

CREAMERIES AND FRESH FOODS

Benefits

Full product traceability from field to fork

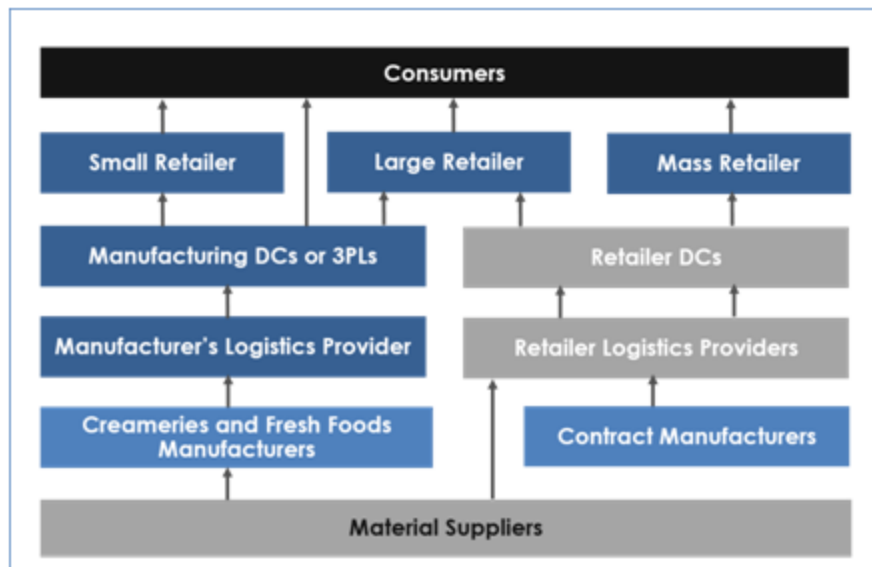
Synchronized production with item level forecasting

Ability to quickly change production schedules

Improved demand planning and supply chain management

In the creameries and fresh foods segment of the food and beverage industry, consumers want healthier products. New products are constantly being added, and complying with quality and safety regulations requires constant attention. Manufacturers need to shorten product lifecycles, spot changes in demand, manage complex global supply chains and effectively manage promotions across a complex value chain. QAD offers a unique solution for creameries and fresh food producers that helps manage supply chains, inventories and promotions, synchronize production and meet compliance requirements while meeting changing demand.

Creameries and Fresh Foods Value Chain



Key capabilities of the QAD solution include supply chain planning and execution, global financials, material and product traceability, serialization, sales and operations planning, quality management, promotions management and warehouse and transportation management. These capabilities provide creamery and fresh food manufacturers the ability to control risk, continually improve operations and align operations and sales with business strategy.

Optimize production cycles and manage shelf lives through improved manufacturing

planning and supplier management

Increase inventory turns, reduce inventory and improve customer service by using sophisticated forecasting methods and rapidly detecting changes in demand

Have field-to-fork traceability through complete product serialization

Creameries and Fresh Foods Solution Overview

Creameries and fresh foods is the second fastest growing segment in the food and beverage industry. Manufacturers produce dairy, fresh produce and fresh bakery items like milk, cheese, egg products, fresh packaged fruits and vegetables and bakery products. Production operations may include batch mixing, blending and baking though some products are simply washed and packaged. Some products require a temperature controlled environment to protect freshness. Many products have shelf lives of less than three months and often less than a week. Some products in this segment are seasonal. Balancing supply with demand is critical to success.

The supply chain for creameries and fresh foods is global in nature because raw materials are often only available from certain climates. Manufacturers typically must process raw materials upon receipt. Managing value added inventories, expiration dates and rotating inventory complicates warehousing, transportation and distribution. Demand may exceed capacity, necessitating contract manufacturing.

Consumer buying habits now include club, superstore, specialty shop and online buying. Consumers prefer easy to prepare foods that provide value and health benefits as well as bakery and bread items made from healthier ingredients. Private label and store brands are popular and promotions are a necessity to compete.

Food safety regulations change constantly impacting how producers manage supply chains and manufacturing processes. Product traceability is required from raw ingredients through finished products. Produce is often sourced internationally and many government agencies require country of origin certifications.

These factors result in shrinking product lifecycles, the need to add innovative products quickly and to closely manage supply chains. Accurate supply chain planning from demand through procurement is essential. Manufacturers use lean principles for streamlining and cost control. Intricate machinery requires ongoing maintenance.

QAD Cloud ERP and related capabilities are an excellent fit for producers of creamery and fresh food products. The solution supports best-in-class, industry-specific processes including meeting compliance requirements and offers flexible deployment options. The following are key capabilities provided by QAD solutions:

[QAD DSCP \(Demand and Supply Chain Planning\)](#)

Serialization and Lot Trace Workbench

[Planning and Scheduling Workbenches](#)

[QAD TAM \(Trade Activity Management\)](#)

[QAD QMS \(Quality Management System\)](#)

[QAD Automated Solutions – Shop Floor Data Collection and Label Printing](#)

[QAD Enterprise Asset Management](#)

[QAD Warehousing](#)

[QAD TMS \(Transportation Management System\)](#)

An overview of the first three capabilities follows. For information about the other capabilities, please visit QAD.com.

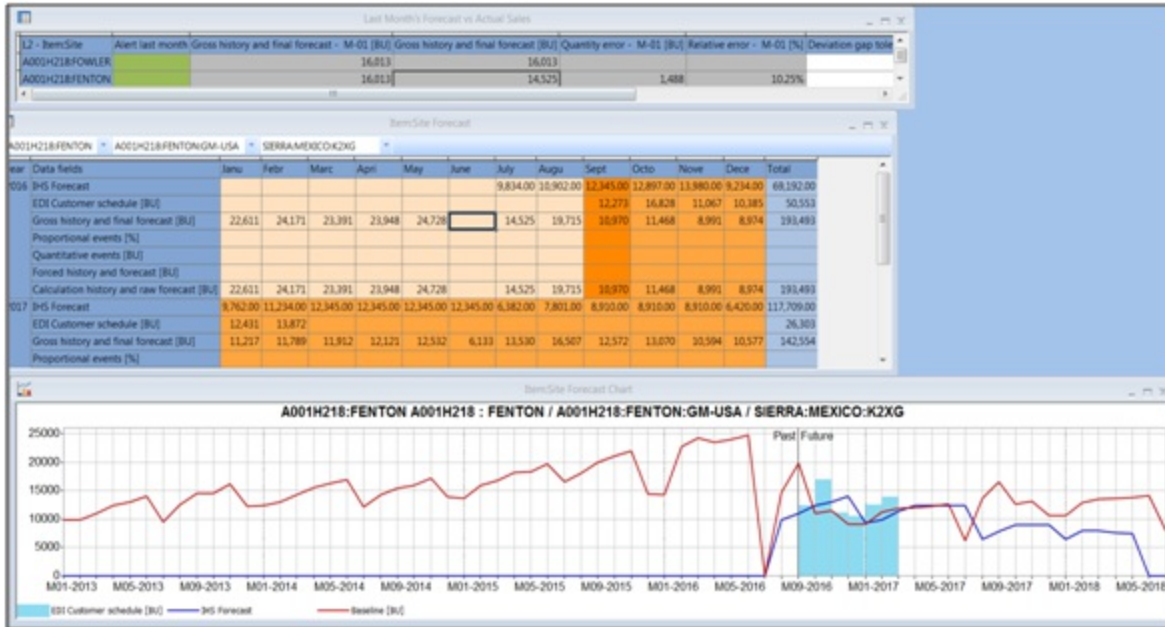
QAD DSCP (Demand and Supply Chain Planning)

Demand Planning, part of QAD DSCP, **generates more reliable forecasts and helps better manage product life cycle events**, directly impacting inventory effectiveness and customer service. Typical measurements related to these KPIs include DIFOT, Forecast Accuracy, Line Item Fill Rate and Inventory Accuracy. The result: bottom line improvements to cost of sales, margin and revenue.

In the creameries and fresh foods segment, demand is shifting, often seasonal and fickle consumers are always looking for new products. Product lifecycles are shrinking and the supply chain is more complex. QAD DSCP provides a sophisticated tool to build and manage forecasts, improving reliability and accuracy by collaborating with all the players involved in the forecasting process. **Organizations can manage forecasts at any level** – customer, item, group or family – with input from a variety of sources like sales representatives, customers, marketing and finance. This enables true collaboration, one of the keys to improving forecast accuracy. It creates sales forecasts based on historical data, market analysis data and customer production data. It also supports **strategic and operational alignment** with S&OP (Sales and Operations Planning) capabilities.

QAD DSCP uses **sophisticated statistical modeling** to pinpoint statistical anomalies that can skew demand, smooth historical data if applicable, determine the effect of exceptional events, and generate a forecast for each individual item, automatically selecting the best-fit statistical model.

Demand and Supply Chain Forecasting Model



Serialization and Lot Trace Workbench

Field-to-fork traceability gives creameries and fresh foods manufacturers the information needed to respond to product issues and supports food industry compliance. Government regulations are increasing and **the ability for manufacturers to serialize products and track them completely is critical for compliance and to gain trust in the marketplace.** Key metrics for meeting industry regulations are Out of Compliance Incidents and the Cost of Compliance. Automating full life-cycle transaction accountability reduces risk. QAD's solution, including item attributes, provides the tools and information required for serialization.

QAD further assists manufacturers in the tracking and tracing of products through the Lot Trace Workbench which provides immediate access to lot/serial-based transaction history. **It provides full traceability – from sourcing to manufacturing and shipment – and a complete audit trail of all lot or serial numbered items.** For any serial number or lot, Lot Trace Workbench makes it easy to track use, shipping information and current location.

Full Product Traceability

Search ((Direction = false) and (Item Number = '02200'))

Direction equals Backward Search Clear All

Item Number equals 02200

Lot/Serial equals

Level	Date	Transaction Number	Site	Location	Item Number	Description	Lot/Serial	Reference	Quantity	UM	Type	Order Number	Transaction Ref	Batch
1	10/10/2016	1119826	10-200	010	02200	Motor Asm 8'Way Seal Adj, 24V amp 2 hp	101016ejm		100	EA	ISS-SD	ejn666	2455037	
2	10/10/2016	1119823	10-200	010	02200	Motor Asm 8'Way Seal Adj, 24V amp 2 hp	101016ejm		100	EA	RCT-WD	ejn777	2455036	
3	10/10/2016	1119822	10-200	020	62201	24V Amp 2HP, 1/2 Dia	ejm101016		100	EA	ISS-WD	ejn777	2455036	
4	10/10/2016	1119821	10-200	020	62201	24V Amp 2HP, 1/2 Dia	ejm101016		100	EA	RCT-PO	ejn999	R1012013	

Address Detail Lot Availability Transaction Attributes Detail Serial History Browse

Address Detail

Address Name Address City State Postal Code County Attention Telephone Fax Number

10C1002 Houston Automotive Group 801 Louisiana, Suite 700 Houston TX 77002 USA Gene Adzuso

Planning and Scheduling Workbench

Visibility into schedules and the ability to change production schedules quickly is critical for creameries and fresh foods manufacturers. QAD's Planning and Scheduling Workbench makes it easy to **generate reliable production plans, manage exceptions proactively and respond to changing conditions**. Improving production plan quality positively impacts metrics like Manufacturing Schedules, Manufacturing Efficiency, Asset Utilization and Inventory Effectiveness.

The Planning and Scheduling Workbench **provides schedulers visibility into demand, supply, inventory, capacity and production and is displayed in an intuitive spreadsheetlike workbench**. Schedulers gain insight into planned production, alternative resources, changes in customer demand, inventory levels, safety stock, forecasts, capacity and planned maintenance schedules. They no longer need to sift through reports or resort to offline spreadsheets.

Schedulers interact directly with the schedule using color-coded alerts that focus attention on potential issues. If there is a shortage, the scheduler can immediately see if it is something that warrants a schedule change such as a new or changed customer order or a quality issue that might lead to missed deliveries or production delays.

The scheduler can immediately respond by simulating changes to production and seeing what the effect will be on the overall schedule and capacity. This ensures that responding to one rush order does not result in missing two or three other deliveries or costing more in overtime than would be made on the sale. Once the scheduler is certain the schedule changes are accurate they can immediately implement the changes and communicate priorities to the shop floor.

Planning and Scheduling Workbench View of Production Lines Including Capacity, Schedules and Supply/Demand Data

The screenshot shows a production scheduling window for product 02303. The main data table is as follows:

Production Line	Month	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week 33	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
ASSY-01	04/03/2016	Remaining Capact	-1.8	2	2.5	-2.1	3.5	5.9	-3.5	0	-2.6	-4.2	-9.1	3.5	2.5	2.5	0.5
ASSY-01	02303	14		20	50	20	115	20	20	1.75	20	20	30	30	30	30	
ASSY-01	02305	30		5	10	25		41		10	51	66					
ASSY-01	02308			3				3			3						
ASSY-01	02306	610						9	71	50	120	50					
ASSY-01	02301	64	7	14	10	10	10	44	10	10	10	10	10	10	10	30	
ASSY-01	02302	82		13	15	15	15	50	15	15	15	15	15	15	15	15	

For more information on how the QAD solution for creameries and fresh food manufacturers can help your company, please contact QAD at +1-805-566-6100 or email info@qad.com.