APRIL 2011



Bahama

Caribbean Sea

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> Islands

Hispaniola

ContainerLINE

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The Whale in the Pond



As we go to press we have exciting developments to discuss – notably our participation at the Intermodal South America show in São Paulo, where we'll feature our SeaCareTM suite of aftermarket programs and services, as well as the upcoming deployment of our NaturaLINETM naturalrefrigerant trial units.

But to start there would be to ignore the "whale in the pond," which is the current state of global fuel prices. Since the beginning of 2011, bunker fuel prices have surged about 25 percent and are still climbing.

Helping to lessen the impact fuel prices have on their businesses, forward-looking shipping lines have already charted courses toward greater efficiencies. Whether for fuel conservation, cost-containment or emissions reduction, they're adjusting their operations, adopting more efficient ship designs and using more efficient equipment.

Count Carrier's PrimeLINE[®] unit among the latter solutions. It continues to lead the field in terms of energy efficiency and once again outsold all competitive models in 2010. Featured in this issue, Chiquita and Crowley Maritime offer two examples of customers attracted to the PrimeLINE unit's energy efficiencies.

Delivering energy efficiency while also avoiding the use of refrigerants with high global warming potential is the "gold standard" offered by the NaturaLINE natural refrigerant technology we introduced at Intermodal Europe 2010. The announcement generated much buzz among show attendees and the container industry trade media. So it's with eager anticipation that our first NaturaLINE units are being readied for their trial voyages. We look forward to reporting on their progress as they embark in the months ahead.



Kartik Kumar Director of Marketing and Strategic Planning Global Container Refrigeration

Agricultural E from Peru

For Peru, agriculture has always been about water and divining inventive ways to capture it. Examples from prehistory include the terraced gardens of the Huari people, the underground aqueducts of the Nazcas, and systems of reservoirs and canals used by the Incas to irrigate their mountain fields.

Those ancients would be in awe of how modern Peru uses irrigation to coax increasingly more life out of desert lands considered to be the driest in the world. In the process, Peru is transforming itself into one of the South America's major exporters of agricultural goods.

Located just south of the equator, Peru is the continent's third largest country and offers a diverse range of climates. At the western edge, the coastal region consists of narrow desert plains bordering the South Pacific, whose north-flowing Humboldt Current provides a cooling influence on the region.

Although the earth in this coastal region is fertile, some areas of Peru's desert have not seen even an inch of rain in recorded history.

"It used to be nothing but dirt as far as the eye could see," said Andrés Catalán, Carrier Transicold field service engineering manager for South America. "But the soil is rich in minerals, and once the farmers get a hold of water, they can produce anything they want – asparagus, melons, avocados."

Steady Drips of Progress

Peru's economy has been relatively strong over the past decade, growing 8 percent in 2010 alone, due in part to increased exports including the high-value minerals of copper and silver. But Peru is mining gold, so to speak, from mango and asparagus exports, thanks to agrarian and other reforms, as well as recent agreements promoting foreign trade.

Water from irrigation fuels the engine of agriculture, not to mention rural employment – farming is a labor-intensive pursuit in Peru, with about 30 percent of its population engaged in agriculture.

Peru's present day farmland accounts for only 4.3 percent of its area, suggesting room for growth, but the obstacle is that the dry Pacific basin contains a mere 1.8 percent of Peru's water. Some 53 rivers carry glacial melt and rain runoff from the Andes to the Pacific, yet only 30 percent of them flow yearround, demonstrating the need for water management.

Strategic irrigation infrastructure development includes diversion of water from rivers via canals, construction of dams to create reservoirs as well as hydroelectric power, and diverting water across the Andean Continental Divide via tunnel. In

EQUADOR

xports Spring 's Coastal Deserts

PAITA PERU LIMA MATARANI

January, during the U.S. – Peru and Ecuador Trade and Investment Mission in Lima, Peru's Minister of Agriculture, Raphael Quevedo Flores noted that seven of Peru's large irrigation projects will expand the agricultural frontier by 225,000 hectares, doubling the current acreage on the Peruvian coast for exportable products.

Shower of Produce

In 2010 alone, Peru generated a bumper crop of exports including cotton, coffee, paprika, citrus, and processed as well as fresh fruits and vegetables. (Although Peru lays claim as the birthplace of the potato, plus more than 2,500 native varieties, potatoes are not a major export crop.)

According to Peru's Ministry of Agriculture, the \$2.8 billion value (U.S.) of its 2010 agricultural exports represented a 31 percent increase over 2009. Europe is the primary consumer of Peruvian produce, followed by the United States.

Of products requiring refrigeration for transport, asparagus, grapes, mangos and avocados are the most significant revenue producers.

Considered today to be the world's leading exporter of asparagus, Peru in 2010 exported 138,600 tons of fresh asparagus with a value of \$291 million. By weight it was just 1.3 percent more than in 2009, but it represented a 16 percent increase in value. Although Peru's grape exports are a fraction of the output of nearby Chile, the value is not insignificant in the scheme of Peru's agricultural exports – 84,700 tons valued at \$180 million, up 25 percent from 2009. Nearly one quarter went to the United States, followed by Hong Kong (15 percent) and the Netherlands (13 percent).

A top global producer of mouth-watering mangos, Peru's exports in 2010 were 106,200 tons, 42 percent more by weight than the year prior, with a value of \$89 million.

Also a leading avocado exporter, Peru shipped 66,000 tons in 2010, about 22 percent more than the year prior, with a value of \$85 million.

Waves to the Future

The majority of Peru's exports traditionally departed Lima's port of Callao, "the 'only' important port just five or six years ago," said Catalán. But infrastructure development, including rail, has given rise to ports of Matarani and Ilo in the south, and the port of Paita is flourishing in the north as it helps to meet demand of the growing agriculture base there.

Accommodating the needs of exporters, Neptunia S.A., a Peru-based terminal and logistics services provider and Carrier Transicold service center, recently expanded its services in the north with a new 40,000 sq. meter (430,600 sq. foot) operation in Paita.

To help improve the quality and value of Peru's exports, shipping lines are getting more sophisticated, employing more refrigeration specialists and making greater use of technologies such as Carrier's EverFresh[®] controlled-atmosphere system and the eAutoFresh[™] automatic fresh air ventilation system, according to Catalán.

Supporting them, as well as the grower-producers, Carrier has provided container refrigeration educational sessions in Peru. According to Catalán, the producers are showing a greater interest than in the past to better understand the shipping science and which technologies are best for which commodities, depending on various factors, such as specific produce respiration rates, tolerance to carbon dioxide, ethylene sensitivity and distance from destination.

"Mangos and asparagus can benefit a lot with controlled atmosphere, especially for the longer trips to Europe, which can be 20 to 25 days from Peru," Catalán said. "Avocados headed for the United States can benefit from eAutoFresh, because they are short trips that can be as few as 10 to 17 days. But for longer trips to Europe, controlled-atmosphere can be the better option."

Deciding on the optimum technology for shipping Peru's refrigerated produce, appropriately enough, seems to be all about the water ... or at least how much of it you need to cross.



aribbean Cruising

Thanks to its exceptional energy efficiency, the PrimeLINE[®] unit is growing in popularity throughout the world's ocean trade routes, and the tropical waters of the Caribbean Basin are no exception. On these pages we spotlight two operations with significant presence in the Caribbean that have considerably expanded their PrimeLINE investments.

PrimeLINE[®] Takes On Larger Role In Crowley Maritime's Growing Fleet

Crowley Maritime Corporation's liner services group recently reached an important milestone on the path to worldclass environmental stewardship: conversion of nearly a quarter of its refrigerated fleet to energy-efficient PrimeLINE[®] units.

The achievement occurred in time for the peak winter produce export season from the Central American countries that Crowley serves, when it took delivery of 355 new 40-foot high-cube refrigerated containers. Combined with the 400 PrimeLINE units Crowley acquired previously following extensive field testing, the Jacksonville, Fla.-based shipping line now has 755 PrimeLINE units in its growing fleet of refrigerated containers.

"The PrimeLINE unit offers improved efficiencies and reduced power consumption, which reduces our emissions and impact on the environment," said John Azzo, Crowley's director of strategic procurement. "We've placed considerable focus on implementing environmentally sound technologies as part of our overall initiatives to provide customers with the highest quality equipment and ocean cargo transportation services between the United States, Central America and the Caribbean."

Crowley dedicates most of its refrigerated containers to perishable produce trade, although Azzo said the PrimeLINE unit's high performance at the lowest temperatures will also serve in the delivery of frozen foods such as ice cream.

The fleet's latest 40-foot high-cube refrigerated containers are also Crowley's first to use sustainable polyurethane technology foam, a highly efficient insulator with substantially lower global warming potential than conventional insulation.

"As a result of the way the container is designed and insulated, combined with the PrimeLINE unit from Carrier, we anticipate long-term efficiencies, even as the units age," Azzo added.

Environmental Stewards

mibbean

Founded nearly 120 years ago by Thomas Crowley, a 17year-old with a single Whitehall rowboat serving sailing vessels moored in the San Francisco Bay, Crowley has grown into a multifaceted enterprise with a shipping and logistics business, harbor-ship assist and tanker escort, ocean towing and barge transportation, marine salvage, wreck removal and emergency response, to name just a few.

Crowley launched its Caribbean liner services in the 1980s, and today Crowley is known as a leading ocean cargo carrier between the United States and Puerto Rico, the Virgin Islands and Eastern Caribbean, the Bahamas, Central America, Dominican Republic, Haiti and Cuba.

Crowley also has a long history of environmental stewardship. A Crowley safety handbook published 20 years before the Oil Pollution Act of 1990 contains operational procedures to prevent spills that many years later became law. Today this environmental stewardship continues with a focus on deploying greener



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technology, using more environmentally friendly operations and joining partnerships to help build a greener planet.

In keeping with this, Crowley also aims to provide its customers with the most innovative, energy-efficient and reliable refrigerated containers. That's where the new refrigerated containers equipped with PrimeLINE units come in.

The PrimeLINE unit uses digital scroll compressor technology and was developed to help shipping lines conserve fuel and reduce emissions related to shipboard power generation. It remains the industry's most efficient container refrigeration unit and has the highest deep-frozen capacity of any unit using non-ozone-depleting R-134a, the refrigerant most widely used by the container industry.

"We are pleased to help Crowley achieve another milestone in the transition of its refrigerated fleet to more environmentally sustainable equipment," said Chiou Fun Sin, Carrier vice president, Global Container Refrigeration. "The PrimeLINE unit was designed especially for shipping lines such as Crowley that care deeply about the impact their operations have on the world."

Chiquita Increases Investment In PrimeLINE[®] Units

Chiquita Brands increased its investment in Carrier Transicold PrimeLINE[®] container refrigeration units nearly fivefold in 2010, based on the solid performance track record and energy-savings of the PrimeLINE units, demonstrated through research.

Within the last year, Cincinnati-based Chiquita added 4,700 PrimeLINE units equipped with the QUEST power-saving mode to the 1,250 previously acquired for its banana fleet. Chiquita's investment came on the heels of side-by-side tests it ran comparing power consumption and pulldown performance of the PrimeLINE unit and other manufacturers' units.

"Pulldown performance is critical to assuring the highest quality product," said Juan Carlos Hernandez, Chiquita's manager of maintenance and repair, who supervised the testing. "In addition, energy conservation is vital to Chiquita's green transportation



initiatives, and we were pleased that it not only reduces fuel consumption related to shipboard power generation but also reduces emissions proportionately, helping us to shrink our carbon footprint."

"We applaud the wisdom of Chiquita in conducting its own analysis to verify capabilities of container refrigeration systems before expanding its investment," said David Appel, president, Carrier Transicold.

"Over the period of ownership, the energy efficiency of PrimeLINE units will result in a substantial savings in terms of total lifecycle costs," Appel added.

Chiquita is a leading international marketer and distributor of high-quality fresh and valueadded food products – from energy-rich bananas and other fruits to nutritious blends of convenient green salads.

The PrimeLINE units are used on routes from Central America, 95 percent of which are destined for North American ports.



ThinLINE[®] Units Deliver For Alaska Tug Operation

It's a big job delivering food and other goods by sea to the vast but sparsely populated northwestern tip of North America, and it requires a special kind of logistics operation to do the job.

Alaska Marine Lines (AML), part of the Lynden family of companies, takes it all in stride, with regular tug-and-barge service that departs from Seattle and navigates the northeastern Pacific's coastal waters and narrow inlets up to Alaska, the largest of the 50 United States, yet the fourth smallest by population.

Each AML barge travels at a speed of about 10 knots, towed 1,200 feet behind an ocean tugboat. Given a deck size approximately 400 by 100 feet, a barge can carry a 600 to 700 TEU load, with containers stacked five-high. It's just a fraction of what today's super-sized containerships carry, but no less important to the residents of Alaska.

Other ships pass by at 25 knots. "We are the tortoise, they are definitely the hare," quips Les Candee AML's manager of Maintenance and Equipment Procurement. But larger containerships cannot economically traverse the islands and ports of southeast Alaska – the "Panhandle" along Canada's western edge – making stops at 13 communities delivering "sometimes as few as half a dozen containers a week," he explains.

Onboard AML's barges are Carrier ThinLINE® units, some

of which are mounted to custom-built 53-foot containers, uniquely designed by AML to maximize interior dimensions so as to help the closed-loop carrier deliver provisions to Alaska's far-flung population.

Cold Frontier

Bordering the chill waters of the Arctic Ocean and Bering Sea, Alaska is nearly 2,300 miles wide from Ketchikan in its southeastern tip, to Attu, the most western island in the Aleutian chain – a span that would extend from Florida to California if overlaid on the Lower 48 U.S. states, with the main mass of Alaska covering most of the Upper Midwest.

Yet with 698,000 residents, Alaska has only 29 towns and cities with populations greater than 1,000, and nearly half its citizens live in or near Anchorage. "We're not talking about Rhode Island here," says Candee in understatement, contrasting Alaska to the smallest, yet even more populous, U.S. state.

In his position, Candee is in charge of some 9,000 pieces of equipment, including the 1,200, mostly 40-foot, refrigerated containers equipped with ThinLINE units that, depending on the cargo, must be as adept at heating as cooling when Arctic temperatures dip from October through March.



AML's year-round departures from Seattle serve 70,000 residents in the Panhandle communities, including Alaska's capital city, Juneau.

"Our tug-and-barge system consists of four vessels traveling north and south, and one that travels east and west, providing twice-a-week service to those communities." Candee says.

Further north, three vessels in rotation provide reach to Central Alaska, with goods arriving weekly through Prince William Sound to the town of Whittier, where containers are offloaded for rail transport through mountains to distribution centers in Anchorage.

Although its major customers are retail businesses, such as grocery stores and restaurant chains, AML ships all types of freight. "Every entity known to man that a human consumes in the state of Alaska is something that we haul," Candee explains. And although AML focuses on Alaska, when combined with other Lynden businesses and connecting services, "we can put anything in the world anywhere you want."

Unique Solutions

"Being a closed-loop service, AML can also do things with equipment that may not be applicable for anyone else in the world," explains Candee.

That spirit led to one of AML's latest innovations, a 53-foot container, as long and wide as a traditional highway trailer, but

10 feet tall. Unlike AML's 200 earlier 53-foot units, the newest have ThinLINE units mounted to the container's front face, bumping out, to maximize the internal dimension to nearly 3,800 cubic feet.

"It looks very much like a trailer unit, except it's all electric." Candee says. "There's probably not a bigger ISO container like this in the world."

The larger internal cube gave AML a competitive edge in winning a contract with a Portland, Ore., bakery. Fresh-baked bread is loaded warm and then frozen in transit during the 10-day, 1,500-mile trip to an Anchorage distribution center, where it is thawed for retail sale.

"The goal was to achieve a cubic capacity that made us costcompetitive with the 53-foot trailers that move on RORO (rollon/roll-off) ships," says Candee. The ThinLINE unit's design allowed for necessary adaptations to provide performance in the extra-long units.

"In our fleet now, the predominant piece of refrigerated equipment we use is the Carrier ThinLINE. We've standardized on it," Candee says, noting its reputation for reliability. "It does the job." Candee also credits the attentiveness of Carrier's sales and service personnel for a relationship with AML spanning more than 30 years.

Exceptional situations require special solutions. AML and its ThinLINE units are up to the distinct challenges posed by Alaska.

Top Achievers Recognized In Asia-Pacific Region

Having recently moved into a new office and operation center, China's Tianjin Yuanchang Reefer Container Service Co., Ltd. (TYR) has a new trophy to add to its décor.

TYR topped a list of outstanding Carrier Transicold container refrigeration service centers from the Asia-Pacific Operations (APO) region that were recently recognized for outstanding performance, taking home the 2010 Top Performer Award presented at the annual APO Service Center Meeting. It was the second time in TYR's 15 years as a Carrier Transicold service center that it won the award.

"TYR looks beyond their established markets to seek out new opportunities," said Hai Kuan Lee, APO regional service manager, Carrier Transicold. "They expand their service offerings and grow in line with their customers' needs, while also making the effort to provide extraordinary service. Whether helping customers after hours or on holidays, or presenting solutions to apparently impossible situations, TYR's staff always goes above and beyond to ensure that their customers are happy."

TYR's new 1,000-sq. meter operation, located in the Tianjin Free Trade Zone, is an example of how it invests in its business. "TYR keeps their facilities up to date, their parts supply wellstocked and their staff trained on the latest technologies," Lee continued.

At the APO Service Center meeting, additional recognition went to eight other service centers in four categories: Coolstar Co. Ltd. of Busan, Korea, and Ming Fung Reefer Container Service Co. Ltd. of Hong Kong, both for customer satisfaction; Dolphin Marine Enterprises Pvt. Ltd. of Mumbai, India, and Eastern (1961) Company Pte. Ltd., Singapore, both for replacement components; IRS Eastern Inc., Davao, Philippines, and Qingdao Xin Sanly Reefer Container Technical Co. Ltd., Qingdao, China, both for employee development. Recognition for most improved service center went to Shenzhen Greating Fortune Automatization Technology Co. Ltd., Shenzhen, China, and Reefertec Pte. Ltd. of Singapore.

The 2010 Service Center Meeting was a two-day event held in Hanoi and attended by representatives of 39 service centers.



Ruan Jian Ting (left), deputy general manager of TYR, receives the APO Top Performer award from Carrier Transicold's Chiou Fun Sin, vice president of Global Container Refrigeration.

Representatives from Carrier's APO service center network gather during the 2010 meeting and recognition event in Hanoi, Vietnam.



Measuring the Impact Of Sustainable Choices

How much of a difference does it make when you choose environmentally sustainable solutions from Carrier Transicold? Tons.

In fact, *millions of tons*, when you consider the curtailing of greenhouse gas emissions related to energy production.

To prove the point, Carrier Corp. recently launched a Webbased $CO_2NSERVATION$ Meter, which calculates greenhouse gas emissions avoided as a result of the application of highefficiency Carrier air conditioning, heating and refrigeration systems by customers around the world since 2000.

According to the CO₂NSERVATION Meter, more than 70 million metric tons of carbon dioxide equivalent (CO₂e) greenhouse gas emissions have already been saved thanks to customers using energy-efficient Carrier products, such as the PrimeLINE[®] container refrigeration unit.

The CO₂NSERVATION Meter continuously updates on Carrier's new sustainability "microsite," demonstrating how efficient technologies lead to lower energy demand and associated emissions.

"Energy efficiency is really a two-part proposition in our business," said Geraud Darnis, president of Carrier Corp., explaining that Carrier invests in technologies that advance the efficiency of products, and customers then choose to invest in those products to secure the efficiency benefits for their operations.

"The Carrier CO₂NSERVATION Meter demonstrates the power of that choice," Darnis said.

In addition to showing metric tons of CO_2e saved, the model indicates equivalents in terms of passenger vehicles removed from highways (approximately 14 million cars at the time of printing) and annual household electricity use (enough energy for approximately 9 million homes). The numbers grow with each passing second.

"Carrier's CO₂NSERVATION Meter is a powerful demonstration that technologies exist today to significantly reduce the energy consumption of heating, air conditioning and refrigeration systems," said John Mandyck, Carrier vice president for Sustainability & Environmental Strategies.

TIAX LLC, an independent, third-party technology company operating laboratories with over 100 scientists, engineers and industry experts, validated the reductions presented in the $CO_2NSERVATION$ Meter.

Carrier's CO₂NSERVATION Meter can be found at **www.carrier.com/green**.







Electronics Components, No Waiting



No one likes to wait – especially when it comes to critical parts needed for equipment repairs.

That's why Carrier's Performance Parts Group has launched a new program in 2011 to assure *immediate availability* of the most in-demand electronics components.

"We've always excelled at assuring fast availability of quality replacement parts, but with specialized electronic components, it could sometimes take several days to fill an order," said Jeff Neuss, business development manager for the Performance Parts Group. "We've taken a hard look at what we need for fast, onthe-spot turn-around and, based on usage patterns and demand, we have increased our levels of 'buffer stock' at parts depots accordingly.

"Now, for example, if a customer needs to return a controller to our Brazil location, we'll have a one-for-one replacement right there."

Keeping the global container fleet up and running is a serious responsibility, which is why Carrier supports the world's largest container refrigeration service center network – nearly 420 locations strong – with 13 strategically located parts depots. Carrier backs them with electronics components from a trio of world-class electronics repair and rebuild facilities located in Rotterdam, The Netherlands, Titusville, Fla., U.S.A., and Tianjin, China.

Carrier's electronics repair and rebuild operations offer the highest standard of diagnostic and repair services for complex refrigeration unit controls. Said Neuss, "These facilities are 'head and shoulders' above third-party repair facilities, because of the comprehensive diagnostics that are run on each controller component by the best-trained technicians in the industry, using equipment that is exclusive to Carrier."

According to Neuss, the faster electronics availability supports a trend in which customers are utilizing their equipment longer and therefore need a quicker turn-around, keeping their units in top operating condition. Many are taking advantage of Carrier's top-quality remanufactured circuit boards as a lower-priced alternative to buying new.

Carrier also supports earlier controllers that are no longer manufactured, such as Carrier's original MicroLink (ML1) and the ML2. Rather than forcing customers to upgrade to a newer model, Carrier can provide remanufactured units that are as good as the originals, with warranties honored worldwide through any Carrier service center.

Carrier electronics support goes beyond the Carrier models, supporting competitive brands, as well.

As shipping lines and container leasing companies know, when it comes to container refrigeration systems, Carrier Transicold's support doesn't end with the sale. It's really just the beginning.

The 2011 Container Electronics Repair Service catalog lists replacement components for more than 800 items. The 52-page catalog is available for download from www.performanceparts.carrier.com.



Finding Performance Parts Now Easier Than Ever

Anyone with a computer will discover that an expanded universe of Carrier Transicold Performance Parts is now just a few key-clicks away, thanks to a new dedicated Web site.

The Performance Parts Group's new Web home has an easyto-remember address, **www.performanceparts.carrier.com**, that serves as a launch point for specific markets. Choose the link for Container Parts, and you are instantly transported to a page with quick links to:

- Genuine Carrier Performance Parts for containers, including ship kits,
- Select LineTM series parts,
- Compressors,
- Consumables,
- Accessories,
- Tools, and more.

Photos provide visual cues to make the site intuitive to navigate. Users can dig deep to find a wealth of resources, much of which was not previously available on the Web, according to Shari O'Shea, Container Products sales and marketing manager for Carrier Transicold's Performance Parts Group who oversaw the new site's development.

Other links within the site provide information about Carrier's world-class electronics repair program and connect to Carrier's

web-based Service Center Locator tool. Channel partners, such as authorized Carrier Transicold Service Centers and customers with a Web ID from Carrier, can use the site to access TransCentral and PartsNet, a secure site that can be used to order parts. Ouick links

along the left column

of each page offer supporting material, including a literature library with downloadable product brochures. A "Knowledge Center," with general information about refrigerants and environmental subjects, is also included.

With so much information at hand, you would be correct in saying that *the whole site is much more than simply the sum of Performance Parts!*

Wherever You Go, There We Are



Carrier's solid commitment to customer care is demonstrated by the presence of authorized service centers in every major and developing port, collectively supported by 13 global parts depots as shown here.

AMERICAS

Oakland, California Syracuse, New York Panama Free Trade Zone Santos, Brazil San Antonio, Chile

EUROPE/AFRICA

Rotterdam, The Netherlands Cape Town, South Africa

ASIA/PACIFIC

Hong Kong Yokohama, Japan Yangsan City, South Korea Singapore Sydney, Australia Auckland, New Zealand

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Account Manager

Johan van der Kruk has been appointed account manager for Carrier Transicold Container Products, based in Hamburg. In his new role, he is responsible for growing Container sales and sales support activities in Germany, the Middle East and the Mediterranean region.

Van der Kruk brings more than 25 years

of container refrigeration service and business experience to his new assignment, having served the past four years as the global service manager for the Container Products Group, and prior to that in a variety of capacities with Smith-Holland.

Johan van der Kruk

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Field Service Manager

Jackson Yang Chia Hsun recently joined the Container Products Group's Asia-Pacific Operations as a field service manager with responsibilities for coordinating and supervising service activities for customers in Taiwan, Hong Kong and the Philippines. He brings more than 10 years of global container refrigeration management and

business experience to this position. Prior to joining Carrier, he held positions of increasing responsibility with Evergreen Marine Corporation, serving most recently as Latin America representative in Panama where he had technical and marketing responsibilities for refrigerated container and generator set businesses and also provided technical training.

Jackson Yang Chia Hsun

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NaturaLINE[™] Technology Featured at Upcoming Events



Cold chain professionals interested in some of the latest sustainable technology advances from Carrier Transicold will have several opportunities to learn from

the experts at upcoming conferences this summer.

A case study on the development of Carrier's breakthrough natural refrigerant technology, NaturaLINETM, is on the agenda of the Reefer and Cold Chain Logistics Conference, scheduled for June 1-2, in Barcelona, Spain. This session, "Upgrading to Green Technology," will be presented by representatives from Carrier Transicold and shipping line Hapag-Lloyd, who together deployed the world's first refrigerated container test units using the natural refrigerant CO₂.

Also at the conference, which is produced by Informa Maritime Events, a Carrier Transicold representative will participate in a panel discussion entitled, "Solutions for Environmental Challenges Facing the Cold Chain."

NaturaLINE technology will also be the focus of a presentation at the International Institute of Refrigeration's 23rd International Congress of Refrigeration (ICR), Aug. 21-26, in Prague, Czech Republic.



"Efficiency, Evolution and Sustainability in Container Refrigeration Applications" is the topic of a Carrier



Transicold paper to be presented during the quadrennial event. Cold chain and logistics managers also

had a chance to familiarize themselves with Carrier's container offering during January's IOPC Cold Chain Conference held in Rotterdam, The Netherlands. Paul den Houdijker, managing director, EMEA for Carrier's Container Products Group, conducted

Paul den Houdijker

a workshop at Carrier's Smith-Holland service depot on the benefits and integrity of container shipping for pharmaceuticals.

ContainerLINE

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