



SepalQ Finite Scheduling

BUILT ON THE SEPAIQ® PLATFORM

SepalQ Finite Scheduling is an Advanced Planning and Scheduling (APS) solution that helps manufacturers build realistic, adaptable schedules around actual operating constraints. Schedule work around equipment, labor, tools, materials, changeovers, dependencies, and current production conditions so plans better reflect the realities of production.

Finite Capacity Scheduling

Build schedules around the actual capacity of machines, work centers, labor, tools, and other constrained resources. Prevent overcommitted schedules and identify where limited capacity may affect throughput, timing, and due-date performance.

Configurable Priority Rules & Constraint Scoring

Prioritize orders using due dates, rush status, customer priority, order value, or custom business rules. Configure how the scheduler weighs competing constraints to favor outcomes such as fewer late orders, higher throughput, better utilization, or reduced changeover time.

Interactive Gantt Scheduling

View orders, operations, resource assignments, conflicts, and exceptions in a visual schedule. Adjust work directly in the Gantt view, evaluate the impact of a change, and maintain a clear view of the current plan.

Features

- Task Dependencies
- Resource Calendars
- Changeover & Sequencing
- Material-Aware Scheduling
- Tools & Labor Constraints
- Production Feedback

Supported Operating Systems

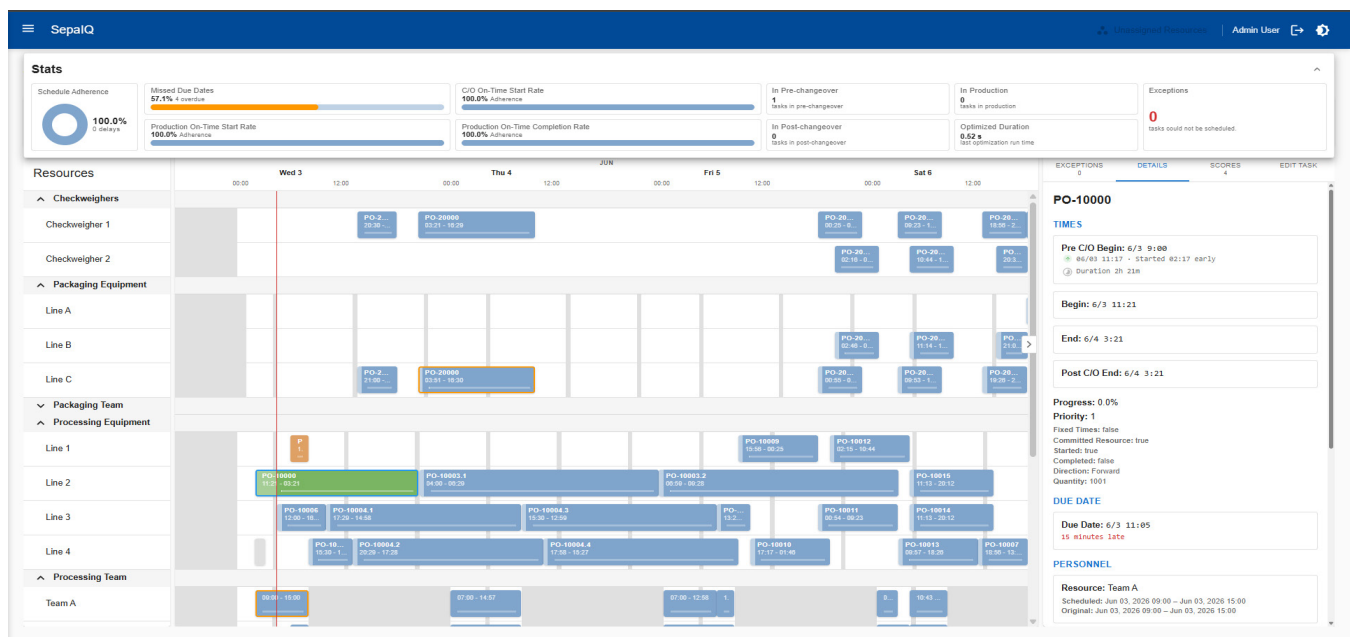
- Windows Server 2016/2019/2022
- Windows 10, 11
- macOS 11+
- Linux (support for popular distributions, tested with Ubuntu 20.04)

Supported Databases

- Microsoft® SQL Server
- MySQL
- PostgreSQL
- MariaDB

Requirements

- Quad-core processor (64-bit)
- 10 GB free HD space
- (requirements vary by usage)



Visualize orders, operations, resources, timing, conflicts, and exceptions in one scheduling view.



Order & Operation-Level Scheduling

Schedule complete orders or individual operations using order quantities, due dates, routings, and required resources. Gain more precise control over timing and production flow from one operation to the next.

Multi-Step & Alternate Routings

Model sequential and parallel operations, alternate production paths, and resource preferences. Account for differences in alternate resource rate, capacity, or efficiency when selecting the best viable route.

Task Dependencies & Timing Rules

Define predecessor and successor relationships among operations and other production tasks, including material and equipment dependencies. Apply timing rules for curing, cooling, transfer, waiting, queuing, overlap, and slack time.

Resource Calendars, Tools & Labor

Schedule against operating hours, shifts, breaks, holidays, maintenance windows, and downtime. Account for required tools, crews, and personnel, including availability, absences, calibration, maintenance, and multi-person task requirements.

Changeover & Sequencing Optimization

Calculate setup and cleanup time based on product-to-product transitions. Model fixed or variable changeovers, campaign rules, sanitation and CIP requirements, and sequencing by product family, grade, color, allergen, or other attributes.

Material-Aware Scheduling

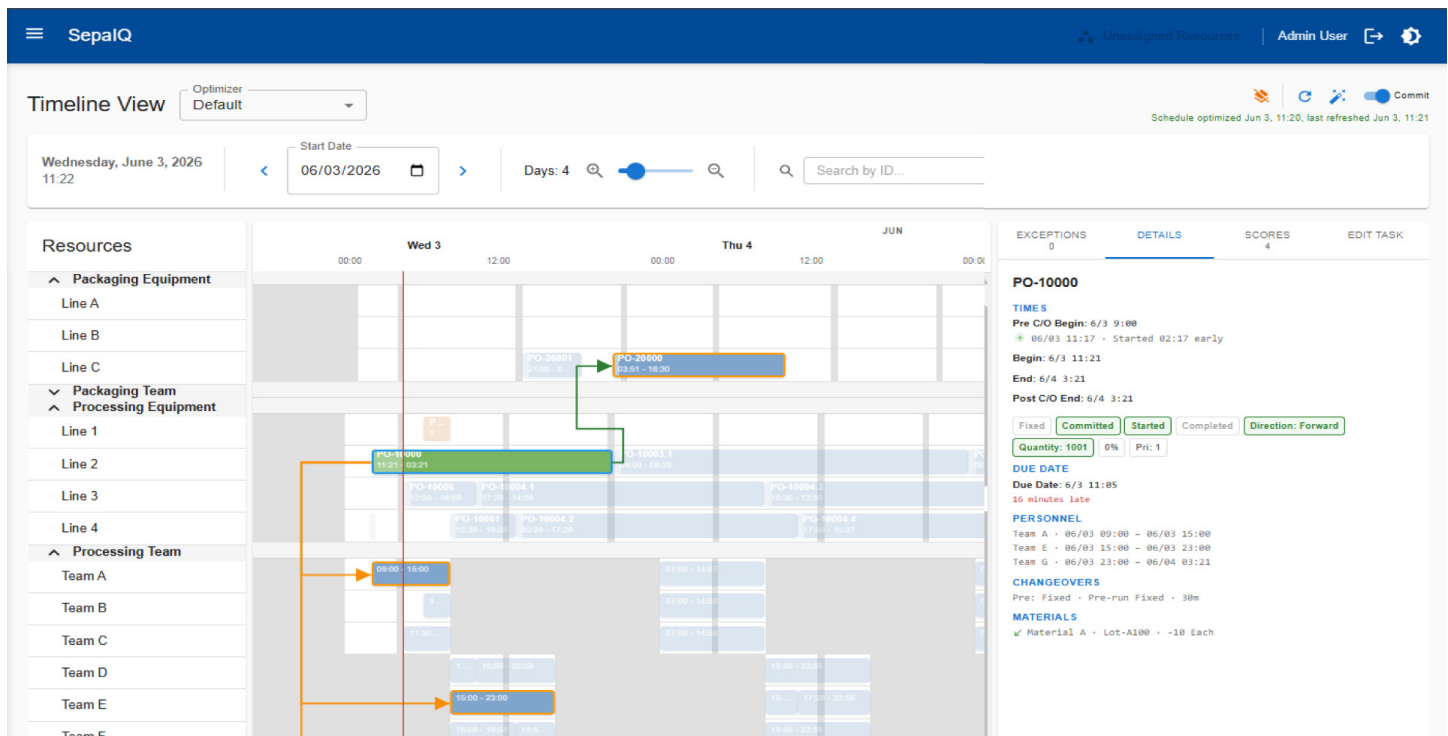
Confirm required materials are available before work is scheduled. Consider expected receipts, lot requirements, approved substitutes, material shortages, pegging, and shelf life limits when building the plan.

Schedule Performance & Exceptions

Review capacity load, utilization, idle time, setup time, WIP, late or at-risk orders, and custom scheduling KPIs. Identify bottlenecks and the constraints creating schedule risk.

Schedule Publishing & Feedback

Publish approved schedules as actionable work for operators, machines, or production teams. Update plans with current WIP status, completed quantities, downtime, delays, and other exceptions as operating conditions change.



Connect tasks, resources, materials, changeovers, and production updates in one scheduling environment.



For more information, please visit our SepalQ product page: <https://www.sepasoft.com/products/sepaiq-finite-scheduling/>