



Optimization PLANORA

Context

As an industrial decision-maker, you manage production schedules every day that directly impact your site's performance.

But one question remains: how can you objectively assess the impact of your planning decisions before implementing them?

Objective

- Equip yourself with a strategic tool to optimize your high-impact production planning.
- With PLANORA, you can:
- Identify the best sequencing of your work orders among millions of combinations
- Measure the impact of each decision on makespan, customer delays and OEE

Objectives (continued)

- Evaluate the potential ROI of a machine investment (added capacity, automation)
- Simulate the impact of a production ramp-up with realistic or ambitious performance assumptions
- Test operational settings in a constrained environment (breakdowns, setups, limited resources)

Quantify the economic cost of a poorly managed bottleneck, and determine the right lever for action
Explore "what-if" scenarios risk-free before making decisions, in a visual, fast and understandable way for everyone

Better understanding performance levers means better management. This model becomes your forward-looking dashboard, aligning shop floor actions with strategic vision

Better planning starts with better understanding

Visual



See PLANORA in action: click on the image

What PLANORA enables: a mathematical approach to industrial management

PLANORA goes beyond scheduling your work orders. It becomes a true strategic decision-support tool, thanks to its fitness function that aggregates all your criteria into a single score.

What PLANORA does (continued)

1. Optimize work order sequencing

The evolutionary algorithm explores thousands of combinations and automatically identifies the best schedule.

The "right" schedule becomes accessible in minutes, where human intuition falls short

2. Integrate machine uncertainties

Breakdowns (MTBF/MTTR), preventive maintenance and series changeovers are realistically simulated:

Smart anticipation before each operation

Event-driven breakdown management system

Your schedule accounts for the real uncertainties of your shop floor.

A better vision for better decisions

3. Preserve P&L through optimization

Minimize unproductive time (setups, changeovers, waiting) to maximize capacity without investing.

Changeover time reduction -15 to 25%

OTD improvement +10 to 20 points

Direct impact on production costs and site profitability

4. Customize all key parameters

Fitness weightings

Changeover matrices

Machine and operator calendars

Skills and versatility

Input volumes per flow

Each scenario can be adapted to shop floor reality and performance targets.

5. Monitor overall fitness

A single score comparable across scenarios:

Aggregates makespan, delays, breakdowns, changeovers, settings and volume

Usable by everyone, from planner to executive committee

Each component reflects a concrete operational challenge

The model becomes a powerful lever for dialogue between operations and management

6. Compare multi-workshop scenarios

Compare 4 workshop configurations in one click.

The multi-scenario engine allows testing:

Different fitness weightings

Different machine configurations

Impact on overall flow

What PLANORA does (continued)

7. Search for a global optimum

The evolutionary algorithm explores ideal configurations considering all constraints, sometimes conflicting: performance, costs, robustness, customer deadlines, available resources...

8. Visualize via Power BI

PLANORA dashboards provide dynamic KPI reporting in Power BI.

A powerful way to share results with the executive committee, giving everyone a clear view of performance levers

Ready to take action?

Take 30 minutes to discover how PLANORA can transform your industrial decision-making

[Book a slot directly with us:](#)

[Contact us for a personalized demonstration](#)

Financial & Operational KPIs



PLANORA goes beyond scheduling. It also tracks production, operational and financial performance indicators.

All KPIs are configurable and can be displayed within the application itself, or automatically interfaced with your usual dashboards (e.g.: Power BI).

Power BI integration provides dynamic, clear reporting accessible at all decision levels.

Contacts

PLANORA

Optimization & Industrial Simulation

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