



EverFRESH®

United Technologies



Preserves just-picked freshness with absolute control.

EverFRESH®

Better than air freight. Better than gas injection.
As good as Mother Nature.

Times have changed in the produce business. With the EverFRESH® controlled atmosphere system option from Carrier Transicold, growers can harvest fruits and vegetables at maturity and peak flavor. It gives shippers full flexibility when transporting perishables to distant markets. And it improves quality and increases consumer appeal.

Unlike air freight, which is expensive and cost-prohibitive, and gas injection, which is costly per trip, degrades over time, and not available worldwide, EverFRESH controlled atmosphere (CA) is integrated into the Carrier ThinLINE® NT container refrigeration unit, providing continuous protection for perishable cargo and minimizing per-trip charges.

With the EverFRESH controlled atmosphere system, you can minimize spoilage and provide a cost-effective alternative to gas injection and air freight. And deliver flavor and freshness as good as Mother Nature.

When you control the atmosphere inside the container, you don't need outside help.

The EverFRESH controlled atmosphere system is a fully integrated, continuously controlled atmosphere system. Because it's built into the refrigeration system, it's available whenever needed, unlike older gas-injection methods.

Gas injection, performed dockside using equipment independent of the refrigeration system, surrounds the cargo with a mixture of calibrated gases before shipment. The gas mixture in the container is primarily controlled at the time when the container is injected. Before gas injection, the container must be tested for leaks, and the leaks must be sealed.

However, no container can be completely leak-free. Therefore, the atmosphere will degrade as the shipment progresses, accelerating aging.

Each gas injection – and sealing – must be scheduled based on the availability of a qualified technician, which can delay loading and shipping.

Carrier's integral EverFRESH system produces its own nitrogen, continuously controlling the gas mixture in the container, virtually eliminating concerns about leakage. You don't have to worry about locating gas injection. And you don't have scheduling delays.



A little tenderness goes a long way.

To appreciate the real value of Carrier's integral EverFRESH® system technology, you have to understand how it works. Continuous, precise management of gases in the atmosphere surrounding your cargo significantly reduces product respiration and slows natural ripening. This extends product life and minimizes product degradation and spoilage, and ensures maximum product quality on delivery. It can also inhibit bacterial growth and help control insect infestation.

The grower can leave products to ripen longer and harvest later. Crops are larger, weightier, higher in sugar content and better tasting, and higher in nutritional value. For the shipper, premium cargo care means premium quality, and satisfied customers.

It's an investment that saves you a lot of expense.

Because the EverFRESH system is an integral system that produces and actively controls atmosphere without external support, your investment returns a profit throughout the life of the refrigeration system. The EverFRESH system eliminates the middleman. You enjoy full profit from each CA shipment.

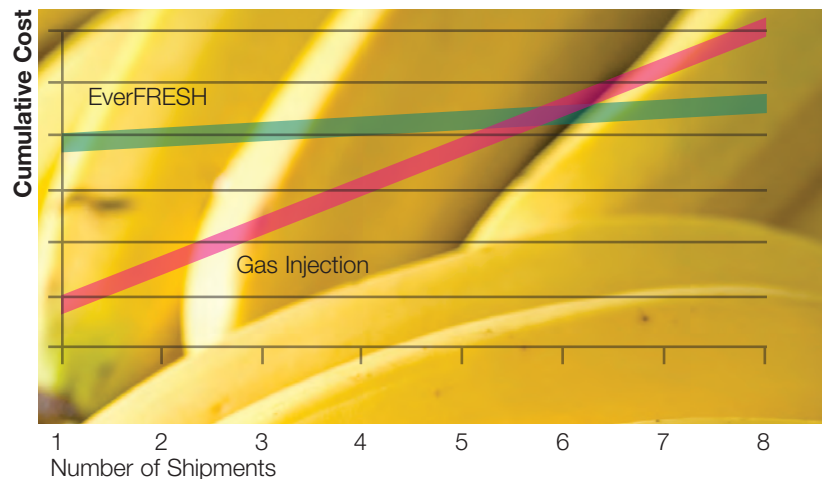
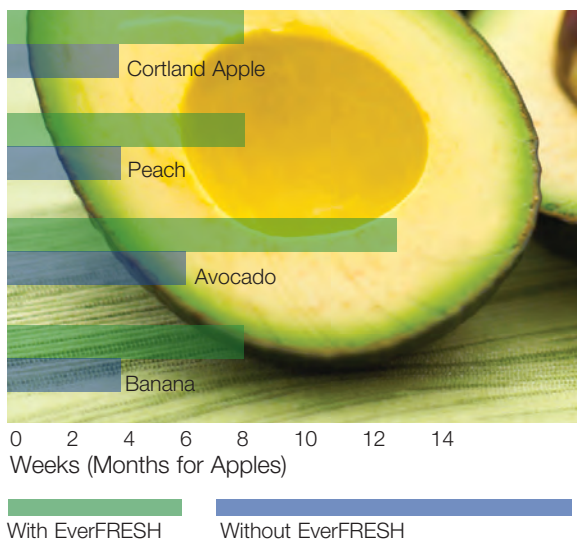
There is no costly setup charge, no dispute over cargo responsibility. Plus, there's no loss of cargo space, so you have full-load capacity. Normal wear and tear from loading and unloading doesn't affect the system, and you have full use of it throughout the life of the refrigeration system. You avoid delays waiting for special technicians and special equipment. And you reduce or eliminate the time and cost of caulking and sealing.

The only thing you want to spoil is the customer.

EverFRESH system technology gives you the control you need to consistently deliver a fresher product. Here are some of the advantages of the EverFRESH system:

- System is fully integrated into the ThinLINE® NT unit envelope, without loss of cargo space.
- Operates anywhere, without special tech support.
- Self-sufficient gas supply. Actively controls atmosphere with adjustable setpoint control for both oxygen and carbon dioxide.
- Provides accurate, reliable operation for the life of the refrigeration system.
- Proven to meet the most demanding applications.
- Only system manufactured by a container refrigeration OEM. Backed by worldwide technical support, service, and parts.

Extended Life of Perishable Products



Generates and controls atmosphere without additional equipment or outside personnel.

Maximum power draw: 1.3 kW.

CA system totally contained in the NT envelope, with zero protrusion into the container cargo space.

Backed by the Carrier Transicold worldwide service-and-parts network.

Common parts with refrigeration system to minimize parts inventory.

Records box gas concentrations throughout the trip.

Warranted for one year, parts and labor.

Automatic self-calibration.

Complete Carrier Transicold manufacturing and installation.

CA system weight:
Less than 61 kg (135 lb.).



Note: Safety interlock on rear container doors.

All it takes is a membrane separator. Who says freshness has to be complicated?



The EverFRESH® system is a membrane-separator CA system.

Compressed air is passed through a filter assembly, into a membrane module composed of thousands of hollow fibers. Oxygen, carbon dioxide, and water vapor permeate the walls of the fibers at a faster rate than nitrogen. The remaining high-purity nitrogen is channeled into the container to reduce the oxygen and carbon dioxide levels, creating the desired atmosphere to preserve the cargo.

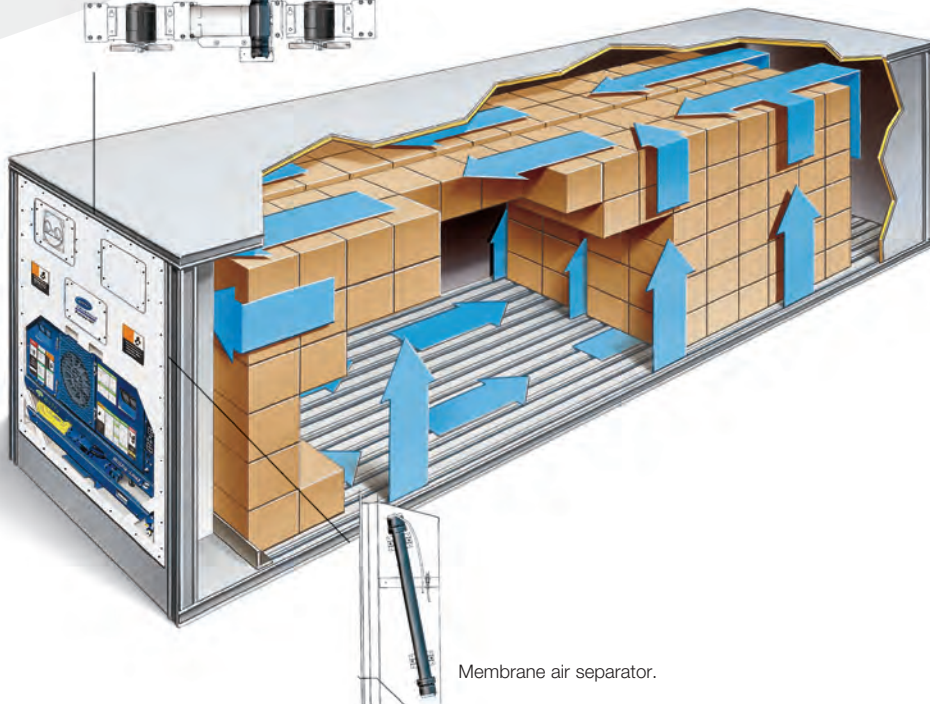
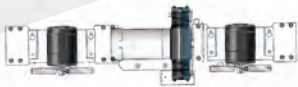
Fresh air is drawn through a special inlet louver and filters. An oil-less air compressor provides pressure to the membrane to optimize nitrogen generation. The membrane provides high-purity nitrogen.

The flow of nitrogen blankets the cargo, displacing oxygen, carbon dioxide, and other unwanted respiratory gases. Ethylene absorbers are available for use with extremely sensitive cargoes.

Natural cargo respiration produces carbon dioxide, which is used by the CA system. If needed, supplemental carbon dioxide is added by the system's Micro-Link® 2i controller. Dedicated software operates the CA system. Gas composition is continuously monitored and displayed. All data can be recorded by our DataCorder™ for later retrieval.

For operator safety, warning labels are displayed at every opening, while a unique interlock safeguard keeps the rear doors locked when container gas levels are hazardous. The lock opens automatically when safe oxygen levels have been restored.

Air compressor.





You're not alone out here.

You can count on Carrier Transicold container systems for dependable service. You can count on Carrier Transicold people for responsive support. Trained climate-control specialists, our product development and field-service engineers provide expert technical assistance worldwide.

What's more, we provide comprehensive warranty support and genuine Performance Parts™ through our network of Carrier Transicold Container Service Centers in every major port.

In turn, our Service Centers are linked to strategically located parts depots for 24-hour order processing and next-day air freight delivery.

For sales, service, and support in container refrigeration, auxiliary power, and controlled atmosphere systems, work with Carrier Transicold. We can provide what you need, when you need it, where you need it. Satisfaction guaranteed.

ADVISORY: Controlled atmosphere alone cannot serve as a cure-all for produce shipments. Proper refrigeration and general post-harvest care (such as cleaning and precooling) are essential for successful produce shipments. If you are unsure what gas levels are best for a specific product, Carrier Transicold is prepared to assist you with recommendations or direct you to expert resources.

North and South America

Carrier Transicold
Container Products Group
1095 Cranbury S. River Road
Suite 23
Jamesburg, NJ 08831 USA
Tel: +1-609-655-7605
Fax: +1-609-655-3595

Europe/Middle East/ Africa

Carrier Transicold
Limited
Pittsburghstraat 21
3047 BL Rotterdam
The Netherlands
Tel: +31-10-2380100
Fax: +31-10-2380142

Asia/Pacific

Carrier Transicold
Pte. Ltd.
251 Jalan Ahmad
Ibrahim
Singapore 629146
Tel: +65-6213-6388
Fax: +65-6862-5309

Asia/Pacific

Carrier Transicold
Container Products Ltd.
Unit 01, 16/F,
Global Gateway (HK)
168 Yeung Uk Road
Tsuen Wan, N.T.
Hong Kong
Tel: +852-288-00389
Fax: +852-288-00314

Japan

Carrier Transicold
Container Products Ltd.
Mitsui Bussan Bldg 3F
14 Nihon Odori
Naka-Ku, Yokohama
Japan
Tel: +81-45-664-6272
Fax: +81-45-664-7806

Australia

Carrier Transicold
Australia Ltd.
5 Hill Road
Wentworth Point
NSW 2127
Sydney, Australia
Tel: +61-2-8748-5513
Fax: +61-2-9648-6101

Carrier Transicold
Container Products Group
P.O. Box 4805
Syracuse, NY 13221 USA

www.container.carrier.com



United Technologies

©2013 Carrier Corporation • Printed in USA 1011 • Form 62-10276 Rev. E
A member of the United Technologies Corporation family. Stock symbol UTX.