

# Planning production when faced with competing business needs

Effective production planning and scheduling are core competencies of competitive chemical supply chains. But the growing complexity of the chemical industry has made achieving this goal more challenging than ever. Corporate consolidation, globalization and expanding product portfolios increase supply chain complexity while growing competition, increased customer demands and difficult market economics put pressure on producers to meet challenging financial performance goals.

Accordingly, production planners and schedulers have to focus on several important goals: scheduling the plant efficiently, keeping inventories low, satisfying customer demand, and anticipating the impact of every decision on the supply chain.

They should understand how much inventory is needed to support demand during the production cycle, and how much is needed to support a desired level of customer service. They should know how to reshape plans smoothly and responsively, without breaking the rhythm of the plant. And they should be able to visualize the impact of a planning decision on the entire supply chain.

How can this optimization be accomplished to maximize your return on assets? With advanced capabilities made possible by Picaso™ from WAM Systems.



WAM Systems Supply Chain Solution Series  
**Optimizing Production**

## Optimize Production Planning with Picaso™ from WAM Systems

Optimizing production requires five key capabilities:

1. Generating accurate forecasts
2. Optimizing product mix and asset usage
3. Optimizing production policies
4. Scheduling in the face of change
5. Monitoring and assessing performance

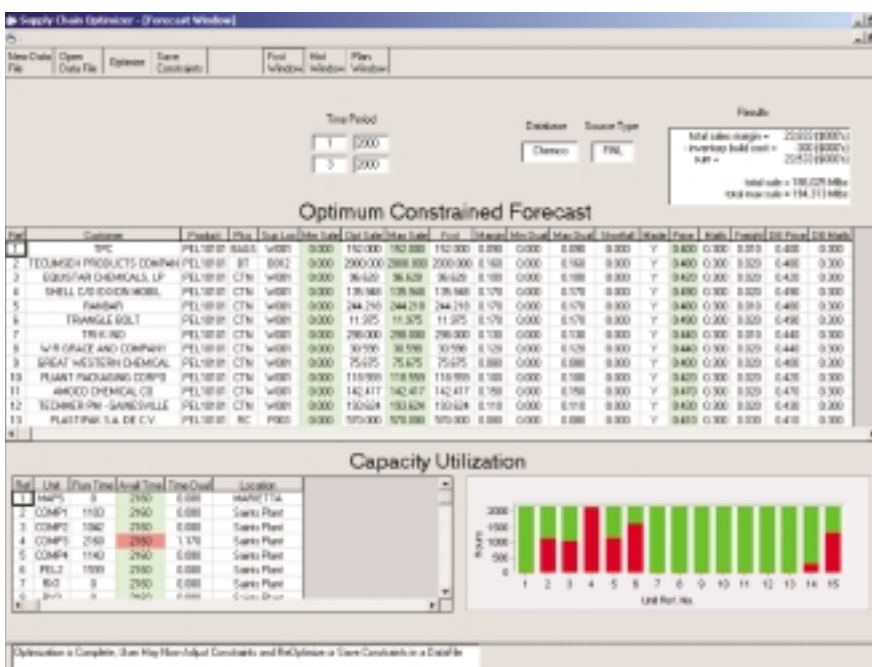
The Picaso suite of supply chain solutions provides these capabilities and delivers the information you need to successfully optimize production in a complex and competitive marketplace.

## Generating Accurate Forecasts

Picaso from WAM Systems provides the powerful yet flexible forecasting tools you need to develop timely, accurate forecasts. You start with Picaso's statistical forecasting engine, which provides a first-cut projection based on methods and criteria tailored to your business. Picaso's forecasting tool prioritizes high-value customers and key accounts with individual attention, and handles smaller customers collectively. The collaborative features enable the key stakeholders to focus on the important details, easily share information, and arrive at a consensus. Customers can also be included in the collaborative process to achieve more accurate forecasting.

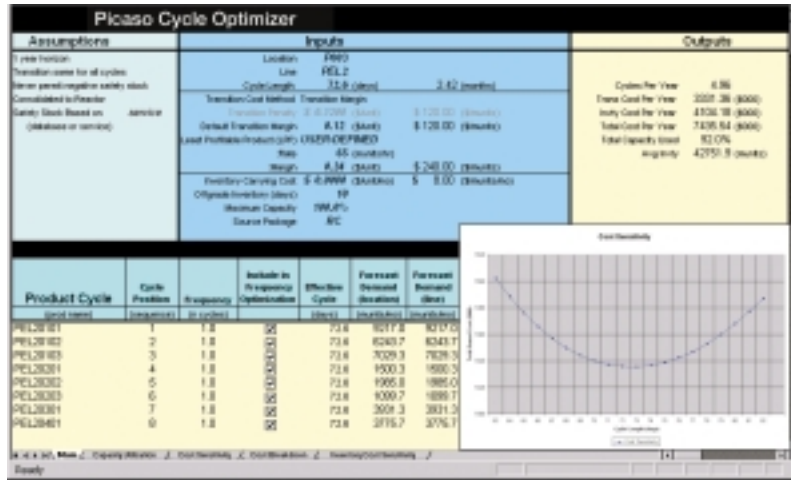
## Optimizing Product Mix and Asset Usage

The Picaso Supply Chain Optimizer uses advanced analytical techniques—powered by the ILOG optimization engine—to map your demand forecast across the supply chain, providing sales and production plans that accommodate your capacity limitations while maximizing profitability. Product and customer mix can be analyzed interactively to find a business blend that improves the use of your equipment. And alternative scenarios can be easily run to assess the impact of various customer and production options.



## Optimizing Production Policies

The Picaso Cycle Optimization helps you balance production costs against the costs of holding inventory. By using this tool, production planners determine the optimal policies for product frequency, cycle length or production campaign length, as well as target levels for cycle and safety-stock inventories.



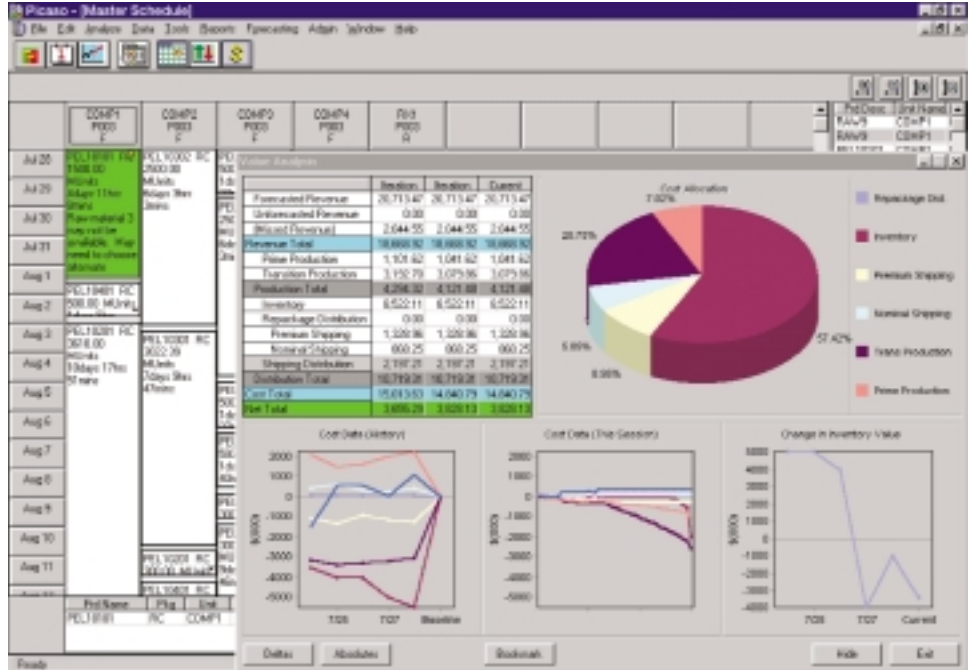
## Bottom Line—Maximizing Your Return

Effective planning and scheduling help you maximize your return on high-value production assets. By improving forecast accuracy, and using the latest techniques

for meeting that demand and developing optimal production plans and schedules, you can achieve significant savings from increased capacity use and decreased transition cost. And you accomplish all this while providing a high level of customer service.

## Scheduling in the Face of Change

Through its integration of supply chain simulation and chemical production modeling, Picaso provides a decision-making cockpit that gives the production planner the right information at the right time. The impact of every scheduling decision can always be seen graphically at every point in the supply chain. And powerful optimization is built in. Picaso provides the best schedule to meet the near-term and long-term goals of the organization while providing clear solutions you can rely on and carry out. Picaso Scheduling is built on a production model unique to chemical operations. Features include multiple formulating, product-to-product transitions, lot quality variability, cycle and campaign simulation, and tank farm and complex storage modeling.



## Monitoring and Assessing Performance

The Picaso Supply Chain Event Monitor maintains an up-to-the-minute simulation of your future supply chain. You can rapidly identify problems as they occur, and take corrective action by repositioning inventories and altering production schedules. And, by using the Picaso Interactive Value Analysis, schedulers can instantly assess the impact of schedule changes on profitability.

For more information about how the supply chain solutions from WAM Systems can help you meet the many challenges of today's complex chemical marketplace, please contact:

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