

# Chemical Manufacturing

## Microsoft Dynamics AX

### Benefits

- **Manage complex operating environments.** Track and manage specific materials characteristics such as potency, expirations, lot control, and units of measure for formula development, production planning, quality control, and inventory management.
- **Automate and streamline processes.** Eliminate manual data input, monitor processes with custom alerts, alter formulas on the fly, and manage safety and hazards information with ease.
- **Make more confident decisions.** Access integrated, real-time data on inventory, yields, production schedules, capacity loadings, and costs for accurate pricing, efficient replenishment, improved profitability management, and fast response to disruptions or new opportunities.
- **Empower people with role-based access to information.** Speed daily tasks by equipping employees with the specific data and processes they need. Increase supply chain visibility and collaboration by extending inventory, product, and order information to trade partners.
- **Achieve a low total cost of ownership (TCO).** Build on existing investments in Microsoft technology. Implement quickly with less training, and take advantage of a flexible solution that can scale and adapt as your business grows.

Enhance productivity for process or mixed-mode manufacturing, and gain insight for more confident decision-making with a business management solution tailored to the needs of global chemical manufacturers. Microsoft Dynamics™ AX solutions for chemical manufacturers work like and with familiar Microsoft software to help your people manage formulas and compliance, automate and streamline processes, optimize inventory and capacity utilization, and more profitably satisfy customers.

Process and mixed-mode manufacturers face unique challenges in managing raw materials, production processes, and regulatory compliance. Companies struggling with inflexible applications for discrete manufacturing or production management systems that are isolated from overall corporate systems may find themselves at a competitive disadvantage.

Microsoft Dynamics AX, an end-to-end business management solution, can help chemical manufacturers meet these challenges and gain a competitive edge. With support for both specialty and commodity chemical manufacturing, the solution can adapt easily to the requirements of complex production operations, take advantage of existing investments in Microsoft technology, and readily scale as your company grows.

With a Microsoft Dynamics AX solution, you can increase the speed and automation of your manufacturing operations for greater asset utilization. Your people can effectively manage recipes or formulas, raw materials inventories, by-products, co-products, intermediates, and yield, which helps improve manufacturing agility, reduce costs, and consistently produce the highest-quality products.

Microsoft Dynamics AX can integrate robust process manufacturing functionality with supply chain, CRM, and financial information and processes to help you fuel productivity, increase operational excellence, make more confident decisions, and manage profitability for greater business growth.

## FEATURES

## BENEFITS

<b>Dynamic Materials Attributes and Formula Management</b>	Define unlimited materials attributes and inventory dimensions, develop and manage multilevel or alternate formulas, and quickly adjust formulas for formulate-to-order production or based on actual raw materials characteristics to help ensure consistent quality of final products.
<b>Co-Product and By-Product Management</b>	Take advantage of integrated management of by-products and co-products to optimize decisions and increase profitability. Analyze attributes and costs, compare costs and benefits of sale or disposal, and credit values to the
<b>Yield Planning and Tracking</b>	Establish yield standards for formulas, then track, compare, and report actual yields to quickly identify out-of-tolerance conditions, isolate causes, and take corrective actions.
<b>Customizable Item and Inventory Characteristics and Dimensions</b>	Define unlimited inventory attributes and dimensions for item or lot characteristics. Track expirations and shelf life, specify catch weights or alternate units of measure, and help ensure cradle-to-grave traceability.
<b>Optimized Inventory Management</b>	Pull inventory in optimal sequence, incorporating “best before” information and using first expired/first out (FEFO) or first in/first out (FIFO) calculations to reduce waste. Monitor inventory, easily manage replenishment, and understand the dynamics of stocking practices.
<b>Comprehensive Production Cost Allocation and Analysis</b>	Understand material and production costs relative to various formulas, manufacturing processes, and packaging options to help ensure full allocation of costs to product pricing, maximize operational efficiency, and focus on the most profitable products and markets.
<b>Integrated Quality Control Capabilities</b>	Facilitate quality control monitoring, set up testing notifications, and track quality information about any given item, including test status, quarantines, or product downgrading. Combine batches and manage process and batch balancing for tighter control of on-spec goods.
<b>Streamlined Customer and Regulatory Compliance</b>	Simplify dissemination of Material Safety Data Sheets (MSDSs), Certificates of Analysis (COAs) or other critical product and ingredient information to customers, consumers, or regulatory agencies. Manage lot traceability and take advantage of radio frequency identification (RFID) capabilities.
<b>Flexible Planning and Scheduling Tools</b>	Plan production using finite or infinite capacity and materials scheduling for make-to-stock, make-to-order, or formulate-to-order operations. Define routings to include cure time and quickly adjust to changes in materials,
<b>Comprehensive Business Intelligence</b>	Quickly analyze and share real-time information using familiar tools such as Microsoft® Office Excel®. Monitor key performance indicators and track trends for fast response to changing market conditions.

For more information about Microsoft Dynamics AX, visit [www.microsoft.com/dynamics/ax](http://www.microsoft.com/dynamics/ax).

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