

WWW.AB-OVO.COM



SUPPLY CHAIN PLANNING AND OPTIMIZATION SOLUTION

FOR CHEMICAL MANUFACTURING



Ab Ovo is a platinum DELMIA Quintiq partner with 110+ specialised consultants with a global customer footprint.



BENEFITS OF OUR SUPPLY CHAIN OPTIMIZATION SOLUTIONS:



REDUCED LEAD TIMES

AI-driven scheduling ensures faster production cycles and deliveries.



COST SAVINGS

Efficient resource allocation minimizes waste and lowers operational costs.



HIGHER SUPPLY CHAIN RESILIENCE

Advanced risk management strategies protect against disruptions.



GREATER SUSTAINABILITY

Green supply chain practices support carbon neutrality and regulatory compliance.

GROWING CHEMICAL COMPLEXITY

Chemical production remains a vital, environmentally conscious industry fully integrated into the global supply chain. Ab Ovo envisions fully digital, intuitive solutions centered on customers end-to-end production and distribution needs. Manufacturers will benefit from transparent planning platforms offering the best suggested production and delivery options alongside real-time resource availability.

ADJUSTMENTS OPTIMIZE SUPPLY CHAIN WITH INTELLIGENT PLANNING

Ab Ovo leads the digital transformation for chemical manufacturers. Advanced technologies are now accessible and affordable for both large producers and specialized niche players. This will enable streamlined production scheduling connected to supply networks and logistics partners worldwide, supporting real-time order processing and settlements upon delivery. Materials and products will be tracked end-to-end across the full supply chain, ensuring transparency at every step.

Strategic	Tactical	Operational	Execution
• Manufacturing network design	• Production planning optimization	• Resource scheduling	• Production scheduling
• Scenario analysis for capacity planning	• Supply chain risk management	• Inventory control and stock management	• Workforce scheduling
• Sustainability strategies and carbon-neutral initiatives	• Supplier collaboration and sourcing strategies	• Supplier and procurement coordination	• Quality control inspections
	• Tactical route design for inbound and outbound logistics	• Order fulfillment and warehouse operations	• Event management
	• Dynamic pricing and cost optimization strategies	• Logistics and transport scheduling	• Real-time monitoring and adjustments

TECHNOLOGIES POWERING OUR SUPPLY CHAIN OPTIMIZATION

AI & MACHINE LEARNING:

Predictive analytics for demand forecasting and risk assessment.

IOT & REAL-TIME DATA:

Sensor-driven monitoring for real-time visibility.

CLOUD-BASED ERP & SCM SOLUTIONS:

Integrates all supply chain processes for seamless coordination.

AUTOMATION & ROBOTICS:

Reduces manual workload in warehouse and logistics operations.

AI-DRIVEN SUPPLY CHAIN SOLUTIONS FOR CHEMICAL MANUFACTURING

Across various industrial sectors, including chemical manufacturing, efforts to cut carbon emissions focus on critical assets. In chemicals, production plants, energy use, and feedstocks are key areas. Transitioning to greener operations requires investment in cleaner technologies and boosting the energy efficiency of existing processes through R&D. Decarbonizing chemical manufacturing globally is a major challenge and investment. Government funding is crucial to meet ambitious goals like the European Green Deal's 90% emissions reduction by 2050. Challenges remain where renewable energy isn't consistently available, affecting production emissions. Modernizing production infrastructure and energy sourcing remains essential.

1. DEMAND FORECASTING & S&OP

- ✓ AI-powered demand forecasting improves production planning, reducing stockouts and excess inventory.

2. PRODUCTION SCHEDULING & RESOURCE ALLOCATION

- ✓ Automated scheduling ensures efficient resource use, minimizing downtime and delays.

3. SUPPLIER COLLABORATION & PROCUREMENT

- ✓ Real-time supplier tracking enhances procurement decisions and reduces disruptions.

4. INVENTORY & WAREHOUSE OPTIMIZATION

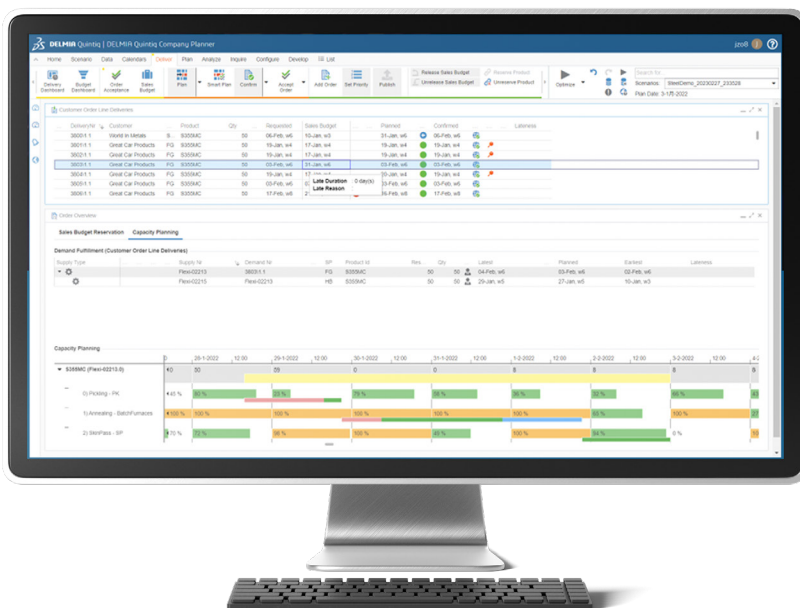
- ✓ Smart warehouse management lowers inventory costs and improves order accuracy.

5. LOGISTICS & TRANSPORTATION EFFICIENCY

- ✓ AI-driven route optimization cuts transport costs and improves delivery times.

6. REAL-TIME MONITORING & RISK MANAGEMENT

- ✓ IoT and predictive analytics provide real-time supply chain visibility and fast issue resolution.



✓ 25% reduction in inventory costs through improved demand planning.

✓ 30% increase in production efficiency with AI-driven scheduling.

✓ 20% lower transportation costs due to optimized routing.

✓ Higher customer satisfaction through faster order fulfillment.

SUSTAINABLE SOLUTIONS FOR CHEMICAL INDUSTRY

COMMITMENT TO SUSTAINABILITY

Sustainability is at the core of our operations. We believe in creating a better world by supporting our customers in achieving greater efficiency and sustainability. Our supply chain planning and optimization solutions are designed to help Pharmaceutical equipment manufacturers minimize waste, reduce emissions, and operate more responsibly.

Beyond offering sustainable solutions, we are committed to becoming a sustainable technology company ourselves. We continuously assess our environmental impact, optimizing our energy consumption and streamlining our business processes.

To drive measurable results, we follow the CO2 Performance Ladder, a leading framework for systematically reducing carbon emissions. By integrating sustainable practices across our operations, we strive to make a positive and lasting impact on both our customers and the environment.

BUILDING A SUSTAINABLE FUTURE WITH SMART SOLUTIONS



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