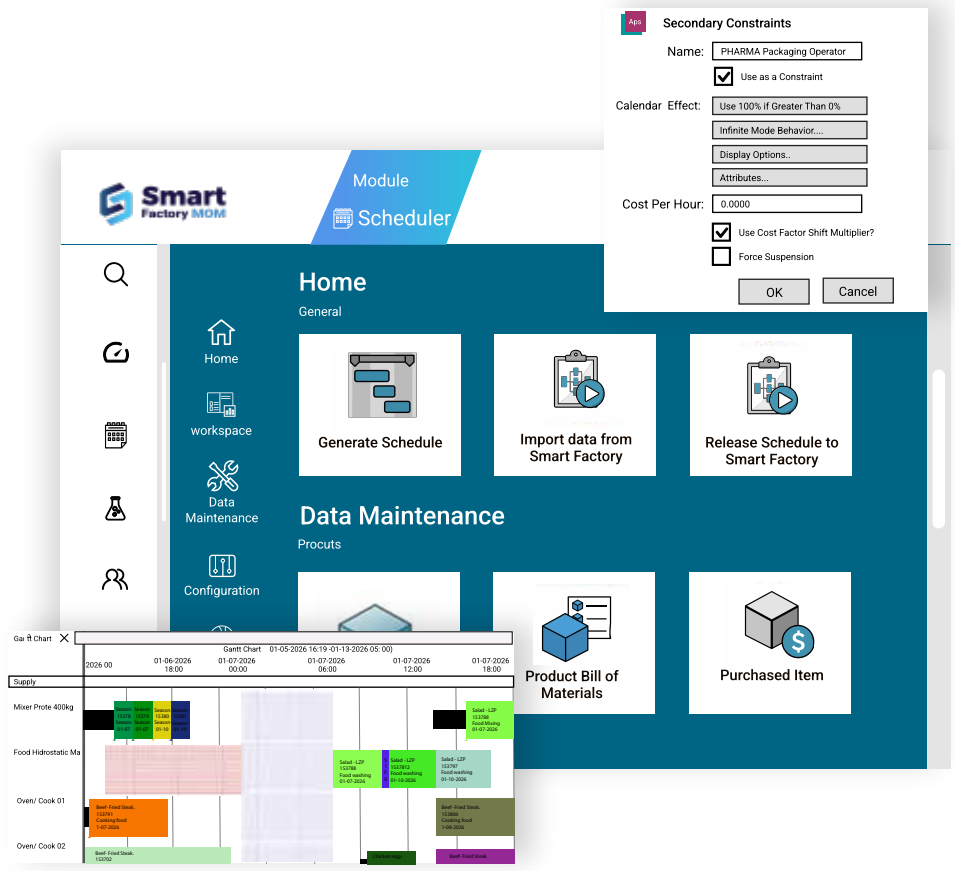
Smart Factory MOM

Scheduling Module

Optimize Production. Maximize Throughput. Deliver On Time.



Overview

Modern manufacturers can no longer rely on spreadsheets and static production schedules. Constant disruptions, limited resource visibility, and changing customer demands make traditional scheduling methods too slow and too reactive.

The Smart Factory MOM Scheduling Module empowers manufacturers with intelligent, finite-capacity scheduling that aligns production plans with real-world shop floor conditions. By considering machine availability, material constraints, labor resources, and production dependencies, manufacturers can create executable schedules that maximize throughput, reduce bottlenecks, and consistently meet delivery commitments.

Key Challenges in Manufacturing Scheduling

Modern manufacturers often struggle with:

- Manual or spreadsheet-based scheduling
- Frequent production disruptions and last-minute changes
- Poor visibility into resource availability
- Inefficient sequencing leading to increased changeovers
- Missed delivery deadlines due to unrealistic planning

Smart Factory MOM Manufacturing Scheduling Software

Smart Factory MOM Scheduling module introducesadvanced and finite capacity scheduling, enabling manufacturers to:

- Generate realistic, constraint-aware schedules
- Dynamically adjust plans based on real-time shop floor events
- Optimize production sequences for maximum throughput
- Simulate scenarios and make data-driven decisions

Key Features

1. Constraint-Based Scheduling

Considers machine capacity, material availability, and dependencies. Handles complex production rules and limitations to ensure feasible and realistic schedules.

2. Custom Production Rules

Allow manufacturers to configure scheduling logic based on plant-specific needs and apply predefined rules for prioritization and sequencing.

3. Dynamic Schedule Adjustments

Modify schedules in real time based on disruptions, respond instantly to machine breakdowns or order changes, and maintain continuity in production.

4. What-If Scenario Simulation

Compare multiple scheduling strategies, evaluate impact before execution and reduce risks, and improve decision-making.

5. Advanced Schedule Optimization

Automatically generates optimal production sequences and minimizes idle time and bottlenecks. This enables manufacturers to improve capacity utilization.

6. Visual Planning with Gantt Charts

Interactive scheduling interface with drag-and-drop adjustments, clear visibility into timelines, dependencies, and resources.

7. Material & Resource Synchronization

Aligns scheduling with material availability, prevents shortages and production delays to enable better inventory planning.

8. Scheduling Analytics & Reports

Analyze the performance of scheduling strategies and identify improvement areas and enable continuous optimization.

Key Benefits

1. Improved On-Time Delivery

Accurate scheduling ensures production aligns with demand, reducing delays and enhancing customer satisfaction.

2. Lower Operational Costs

Automation reduces manual effort, minimizes changeovers, and improves overall efficiency.

3. Increased Resource Utilization

Maximize machine and workforce efficiency by eliminating idle time and bottlenecks

4. Enhanced Production Visibility

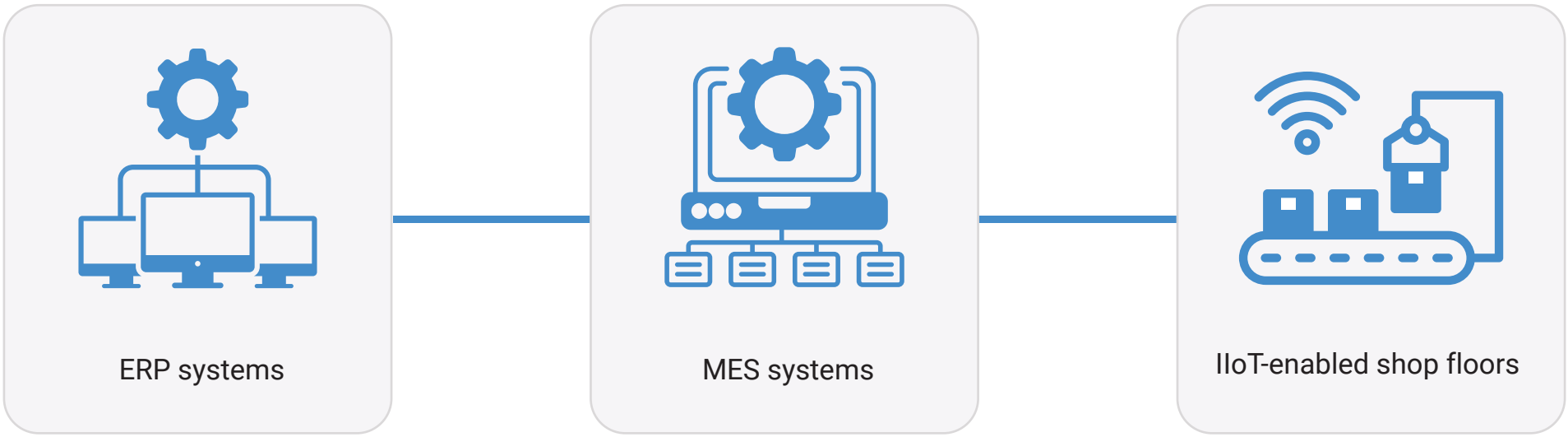
Gain complete control over schedules with real-time insights and interactive dashboards.

5. Reduced Lead Time

Optimized sequencing and real-time adjustments shorten production cycles.

Seamless Integration

The scheduling module integrates effortlessly with the following:



This ensures end-to-end synchronization between planning and execution.

Take Control of Your Production Scheduling

Eliminate inefficiencies and take full control over the potential of your manufacturing operations with Smart Factory MOM intelligent scheduling engine.

Request a Demo

