



*Improving Planning & Scheduling
in the Manufacturing Industry*



ADD VALUE TO YOUR BUSINESS WITH QUINTIQ ADVANCED PLANNING & SCHEDULING (APS) SOLUTIONS FOR MANUFACTURING COMPANIES

EACH INDUSTRY WITHIN THE BROAD AREA OF MANUFACTURING FACES DIFFERENT BUSINESS CHALLENGES:

- The food and beverage industry operates in an increasingly competitive market due to price and margin pressures.
- The forest, paper and packaging industry is characterized by globalization and consolidation, as well as ever-changing business and regulatory environments.
- The textiles industry has to adjust to increasingly fierce competition due to new players entering the market.
- The metals industry is characterized by consolidation and specialization which led to a few global leaders and numerous specialized niche players.

These are just a few examples of industry-specific challenges faced by manufacturers. But, they are not the only ones: all manufacturing companies, regardless of which industry, also have to cope with increasingly intense competitive pressure.

To survive in this dynamic environment, manufacturing companies need to strive for lower inventory levels, improved delivery performance, and higher utilization in order to increase their productivity and enhance their supply chain efficiency.

WHY CHOOSE QUINTIQ APS SOLUTIONS?

Quintiq understands these challenges and offers a variety of planning solutions that enable you to

optimize production and gain higher productivity and efficiency. Our solutions tackle general industry issues and are also capable of capturing a company's differentiators and supply chain complexities.

THE QUINTIQ TECHNOLOGY ADVANTAGE

Quintiq solutions are grouped according to the planning horizon of planning decisions. The solutions provide advanced optimization capabilities from the strategic level down to the operational level:

SOLUTION OVERVIEW			
Strategic Planning <i>Months/ Years ahead</i>	Macro Planner <i>Multi-scenario Supply Chain Simulation</i>	Sourcing Strategy	Customer Service Strategy
		Product Mix Optimization	Supply Chain Design
Tactical Planning <i>Weeks/ Months ahead</i>	Company Planner <i>Capacity Planning for One or Multiple Facilities</i>	Material/Stock Management VMI	Order Acceptance ATP/CTP
		Order Et Campaign Planning and Optimization	KPI Analysis
Scheduling and Real Time Event Management <i>Days ahead/ Day-of-operation</i>	Scheduler <i>Detailed Scheduling, Real-time Re-planning and Alerting</i>	Generate Optimized and Accurate Schedules	What-if Scenarios
		Real-time Re-planning; Calculate effects of disturbances	Performance Monitoring
Transportation Logistics	Logistics Planner <i>Planning and Optimization of Transportation Logistics</i>	Transport Planning and Optimization	Supply Chain Integration
		Carrier Planning	Performance Monitoring

ARNDT GELENKIRCHEN,
CEO, SIG IT:
"We selected
Quintiq after an exhaustive
search for a fully integrated
planning solution that is
complementary to our SAP
backbone."

EELKO HOEKSTRA,
OPERATIONAL DIRECTOR,
MENEBA:
"With Quintiq, Meneba
will be able to achieve the
most economic recipe
composition on the one
hand, and on the other
hand realize an even smaller
variation in the essential
quality aspects per finished
product."

MIKE DOMICOLA,
OPERATIONS SUPPORT
MANAGER, NOVELIS
"Since 2003 we have
enjoyed a 45% increase in
on-time production."

RENÉ BOERSMA, LOGISTICS
MANAGER, TRESPA
"With Quintiq we are able
to keep our production
efficient and maintain
a high level of delivery
reliability."

Quintiq Macro Planner



This is a powerful multi-scenario and rolling forecast tool. With the Quintiq Macro Planner, manufacturing companies can perform strategic planning and KPI analysis for several years ahead. For example, it supports decisions regarding capacity investments/de-investments, product mix and sourcing.

Quintiq Company Planner



This solution provides tactical planning (weeks/months ahead) and decision support to help you manage in real-time the interactions between capacities, raw materials and sales. It also enables you to accommodate peaks, prevent production bottlenecks, and optimize the supply chain. It supports decision making regarding order acceptance and provides due date calculations.

Quintiq Scheduler



This solution streamlines operations in processing facilities by generating optimized schedules and order sequencing. With its rich feature set and extensive flexibility, Quintiq Scheduler empowers you to maintain operational excellence - even when planning and scheduling just days or hours ahead.

In addition, Quintiq offers a solution to support the transportation logistics challenges that typically face manufacturing companies.

Quintiq Logistics Planner

Regardless of whether your business model is based on managing third party carriers or your own resources, Quintiq has extensive experience in supporting transportation logistics. Our solutions often link production planning to transportation requirements in a solid and integrated solution covering both business models.



QUINTIQ ARCHITECTURE

The Quintiq Application Suite consists of a unique three-layer architecture that can be best visualized in the following graph:



The orange layer represents 80% or more of the solution. It is the standard Quintiq Application Suite, which consists of

many planning functionalities, ranging from the Windows (and/or Web) user interface and the real-time knowledge engine where the knowledge tables and calculations can be specified, to the integrator that allows integration with other systems and optimizers that allows optimization of (parts of) the puzzle. The Quintiq Application Suite is used by all Quintiq customers.

The blue layer represents a Quintiq Industry Solution. Quintiq has a number of different Industry-variant Solutions for different market segments. This represents a further 10% of the solution (market specific, but company independent logic).

Finally, the grey layer is all that makes each customer's implementation unique. That is the part of the system that will be configured together during a project to provide the final 10% of the solution.

The Best of Both Worlds!

Based on this architecture, the Quintiq Application Suite is standard software that offers you the advantages of fast deployment and easy upgrades. Since it also includes a small part that is tailored to your specific needs, it offers flexibility and a 100% fit to your business. You get the best of both worlds – a solution that is tailor-made and out-of-the-box!

THE QUINTIQ IMPLEMENTATION METHODOLOGY

Quintiq has developed a standard project methodology: the Quintiq Project Life Cycle, or QPLC. This methodology helps our customers to deploy new technology, optimize their applications, and enhance their ability to use Quintiq products in their environment.

The QPLC Methodology divides a Quintiq implementation project into six main phases: Preparation, Analysis, Modeling, Iterative Phase, Implementation, and Optimization.

Why is there an Iterative Phase?

The objective of the Iterative Phase is to transform the 70% solution (ready for testing) into a 95% solution (ready for live usage). By using an iterative approach, you

benefit from great flexibility. Based on your feedback we can deliver you a new model on a daily basis and once you accept all test cases and the reality-check is deemed successful, your solution is ready.

BENEFITS FOR YOUR COMPANY

Business Benefits:

- Increased delivery performance
- Higher productivity and lower operating costs
- Reduced inventory levels
- Reduced cycle times
- Increased throughput
- Improved customer service

Additional Benefits:

- Easy integration with other systems, such as ERP and MES
- Exact fit to customer's needs
- "Powered by SAP Netweaver" certification
- Virtually unlimited, multi-user capability over a wide geographic area
- Web-enabled
- Advanced interfacing possibilities (XML, ODBC, .Net)
- Minimal hardware requirements, with excellent performance

HUBERT BÜRGE, HEAD OF PLANNING AND LOGISTICS, ALUNORF

"We have been using Quintiq for more than 10 years now, with very pleasing results. Our delivery performance has increased significantly, from 40% to 91%; and our inventory level has been reduced by 26%."

PETER BETJES, MANAGER AFTER TREATMENT, OVAKO

"We have been able to reduce production cycles by 10 percent. Temporary stock has decreased by almost half."

Selected Quintiq Manufacturing Customers:



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