## **DECEMBER 2011**



# ContainerLINE



## Consider a Toast to Natural Refrigerants



2

Champagne and celebration go hand-inhand, whether the occasion is New Year's Eve, a wedding gathering, or even a ship christening. The introduction of the NaturaLINE<sup>TM</sup> container refrigeration unit design gives another reason to consider a glass of "bubbly."

As we first announced at the Intermodal Europe 2010 Show, with NaturaLINE technology, carbon dioxide, the very stuff that puts the sparkle in Champagne and sparkling wines, can now be used as a refrigerant in systems to cool cases of wine, among other temperature-sensitive goods shipped via ocean containers to consumers around the world.

## NaturaLINE

Carrier Transicold's NaturaLINE development is a

major milestone in the "greening" of container shipping through innovation in refrigeration technology. NaturaLINE is the world's first natural-refrigerant-based container refrigeration system. Its CO<sub>2</sub> refrigerant has a global warming potential (GWP) of only one – that's 1,300 times less than the GWP of the closest synthetic refrigerant currently used by today's refrigerated container systems. In a time of increasing worldwide concerns about the effect of greenhouse gases on Earth's biosphere, that's significant.

Like Carrier's popular PrimeLINE<sup>®</sup> unit, the NaturaLINE design maximizes capacity with best-in-class energy efficiency and robust construction that delivers high reliability for demanding container applications. With its

natural refrigerant, it achieves this performance in the most sustainable way. That should make NaturaLINE a "natural choice" for many fleets – one worth popping a few Champagne corks to celebrate.





## Kartik Kumar

Director of Marketing and Strategic Planning Global Container Refrigeration

## NaturaLI

The wraps came off the world's first and only naturalrefrigerant-based container refrigeration system at Intermodal Europe 2011 in Hamburg, as the new NaturaLINE<sup>™</sup> product design made its debut, exactly one year after Carrier Transicold announced the technology development.

"Advancing Carrier's natural leadership in environmental technologies for the marine container refrigeration market, the NaturaLINE design provides the global shipping industry with the most environmentally sound alternative for refrigerated transport," said David Appel, president, Carrier Transicold. "Carbon dioxide has a global warming potential of only one, and when compared to today's container refrigeration units, NaturaLINE stands apart as the *only* one to offer a natural refrigerant-based solution."

Incorporating breakthrough technologies, the NaturaLINE unit has been engineered to deliver efficiencies currently only achieved by Carrier's best-in-class performer, the popular PrimeLINE<sup>®</sup> unit. Both units significantly reduce on-board power generation requirements, helping shipping lines save fuel used in generation of electricity. This, in turn, helps hold down operating costs and reduce emissions related to power generation.

"NaturaLINE demonstrates how technological innovation can reduce the impact on climate change, continuing Carrier's long-standing commitment of providing sustainable solutions," Appel said.

Through the use of the natural refrigerant CO<sub>2</sub>, the NaturaLINE design will improve upon the PrimeLINE unit's ability to reduce carbon emissions 28 percent compared to previous units.

#### The Advantages of One

The natural refrigerant CO<sub>2</sub>, also known as R-744, is non-ozone depleting. Its GWP of one compares very favorably to conventional container system refrigerants R-134a and R-404A, which have GWPs of 1,300 and 3,260, respectively. The GWP of CO<sub>2</sub> is also lower than other natural refrigerants, such as propane and ammonia. So even in the event of a leak, the use of CO<sub>2</sub> adds no new environmental risk.

The introduction of natural refrigerant technology comes at a time when shipping lines are under increasing pressure to reduce their carbon footprint. Even though HFC refrigerants are considered to be minor contributors to global warming, their use continues to draw the focus of governments and the environmental community because of their higher GWP.

While presently there are no HFC bans for the shipping industry, the F-gas regulation in Europe has phased out automotive air conditioning systems using refrigerants with GWP ratings greater than 150 in new cars, and incentives are being offered in several EU ports for ships that produce low emissions and report their energy efficiency.

Although transport refrigeration (marine, truck and trailer, vans) is not presently covered by the European Union F-Gas

# NE<sup>m</sup>isThe ONE

Carrier

NaturaLINE

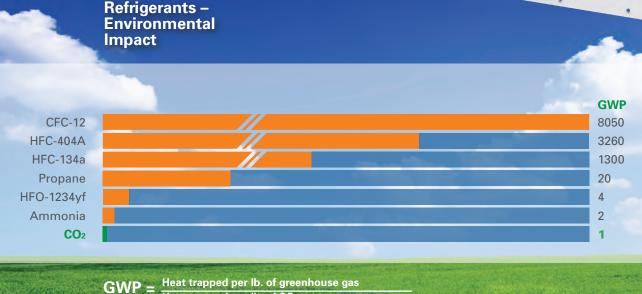
NaturaLINE technology shines in shipping innovation awards. Story on p. 12

Regulation, developments point to a potential inclusion in upcoming new F-Gas regulations. Carrier is committed to offering solutions to our shipping customers, even before these potential regulations take effect.

## **One-Upping**

In developing the NaturaLINE system for best-in-class environmental performance, engineers drew from Carrier's considerable experience with CO<sub>2</sub> in other applications, such as the CO<sub>2</sub>OLtec<sup>TM</sup> system used in retail refrigeration applications throughout northern Europe. With nearly 300 installations at press time, CO<sub>2</sub>OLtec systems continue to grow in popularity while reducing the impact from potential greenhouse gas emissions.

(continued on next page)



Heat trapped per lb. of greenhouse gas Heat trapped per lb. of CO<sub>2</sub>

Source: IPCC SAR WG I, 2010

## Innovation Key NaturaLINE

## THE NATURAL ONE

For container shipping, CO<sub>2</sub> is the only refrigerant that meets all of the following criteria:

- GWP of 1;
- Zero ozone depletion potential (ODP);
- Excellent heat transfer / heat reclaim properties;
- Non-flammable;
- Cost effective, available worldwide and requires no special disposal;
- Protected against phase-outs, taxes, and European F-gas regulations.

## NaturaLINE<sup>™</sup> is The One

(continued from page 3)

As a result of Carrier's multi-year development initiative, the NaturaLINE design includes a number of "firsts" for container refrigeration applications, some of which are patented. Among them are:

- A purpose-built, multi-stage compressor with variable-speed drive;
- A new gas cooler in place of the traditional condenser;
- A flash tank;
- Multi-speed fans; and,
- An advanced software control system.

All work together as one to efficiently optimize fan speeds and compressor capacity to match cooling loads and temperature control.

Although natural refrigerant technology differs distinctly from Carrier's other container refrigeration systems, one point of commonality is the Micro-Link<sup>®</sup> 3 Control, which assures that NaturaLINE units will be as familiar to operate as any other Carrier container refrigeration unit.

Serviceability will also be very similar to standard practices on today's refrigeration units, and will be supported by Carrier's complete service training program and global service center network. The way that technicians interact with, troubleshoot and repair NaturaLINE units will be very similar to how it is done with today's units.

At the Intermodal Europe 2011 event, Carrier executives said that NaturaLINE units have completed extensive lifetesting and are readying for sea trials, following successful trans-critical demonstrations with Hapag-Lloyd in 2010 and 2008. Although it bears some resemblance to other refrigeration units in the Carrier Transicold family, closer inspection of the NaturaLINE<sup>™</sup> design reveals some critical distinctions or, in deference to our container refrigeration engineers, we'll call them "transcritical" distinctions.

"Transcritical refers to a refrigeration cycle that is unique to CO<sub>2</sub> compared to conventional refrigerants," explained Program Manager Mike Griffin, who led the engineering and development of NaturaLINE technology.

Addressing the transcritical cycle and the special thermodynamic properties of CO<sub>2</sub> necessitated the development of an innovative refrigerant management system, including a new purpose-built multi-stage compressor, a "gas cooler" with a wrap-around coil design and a flash tank.

In spite of the differences, much of the NaturaLINE design remains the same as other Carrier units. The basic frame, the evaporator and evaporator fans, and the controller and control box are virtually identical to existing Carrier models. The control interface is the same, although there will be new alarm and function codes. Also, serviceability will be similar to existing Carrier products, and will be supported by a new comprehensive training program offered by Carrier.

NaturaLINE technology achieves goals for best-inclass efficiency, performance and serviceability, all within a compact design envelope. The adjacent illustration shows some of the new core components that distinguish a NaturaLINE refrigeration unit from anything that has come before.

## **Multi-Stage Compressor**

The NaturaLINE design makes use of an exclusive new multi-stage compressor that maximizes capacity and minimizes power consumption. "Purpose built" for the NaturaLINE application, the patented reciprocating compressor was developed by Carrier's world-class Carlyle Compressor design center.

New to container refrigeration are the NaturaLINE system's two stages of compression, which improve the overall efficiency of the unit.

The compressor also features a unique cylinder unloading capability. If the compressor needs to shed capacity for light-load conditions, it can save energy by turning off one of its two cylinders, similar to how certain automobiles do to save fuel.

## Variable-Speed Drive

A first for a Carrier container refrigeration unit, the electric motor that powers the compressor now runs at variable speeds. A custom-designed variable-speed drive electronically adjusts the compressor's speed, to provide the precise amount of cooling capacity to meet demand.

## to **™ Technology**

This saves considerable energy compared to conventional units in which a compressor has only one speed – maximum – and refrigeration capacity is controlled via mechanical means.

#### **Gas Cooler**

NaturaLINE technology replaces the condenser assembly found in conventional refrigeration units with a new heat exchanger called the gas cooler. The gas cooler's coil wraps around its fan, maximizing heat-transfer surface area for greater efficiency in a design that is both compact and lightweight.

The gas cooler makes the overall refrigeration system more versatile in responding to CO<sub>2</sub>'s thermodynamic properties. It's really two heat exchangers in one to allow gas cooling after each compression stage. This results in better unit efficiencies.

## Flash Tank

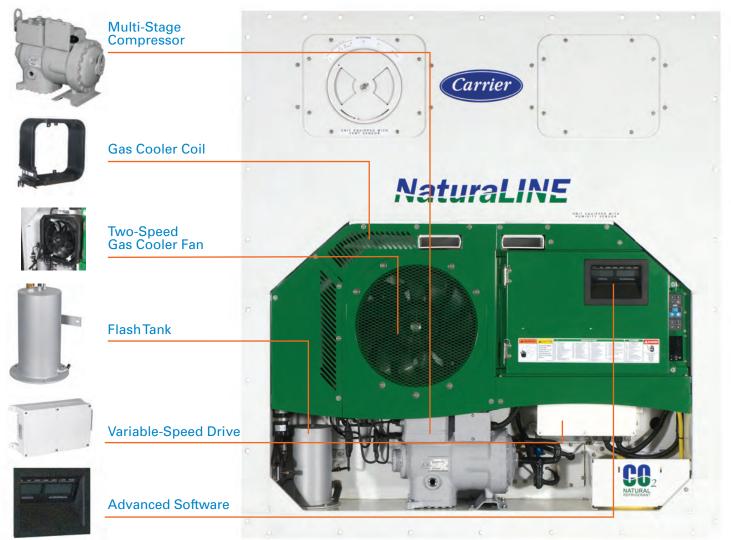
An entirely new component in a container refrigeration system is the flash tank, which manages the flow and phase change of the refrigerant after leaving the gas cooler. For efficient cooling performance, the exclusive Carrier design enables final separation of CO<sub>2</sub> from its gas phase to the liquid state before entering the evaporator.

#### **Two-Speed Fans**

The NaturaLINE unit's evaporator and gas cooler use two-speed fans, offering greater versatility and energy-saving performance. The evaporator fans are the same as the ones used on the PrimeLINE<sup>®</sup> unit, and other Carrier models. The new gas cooler fan has an aerospace-inspired design that is larger than the traditional condenser fan, with blades tuned to provide greater airflow and efficiency.

## **Advanced Operating Software**

The operating software has been reengineered to manage the unique NaturaLINE mechanical system while still providing an easy to use control interface that works virtually the same as every other contemporary Carrier container refrigeration unit.



## PrimeLINE® a Perfect Fit for Arkas Environmental and Shipping Needs



One of Arkas' container vessels passes through the Bosphorus strait, connecting the Black Sea and the Sea of Marmara.

An unwavering commitment to the environment led Turkish shipping line Arkas Shipping and Transport S.A. to acquire 1,800 40-foot containers equipped with the Carrier Transicold's PrimeLINE<sup>®</sup> refrigeration system, which leads the industry in energy efficiency.

A business unit of Arkas Holding Company, Arkas Shipping and Transport's environmental commitment is so strong that it would consider nothing less than the PrimeLINE unit with its recent acquisition, which doubled the size of its refrigerated container fleet, according to Friksos S. Rothman, assistant manager – Reefer Container Technical Services, Arkas Holding's Ardep Customs and Warehousing S.A.

"Arkas contributes to the protection of the environment by making well-directed choices. From that perspective, Carrier's PrimeLINE was our only choice – a better-performing unit that results in lower emissions related to shipboard power generation," Rothman said.

Not only was the PrimeLINE unit well suited to Arkas environmentally, but the unit's exceptional efficiency – thanks in part to its efficient digital scroll compressor – also enables Arkas to fit more reefer containers onto fleet vessels and in terminals without requiring infrastructure upgrades, according to Rothman.

"We are pleased that Arkas has been able to further enhance its environmental profile through the acquisition of these PrimeLINE units, which are expected to save enough energy over their operating lifetime to eliminate more than 62,000 tons of carbon emissions relative to industry average," said David Appel, president, Carrier Transicold. "That's equivalent to removing nearly 900 cars from the road over the same period."

#### **Performance and Commitment**

Encompassing 52 companies and over 5,645 employees, Arkas Holding, based in Izmir, Turkey, offers a wide range of services from land, air and sea, including international container shipping and port operations. Arkas today has 33 offices in 15 countries. Arkas Shipping and Transport constitutes the core of the group of businesses, providing transport services in the Black Sea, Mediterranean and beyond. Its Arkas Line unit offers regular container shipping between ports in the Black Sea and the Mediterranean with a fleet of 27 container vessels. Arkas strives to exceed shippers' expectations from the vantage of time, safety and cost, renewing itself in response to ever-changing conditions.

While the environmental and operational benefits of reduced power consumption were the primary reasons behind Arkas' selection, the PrimeLINE unit's exceptional pulldown and ability to dehumidify down to 50 percent were key decision drivers, Rothman said.

The PrimeLINE unit offers best-in-class pulldown among all container refrigeration units, as well as best deep-frozen capability among refrigeration units using non-ozone depleting R-134a, the refrigerant most widely used by the container industry. No other container refrigeration unit provides dehumidification capability lower than the PrimeLINE unit, and none can achieve 50 percent relative humidity as efficiently.

As Carrier's Appel noted, "The PrimeLINE unit represents a continuation of Carrier's decades-long commitment to incorporating sustainability into its product portfolio, giving customers such as Arkas opportunities to increase quality while lowering carbon emissions and operating costs."

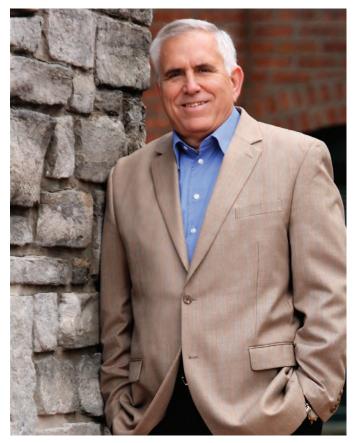


## The Right Parts In All the Right Places

At a time when the total global refrigerated container fleet is estimated to be about a million units and the total number of dry and reefer containers is about 18 times that, a mere 420 containers may seem like a drop in the ocean. But when those 40-foot containers are filled with replacement parts, electronic components, consumables and refrigeration accessories from Carrier, they actually serve as a vital link in the global cold chain.

The 420 containers represent the annual shipments dispatched by Carrier's Performance Parts Group from Syracuse, N.Y., Rotterdam and Singapore to bolster inventories of Carrier's other strategically located parts depots throughout the world, which in turn support Carrierauthorized service centers and shipping line customers.

Carrier maintains thousands of active container part numbers supporting various generations of ThinLINE<sup>®</sup>, EliteLINE<sup>®</sup> and PrimeLINE<sup>®</sup> units, PowerLINE<sup>®</sup> generator sets, and also common replacement components for competitive equipment. Replacement parts are available in both the high-tier Performance Parts<sup>™</sup> line and the Select Line<sup>™</sup> tier, both of which are manufactured to originalequipment specifications, and supported by Carrier's global warranty program, but vary in terms of warranty length and cost.



"We're here to support our customers throughout the life of their Carrier investment," says Ralph Bott, general manager, Performance Parts Group.

Additionally, the Performance Parts Group is now making preparations so that a ready supply of parts will be available to support the new NaturaLINE<sup>™</sup> unit.

"The depth of our product offerings is just one of the key differences between Carrier and our competition," said Ralph Bott, general manager of Carrier's Performance Parts Group.

"Knowing what to stock where and in what quantities is fundamental," he said. "A Carrier advantage is that we have our depots in the right places and the systems in place to assure that they are always well-stocked.

"Built through a nearly four-decades-long investment, our global network of parts depots is as extensive as it is because we've listened to our customers," Bott continued. "We understood where they needed us to be, and in supporting their businesses, we've grown along with them."

The scale and scope of the network itself will remain dynamic, according to Bott. "Based on customer feedback we are always looking for opportunities to support them wherever needed with quality parts and accessories, and unmatched global warranty support.

"Our commitment doesn't end with the sale. We're here to support our customers throughout the life of their Carrier investment."

## **PERFORMANCE PARTS DEPOTS 2011**

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

ASIA/PACIFIC Hong Kong Yokohama, Japan Yangsan City, South Korea Singapore Sydney, Australia Auckland, New Zealand EUROPE/AFRICA Rotterdam, The Netherlands Cape Town, South Africa



New Zealand's Specialised Refrigeration Services Ltd. (SRS) was named Carrier Transicold's 2011 Top Performer for the Oceania region during the Container Products Group regional service center meeting in Queenstown, New Zealand.

Established 15 years ago, SRS is part of the Specialised Container Services Group of Pinnacle Corp. Ltd., and has operations in eight New Zealand port cities, including its headquarters in Wellington.

"SRS excelled in all categories considered for the Top Performer program," said Paul Gray, Carrier Transicold field service manager, Oceania. "As part of their exceptional initiatives, they have in-house video conferencing to communicate to their entire work force in all locations. The owners also take a hands-on approach to shaping their reefer work force on a day-to-day basis to meet their customers' needs."

This is the second Top Performer award for SRS, including recognition by Carrier four times since 2001 for its training and employee development programs.

"SRS appreciates the recognition and support provided by Carrier since our company commenced trading," said Grant Tregurtha, SRS managing director. "The areas of expertise recognized over the years reinforce our commitment to our industry and to Carrier, which remains at the forefront of reefer machinery design and manufacture globally."

At the Oceania Service Center meeting, accolades also went to Sydney, Australia's Reefer Management Services Pty. Ltd. and JPC Reefer Services for customer satisfaction and replacement components, respectively. Sturrock & Greenwood Ltd. of Nelson, New Zealand, received special recognition for employee development.

The 2011 Service Center Meeting was a two-day event attended by 40 representatives from 10 service centers as well as Carrier representatives from the Asia-Pacific Operations region, Oceania and Performance Parts Group operations in Australia and New Zealand. Presentations included a review of the current container refrigeration market and updates about service, warranties, field programs, replacement components and container refrigeration technologies.



Gathered for the Oceania Top Performer presentation are, left to right, Derek Walden of SRS, Carrier Transicold's Paul Gray, Grant Tregurtha of SRS, Hai Kuan Lee of Carrier Transicold Asia-Pacific Operations and SRS's Chrystal Welham, Lindsay Cresswell, Karen Preston and Justin Williams.



With New Zealand's Remarkables mountain range in the background, representatives from Carrier and the Oceania service center network gather during the 2011 meeting.

## Turn to the Expert Dennis Hogendoorn



Dennis Hogendoorn already had a decade of accounting and finance behind him when he joined Carrier Transicold's Netherlands operation as a finance manager in 2006. Perhaps it was his "spirit of adventure" that lured him to the operations side of the business two years later when he became assistant branch manager in Rotterdam.

That spirit runs deep for Hogendoorn.

An outdoor recreation and fitness enthusiast who enjoys cycling and snowboarding, Hogendoorn's venturesome inclinations also led him to the peak of Mount Kilimanjaro in Tanzania in 2008. He followed that in 2009 living temporarily on a tropical-jungle island in Malaysia as a participant on "Expeditie Robinson," the Dutch version of the American reality television show "Survivor." Selected from a field of 5,000 applicants, he was a top-five finalist out of 21 competitors.

"I am always looking for new challenges," he said. So to step out of finance and into a more commercial and operational role "seemed like an excellent opportunity."

Earlier this year, he started wearing two hats as both the Rotterdam branch manager and as the Performance Parts Group's regional manager for Europe, Middle East and Africa (EMEA). That, once again, led him on an adventure, but this time the destination was customers.

"My first goal was introducing myself to as many customers as possible and getting to know them," he said.

"I travelled to customer locations in the Middle East and

also within Europe to understand their businesses. We try to keep the communication very open to be able to anticipate and respond to customer needs."

Back in Rotterdam, Hogendoorn today applies financial skills honed during prior positions at PricewaterhouseCoopers and a business sense developed at Exel Group Holdings in the Netherlands to achieve results for Carrier. "In any function, you can benefit a lot from a finance background," he said.

In addition to focusing on meeting the needs of Carrier's customers in the region, Hogendoorn is responsible for the financial, operational, logistical and commercial aspects of the Performance Parts business in EMEA, and the electronics repair and rebuild operation based in Rotterdam.

As to the success the Rotterdam operation has enjoyed this year, Hogendoorn credits improved efficiencies, programs such as the PartsNet web-based ordering system and an exceptional team.

"We have a good group of people with the right mentality," he said. "Customer focus is important. I am very proud of them and their accomplishments.

"My biggest challenge at Carrier is, of course, realizing the goals that are set for the Performance Parts Group EMEA business and looking for opportunities to expand the business. Achieving this in an environment in which our customers are happy and all employees feel valued, honored and challenged is very important."

## Natural Refrigerants Captivate Industry Groups



Kartik Kumar at Cool Logistics



Natural refrigerant technology for the marine shipping industry has been a topic of considerable interest this year among both cold chain and environmental audiences, with Carrier representatives speaking at a number of industry events.

Notably out front at several conferences was Kartik Kumar, Carrier Director of Marketing and Strategic Planning, Global Container Refrigeration, who spoke about the development of NaturaLINE technology on panels at the Cold Chain Logistics Conference and CARBON EXPO, both in Barcelona, Spain, and also at Cool Logistics Global 2011 in Antwerp, Belgium.

Discussing natural refrigerant technology in the context of European environmental standards development, Mike Griffin, Carrier Transicold program manager, addressed the International Congress of Refrigeration in Prague, Czech Republic and the ATMOsphere Europe conference in Brussels, Belgium, an event itself dedicated to the promulgation of policies related to adoption and use of natural refrigerants.

"With the increased focus on environmental sustainability, the idea of natural refrigerants has resonated well with the shipping industry," said Kumar. "Audiences recognize this as a step in the right direction and have told us that natural refrigerants represent the final step in the transition to the most environmentally sound refrigerant.

"While we are encouraged by the response, we consider it a privilege and are proud to be in a position to help define the industry direction," Kumar said. "We are truly excited about the promise this technology holds for the container refrigeration industry."

Griffin's address at the ATMOsphere Conference clearly stated Carrier's position on natural refrigerants, calling for the inclusion of transport refrigeration in the European F-Gas Regulation.

"Carrier has the right refrigerant solution for every application, but not every application will use the same refrigerant," Griffin said. "We have an ongoing commitment to apply refrigeration alternatives that minimize environmental impact while serving customer needs.

"Although transport refrigeration is not currently covered by the current EU F-Gas Regulation, Carrier supports its inclusion in a revised F-Gas Regulation that would advocate the use of natural refrigerants by 2025," said Griffin. "Technological progress has been made with natural refrigerant solutions that can be expected to meet ambitious F-Gas goals by 2025 for transport refrigeration. In this context we believe that any potential intermediate, non-natural refrigerant solution will be damaging to the environment, costly to develop and unnecessary."





## Remembering Chris McHugh



This issue of ContainerLINE is dedicated to the memory of our friend and colleague, Global Service Manager Chris McHugh, who had a profound and positive impact on each of us, as well as our business, during his 23-year career with Carrier.

1965 - 2011

It is with sadness that we report the loss of an important member of the Carrier family, Global Service Manager Chris McHugh, who was well known by customers and fellow employees throughout the world. A husband, father of two daughters, and friend to many, he passed away on Sept. 5.

Chris served Carrier with dedication for his entire 23-year career, starting in the Container Service Engineering Group after receiving his electronics engineering degree from the State University of New York – Binghamton. Over the years he held a variety of responsibilities, ranging from engineering to

product management to customer service, and along the way also earned a masters degree in engineering management from Syracuse University.

After a stint with Carrier Electronics beginning in 2006, Chris returned in 2010 as regional service manager for the Americas, a position he held until his most recent promotion in June. He is fondly remembered by his colleagues at Carrier, especially for his leadership, sense of humor, love of sports, and devotion to his family.

## **Personnel** Updates



Regional Service Manager, Americas

Zvonko Asprovski has been named regional service manager for the Americas. In his new role, he will lead the

field service engineering team members in North, South and Latin America and will provide aftermarket support for customers and the service center network in the region.

Asprovski brings nearly 15 years of container refrigeration unit design, application and service experience to his position. He joined the Product Support Group in 1998 as a service engineer, taking on a key role in the development of Carrier's EliteLINE® scroll platform. He has also supported the Container Products Group's telephone hotline, which provides 24/7 technical and troubleshooting assistance for customers around the world. Most recently he participated on the container engineering design team developing NaturaLINE<sup>TM</sup> natural refrigerant technology.

#### Zvonko Asprovski

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David Smith has rejoined the Container Products Group as a program manager. His initial assignments include the Tier 4 engine tor sets, which is

**Program Manager** 

project for generator sets, which is an emissions enhancement related to U.S. Environmental Protection Agency requirements, and the development of new options for container refrigeration units.

Smith returns to Carrier from JADAK Technologies in Syracuse, N.Y., where he served as a business program manager since March 2010. His original experience with Carrier dates back to 1999, when he joined the Container Products Group as a senior engineer, later growing into product management responsibilities within the Commercial HVAC group.

#### **David Smith**

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**Technical Writer** Tim Kernan has joined Carrier Transicold as technical writer for container products and generator sets.

In his new position, he is responsible for creating parts and operations manuals and service guides for container refrigeration units and

generator sets, applying his extensive experience in the development of interactive technical documentation to enhance their functionality.

Previously, Kernan served as technical publications manager for BioSpherix Ltd. and as documentation and graphics editor for Lockheed Martin Training & Technical Services.

#### Tim Kernan

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## Welcome Aboard

## **NaturaLINE<sup>™</sup> Technology** Recognized by Shipping Industry

With more than 420 container refrigeration service centers worldwide in all major and developing ports, Carrier Transicold offers the most comprehensive sales and service network in the industry. The following locations recently joined our expanding global base.

#### **Dunkerque – France**

Progeco Dunkerque Contact: Stephane Szopiak dkq-stephane.szopiak@progeco.fr +33 (3) 28289595

#### **Montoir De Bretagne – France**

Progeco Montoir/Atlantique Conteneurs Contact: Yves Nicolas mrg.ynicolas@progeco.fr +33 (240) 450901

## Vado Ligure - Italy

Vado Container Services Contact: Manlio Ginocchio ginocchio.m@cosiarma.it +39 (010) 643471

#### **Rotterdam – The Netherlands** Seamark Reefer Service BV Contact: Jim Vodegel

jvodegel@srsbv.nl +31 (10) 4386369

#### Tauranga - New Zealand NZL Cool Contact: Vanessa Rogers vanessa.rogers@nzlgroup.co.nz +64 21582379

Saint Petersburg - Russia Aurora Logistics Ltd. Contact: Andrey Popovich popovich@avroraref.ru +7 (812) 3193444

## Montevideo – Uruguay

Montecon S.A. Contact: Juan Olascoaga Bulgarelli m-r@montecon.com.uy +598 229150404

Carrier Transicold's NaturaLINE<sup>TM</sup> technology was named a finalist in two prestigious shipping industry award events recently.

## Finalist Innovation Technology of the Year

It was judged "Highly Commended" for the category Innovation Technology of the Year in Containerisation International's 2011 Awards program. NaturaLINE technology

was also among six finalists for Innovation Award, New Products, in the IFW Awards competition.

No other container refrigeration manufacturer's technology was recognized as a finalist in either program.

"Carrier Transicold was Highly Commended by the judges, as the NaturaLINE CO2 solution was viewed as representing a tremendous breakthrough from the technological perspective, while allowing for the more sustainable movement of perishable products in an era when



companies' carbon footprints are becoming more important," said John Fossey, editorial director of Containerisation International.



"Innovation and environmental commitment are key business drivers at Carrier, so we are proud and honored to have been recognized for our NaturaLINE technology in these two

internationally recognized programs," said Kartik Kumar, Carrier Transicold Global Container Refrigeration's director of Marketing and Strategic Planning. "This recognition reaffirms our drive to develop technologies that can shape the future of the shipping industry by helping it achieve its environmental sustainability goals."

Winners of the IFW program, now in its 15th year, were to be announced after this issue of ContainerLINE went to press. The monthly trade magazine Containerisation International and media website IFW are both owned by Informa Plc.



Please send your comments and story ideas to: jon.shaw@carrier.utc.com ContainerLINE Carrier Transicold **Communications Department** P.O. Box 4805 Syracuse, New York 13221 U.S.A.

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Carrier Transicold helps improve transport and shipping temperature control with a complete line of equipment for refrigerated trucks, trailers and containers. Carrier Transicold is a unit of Carrier, the world's leader in high technology heating, air-conditioning and refrigeration solutions.

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