



Case Study

Ocean Mist Farms

End-to-end produce traceability translates to end-to-end efficiencies and food safety

Challenge

About a decade ago, produce growers in the U.S. and Canada worked together on an end-to-end traceability initiative with the ultimate goal to trace food crops back to the fields of origin. The challenge for Ocean Mist Farms was to make its proprietary product identification system and process interoperable with the rest of the industry, including shippers, retailers, and distributors.

Solution

Ocean Mist Farms decided to implement GS1 Standards because of their ubiquity in worldwide commerce. The information encoded in GS1-128 barcodes would help benefit the grower's internal operations, including inventory control and sales order optimization, plus provide support for trading partners throughout the supply chain.

Benefits

Operational efficiency. Traceability practices adopted by Ocean Mist Farms save significant time since produce information is now easily collected from scanning the GS1 barcodes on case labels, eliminating the manual recording of data. This increased efficiency has resulted in time savings as high as 25 to 35 percent. Additional benefits include enhanced inventory management and order optimization because of the wealth of data now readily available on any produce item.

Transparency. Traceability information, including the harvest date, is clear to wholesalers, distributors and retailers, helping to assure each product's freshness.

Accuracy. Multiple verifications at each stage of harvest and distribution means that a single label supplies extensive data. This includes data from the moment produce is harvested, through transport to the cooling facility, storage in the warehouse, product selection and order fulfillment, shipping to a retail warehouse, delivery to a retail store, and ultimately, its use in a consumer's kitchen.

Safety. Knowing exactly from which block, in which field, on which ranch an artichoke, a head of lettuce, or any other piece of fresh produce was grown and harvested, results in complete transparency and a rapid means of trace back in the event of a recall.

Future-proof. Increasingly, consumers are demanding more information on the sources of their food—a demand that traceability data can help satisfy.

Standardized Traceability

Ocean Mist Farms is headquartered in Castroville, California, which is known as the “Artichoke Capital of the World,” thanks in large part to Ocean Mist Farm’s century-old growing operation. Chris Drew, vice president of operations, oversees Ocean Mist Farms’ cooling facilities and quality assurance.

In 2010, the Canadian Produce Marketing Association, the Produce Marketing Association, and the United Fresh Produce Association, working with GS1 US®, joined to mobilize the Produce Traceability Initiative (PTI) intended to help the industry implement improved traceability procedures and to develop best practices for case-level traceability.

Ocean Mist Farms had already established a proprietary traceability program yet, the company recognized the benefits of using GS1 Standards, which are used throughout the supply chain to communicate among trading partners and increasingly, to consumers.

With so many types of produce, some with wide variations in marketable sizes, and variable packaging sizes/types—such as private label, tag formats, and other attributes—a comprehensive strategy determined the ideal method to assign the Global Trade Item Numbers (GTINs), a unique product identifier. Drew says. “It was much easier to apply GS1 Standards-based barcodes across all commodities and have all our traceability information look the same on each box versus the alternative of implementing an incremental approach.”

“It was much easier to apply GS1 Standards-based barcodes across all commodities and have all our traceability information look the same on each box versus the alternative of implementing an incremental approach.”

Chris Drew
Vice President of Operations, Ocean Mist Farms

Leader of the Pack

Once pickers in the fields harvest an item, the produce is packed in cartons and GTINs, encoded in GS1-128 barcodes and printed on labels, are applied. The barcodes also include traceability data, including the crew that picked the produce, the block and field where it grew, and the different pack styles.

What gets picked and packed is determined by a field commodity manager who relies on demand estimates supplied by Ocean Mist Farms sales teams. While the crew, field and block designations remain constant, the pack styles can differ. Each master carton goes on a pallet arranged by pack-style. For instance, cartons of bulk baby artichokes are grouped on a field trailer pallet with similarly packed cartons on which data-rich labels have been applied.

Once a pallet is full, it heads to the warehouse receiving office, where the block information encoded in the barcode is scanned from the field tag and all the information is verified to match the information forwarded by the harvest crew. It is also checked against the company’s enterprise resource planning (ERP) system that checks if the field and block data match the produce grown there.

Once verified, pallet tags are printed, and all 96 cases of baby artichokes are accepted into pre-cooling, and finally into cold storage in the warehouse where each room and row is identified with a GS1 Global Location Number (GLN).

The Ocean Mist Farms traceability system requires multiple verifications of the product data collected: at receiving, when placed into inventory, and when sent to a designated room and row in the warehouse. “Our launch was successful partly due to the fact that we all understood the importance of making certain our traceability information was accurate,” says Drew.



Cartons of produce are labeled with GS1-128 barcodes that, when scanned, provide rich product data for traceability.

Traceability Data Helps Improve Product Quality



Which block the produce came from



When it left the farm's shipping dock



Where the case was shipped



Issue with produce variety reported



When the customer reported the issue

Transformative Traceability

Ocean Mist Farms reviews its quality adjustments and customer concerns on a monthly basis. In the event it detects that a particular produce item is not holding up as well as it should, captured data is used to alter growing decisions.

"It's helped us streamline our focus on planting the best quality varieties for individual time periods, or what we call growing windows," Drew says. "The data helps if we have consumer complaints for quality defects by telling us where it shipped, how old the product was when the customer reports it to us, in comparison to when it left our dock. It really helps us make decisions that result in improved product quality."

"The data helps if we have consumer complaints for quality defects by telling us where it shipped, how old the product was when the customer reports it to us, in comparison to when it left our dock. It really helps us make decisions that result in improved product quality."

Chris Drew
Vice President of Operations, Ocean Mist Farms



Efficiency Benefits of Case-Level Traceability With GS1-128 Barcodes



Time savings
of 25-35%



Eliminated 3
hand swipes



Reduced
waste



Optimized
inventory

Level the Playing Field

Effective traceability across the industry is a game changer. Ocean Mist Farms conducts mock recalls internally and with its partners. “We have a two-hour time limit to find every case that shipped. And we’ve met our goal time-after-time,” Drew says. “We’re confident we can locate every case that we have shipped from a particular lot.”

“Ocean Mist Farms’ consumers can feel comfort in knowing we, as producers, have the capability to find where each carton of fresh vegetables originated and trace each carton through the supply chain, quickly and accurately,” Drew says.

Drew points out that the more widespread the adoption of traceability standards, the better for the industry as a whole. When a recall occurs, swift action and accuracy benefits every grower. The less panic from a recall, the less long-term damage to a brand, grower or even a produce category.

“We were an early adopter, and I hope that others are working toward becoming compliant.” Drew offers words of advice to those who are new to traceability. “Don’t be afraid of it. When you adopt standards, you’re only improving your business, and there shouldn’t be any fear in that.”

“We have a two-hour time limit to find every case that shipped. We’re confident we can locate every case that we have shipped from a particular lot.”

Chris Drew
Vice President of Operations, Ocean Mist Farms

“Ocean Mist Farms’ consumers can feel comfort in knowing we, as producers, have the capability to find where each carton of fresh vegetables originated and trace each carton through the supply chain, quickly and accurately.”

Chris Drew
Vice President of Operations, Ocean Mist Farms



The cartons’ barcoded labels are scanned to collect product data that is then verified to ensure it matches the information forwarded by the harvest crew.

About the Organizations



About Ocean Mist Farms

Ocean Mist Farms, a fourth generation family-owned business and the largest grower of fresh artichokes in North America, is committed to delivering the highest standards in the industry for food safety, product quality, customer service, innovation and sustainability. The company's full line of over 30 fresh vegetables includes the award-winning Season & Steam Convenience Vegetable and Ocean Mist Organic product lines. www.oceanmist.com



About GS1 US

GS1 US®, a member of GS1® global, is a not-for-profit information standards organization that facilitates industry collaboration to help improve supply chain visibility and efficiency through the use of GS1 Standards, the most widely-used supply chain standards system in the world. Nearly 300,000 businesses in 25 industries rely on GS1 US for trading partner collaboration that optimizes their supply chains, drives cost performance and revenue growth while also enabling regulatory compliance. They achieve these benefits through solutions based on GS1 global unique numbering and identification systems, barcodes, Electronic Product Code-based RFID, data synchronization, and electronic information exchange. GS1 US also manages the United Nations Standard Products and Services Code® (UNSPSC®). www.gs1us.org



About the Foodservice GS1 US Standards Initiative

The Foodservice GS1 US Standards Initiative represents a broad cross section of industry trading partners. Today, more than 130 manufacturers, distributors, brokers, operators, industry associations, government agencies, logistics, and technology providers are participating members in initiative activities focused on improving transparency, operational efficiencies, traceability, and food safety with GS1 Standards. www.gs1us.org/foodservice-initiative



About the GS1 US Retail Grocery Initiative

The GS1 US Retail Grocery Initiative is a voluntary collaborative industry effort seeking to address current industry challenges to improve product information and images, data quality, supply chain visibility, and operational efficiencies. This structured Initiative for retail grocery aims to help enable stakeholders to focus on the most important industry problems, streamline resources, and drive adoption and implementation of the industry-defined solutions leveraging GS1 Standards. www.gs1us.org/retail-grocery-initiative

About the Produce Traceability Initiative

Sponsored by Canadian Produce Marketing Association, GS1 US, Produce Marketing Association and United Fresh Produce Association, the Produce Traceability Initiative (PTI) is designed to help the industry maximize the effectiveness of current trace-back procedures, while developing a standardized industry approach to enhance the speed and efficiency of traceability systems for the future. The PTI has a bold vision, which outlines a course of action to achieve supply chain-wide adoption of electronic traceability of every case of produce. The PTI website serves as a central resource to provide industry members with extensive education and guidance on implementing these recommendations. www.producetraceability.org

Proprietary Statement

This document contains proprietary information of GS1 US. Such proprietary information may not be changed for use with any other parties for any other purpose without the expressed written permission of GS1 US.

Improvements

Improvements and changes are periodically made to publications by GS1 US. All material is subject to change without notice. Please refer to GS1 US website for the most current publication available.

Disclaimer

Except as may be otherwise indicated in specific documents within this publication, you are authorized to view documents within this publication, subject to the following:

1. You agree to retain all copyright and other proprietary notices on every copy you make.
2. Some documents may contain other proprietary notices and copyright information relating to that document. You agree that GS1 US has not conferred by implication, estoppels, or otherwise any license or right under any patent, trademark, or copyright (except as expressly provided above) of GS1 US or of any third party.

This publication is provided "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Any GS1 US publication may include technical inaccuracies or typographical errors. GS1 US assumes no responsibility for and disclaims all liability for any errors or omissions in this publication or in other documents which are referred to within or linked to this publication. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Several products and company names mentioned herein may be trademarks and/or registered trademarks of their respective companies. GS1 US does not, by promulgating this document on behalf of the parties involved in the creation of this document, represent that any methods, products, and/or systems discussed or recommended in the document do not violate the intellectual property rights of any third party. GS1 US has not performed a search to determine what intellectual property may be infringed by an implementation of any strategies or suggestions included in this document. GS1 US hereby disclaims any liability for any party's infringement of intellectual property rights that arise as a result of any implementation of strategies or suggestions included in this document.

This publication may be distributed internationally and may contain references to GS1 US products, programs, and services that have not been announced in your country. These references do not imply that GS1 US intends to announce such products, programs, or services in your country.

GS1 US shall not be liable for any consequential, special, indirect, incidental, liquidated, exemplary, or punitive damages of any kind or nature whatsoever, or any lost income or profits, under any theory of liability, arising out of the use of this publication or any content herein, even if advised of the possibility of such loss or damage or if such loss or damage could have been reasonably foreseen.

GS1 US HEREBY DISCLAIMS, AND YOU HEREBY EXPRESSLY RELEASE GS1 US FROM, ANY AND ALL LIABILITY RELATING TO YOUR COMPLIANCE WITH REGULATORY STANDARDS AND LAWS, INCLUDING ALL RULES AND REGULATIONS PROMULGATED THEREUNDER. GS1 US MAKES NO WARRANTIES OF ANY KIND RELATING TO THE SUITABILITY OF THE GS1 STANDARDS AND THE SPECIFIC DOCUMENTS WITHIN THIS PUBLICATION TO COMPLY WITH ANY REGULATORY STANDARDS, LAWS, RULES AND REGULATIONS. ALL INFORMATION AND SERVICES ARE PROVIDED "AS IS."

*GS1 US employees are not representatives or agents of the U.S. FDA, and the content of this publication has not been reviewed, approved, or authorized by the U.S. FDA. The following information contained herein is for informational purposes only as a convenience, and is not legal advice or a substitute for legal counsel. GS1 US Inc. assumes no liability for the use or interpretation of the information contained herein.

No Liability for Consequential Damage

In no event shall GS1 US or anyone else involved in the creation, production, or delivery of the accompanying documentation be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other loss) arising out of the use of or the results of use of or inability to use such documentation, even if GS1 US has been advised of the possibility of such damages.

IAPMO

In this publication, the letters "U.P.C." are used solely as an abbreviation for the "Universal Product Code" which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.

*If applicable

GS1 US Corporate Headquarters

Princeton South Corporate Center, 300 Charles Ewing Boulevard
Ewing, NJ 08628 USA
T +609.620.0200 | E info@gs1us.org
www.gs1us.org

Connect With Us



6 14141 02778 1