

FROZEN FOODS

Benefits

Improve forecasting and supply chain planning

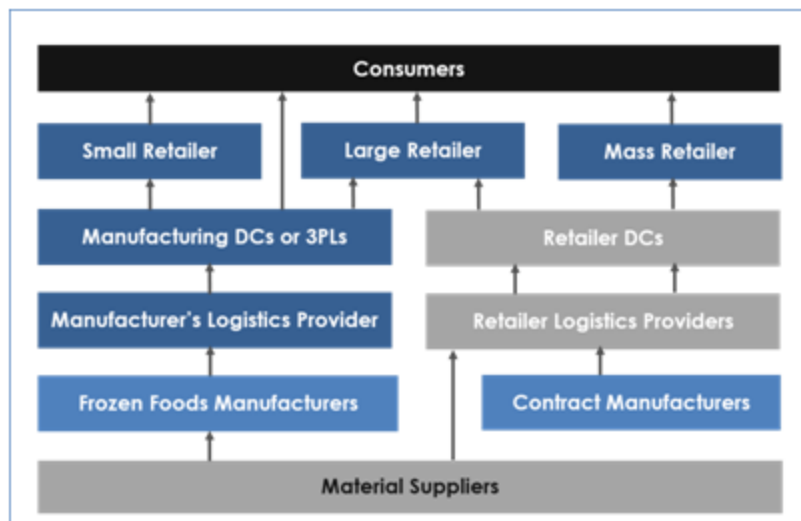
Synchronize production with demand while maximizing manufacturing efficiencies

Effectively manage promotions and trade activity

Provide full product traceability for regulatory compliance

QAD offers frozen foods manufacturers a unique solution to meet industry challenges and better manage their operations. Frozen foods is the fastest growing segment of the food and beverage industry. Consumers want choices that are healthy and easy to prepare along with innovative products. Food safety regulations continue to evolve. Manufacturers need to shorten product lifecycles and manage complex supply chains while minimizing costs and growing profits. Promotions are critical for profitability. The QAD solution helps manufacturers address their business needs from “field to fork.”

Frozen Foods Value Chain



QAD solutions include capabilities for demand planning, supply chain execution, global financials, material and product traceability, serialization, label printing, sales and operations planning, quality management, promotions management and warehouse and transportation management. These and other capabilities assist frozen foods manufacturers in controlling manufacturing while meeting customer demand and ensuring quality and consumer safety. Manufacturers can control risk, improve operations and align with their overall business strategy.

Better manage production cycles through more accurate forecasting, improved supplier management and better manufacturing planning.

Increase inventory turns and improve customer service by detecting demand changes.

Improve promotion management and reduce trade spend through better trade activity management.

Readily comply with regulatory requirements through product serialization and track and trace capabilities.

Frozen Foods Solution Overview

The producers of frozen food and beverage products, who participate in the fastest growing segment in the food and beverage industry, use several manufacturing processes including batch and tank mixing, blending and compounding to discrete packaging operations in refrigerated and frozen environments.

Consumption in frozen foods has been growing due to proliferation and popularity of clubs, specialty shops and discount stores that all now sell frozen products. Consumers increasingly prefer easy to prepare products that also provide value and health benefits. Private label and store brands are gaining in popularity. In addition, many products are seasonal in nature. Given these market factors, product lifecycles are shrinking, causing producers to continually add new products.

Managing expensive value added inventories, expiration dates and rotating inventory are critical processes for frozen food manufacturers which also complicate warehousing, transportation and distribution. Demand often outstrips capacity causing the need for contract manufacturing and co-packers. Many manufacturers lack sufficient refrigerated and frozen storage and transportation resources, creating a dependency on third party logistics providers.

Ingredients are often perishable. Ensuring on-time ingredient delivery to keep up with finished product demand is challenging. Global regulations for food safety are always evolving. Product traceability is needed from raw ingredients through finished products.

Synchronization across processes and between departments is needed for on-time delivery and growing margins. Supply chain planning from demand through procurement is essential while balancing manufacturing scheduling. Many producers apply lean principles to streamline manufacturing and reduce costs. Complex machinery needs constant maintenance to keep the shop floor running.

QAD Cloud ERP and related capabilities provide global producers of frozen foods an integrated solution to deal with their many challenges. QAD solutions support best-in-class, industry-specific processes and offers flexible deployment. The following are key capabilities provided by the QAD solution to help frozen food manufacturers succeed.

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

Serialization and Lot Trace Workbench

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

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

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

[Planning and Scheduling Workbench](#)

[QAD Supplier Portal](#) – Supplier Management

[QAD EAM \(Enterprise Asset Management\)](#)

[QAD Warehousing](#)

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

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

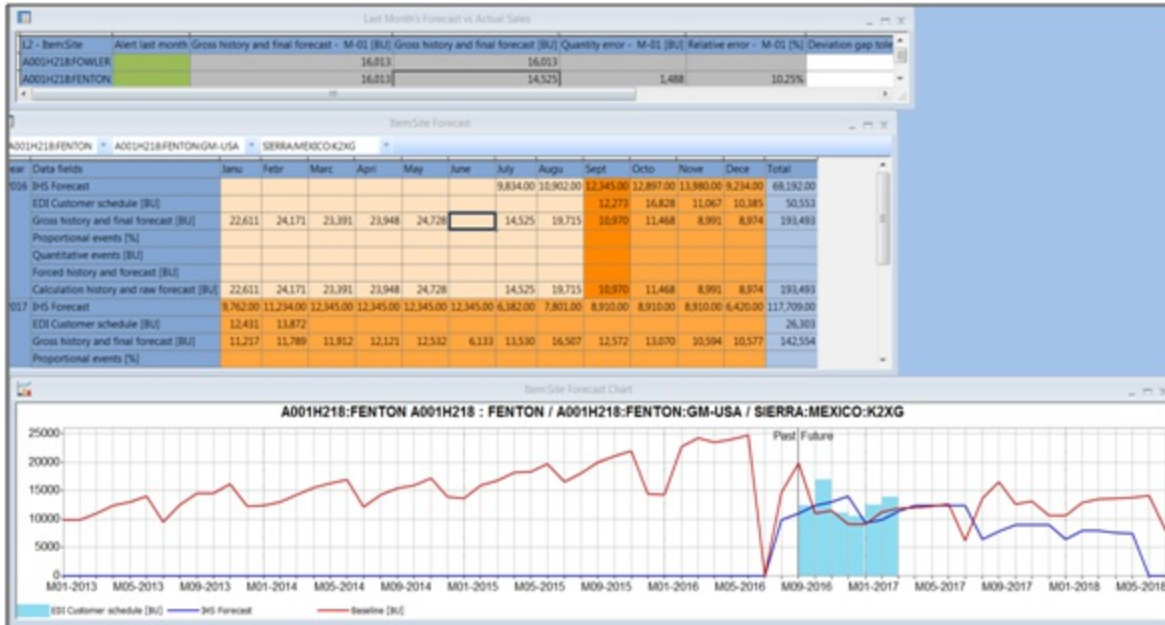
QAD DSCP (Demand and Supply Chain Planning)

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 frozen foods segment, demand is shifting and seasonal and fickle consumers are always looking for new products. Product life cycles 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 frozen food manufacturers the information needed to respond to product issues and support 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 regulations include Out of Compliance Incidents and the Cost of Compliance. Automating full life-cycle transaction accountability reduces risk. Item attributes, part of the QAD's solution, provides the tools and information required for complete 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	101016ejn		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	101016ejn		100	EA	RCT-WD	ejn777	2455036	
3	10/10/2016	1119822	10-200	020	62201	24V Amp 2HP, 1/2 Dia	ejn101016		100	EA	ISS-WD	ejn777	2455036	
4	10/10/2016	1119821	10-200	020	62201	24V Amp 2HP, 1/2 Dia	ejn101016		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 Country Attention Telephone Fax Number

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

QAD TAM (Trade Activity Management)

QAD TAM provides the ability to use historical information to help **plan promotions**. It increases the visibility of all discounts earned against promotional deals. Promotional data is maintained at the invoice line level including all relevant details needed for profitability analysis. Frozen food manufacturers can copy varying levels of detail from live promotions and/or create templates.

With the competition in frozen foods, manufacturers need to differentiate themselves. Promotions help manufacturers increase sales and brand awareness. QAD TAM provides **flexible deal management** capabilities for individuals and groups by customer and items. It includes deal categories such as immediate discount and order line/order level discounts commonly referred to as off-invoice deals. Examples include deferred discount – future discounts based on sales activity commonly referred to as bill-back and rebate deals; bonus goods – free or discounted goods based upon previous order lines; allocated funds – fixed monies with a defined payment schedule independent of sales activity commonly referred to as lump sum deals.

It also delivers an efficient and powerful solution for managing deductions. Key deduction management capabilities include:

Deduction Review Workbench: A central dashboard for viewing and maintaining deductions.

Earned Discount Visibility: Deduction monies 'assumed' are easily validated against open Earned Discounts visible immediately within the Deduction Review screen.

QAD TAM simplifies the promotional, deal and pricing process to ensure manufacturers do not miss out on revenue opportunities.

Trade Contact Activity Center

The screenshot displays the TAM Contract Activity Center interface, which is divided into three main sections:

- Customer List:** Shows a table of customers with columns for Customer ID, Name, Active status, Bill To, Class, List Type, Business Relation, Type, Site, Country Code, and Region. Two records are visible: 10C1003 (Pacific Health Care Systems) and 10C1004 (Price Chopper).
- Contract Pricing Contracts:** Shows a table of contracts with columns for Contract Code, Description, Contract Type, Status, Buying Group, Customer, Buy Start, and Buy End. Two records are visible: CR-00200 (Return Distributor Contract) and CR-00248 (Test Generate and Review Claims).
- Contract Deal:** Shows a table of deals with columns for Contract, Deal, Description, Deal Start Date, Deal End Date, Deal Category, Entity, Deal Effects, and Combination Type. Three records are visible: CR-00250 (Deal Service Fee), CR-00250 (Distributor Contract Pricing), and CR-00250 (One-Off Deferred).

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