



Spring 2017 THE NEWSLETTER FROM DAIKIN REEFER



Welcome

From Katsuhiro Tetsuya, Director of Daikin Reefer Container Sales Division

elcome to the Spring 2017 edition of the Daikin Reefer newsletter. It's no secret that 2016 was an exceptionally difficult year for the container shipping and transport industry, with extreme financial pressures arising from a combination of low trade demand, vessel overcapacity and very low freight rates. Reefer container shipping was not immune and Daikin, like many other suppliers to the industry, also experienced a tough year.

Now we have entered 2017, the Chinese Year of Fire Rooster, which is said to be a 'year of resolve as well as achievements for all'. Outside of the Maritime world, we have seen many changes on a global scale in the past couple of months. With the rapid changes surrounding us, things may not go as planned, including the recovery of our industry. However, even if the tough time continues, Daikin promises to commit to supporting the industry with technologies and services to ensure best energy utilization, equipment uptime and cost of ownership, plus the chance to open up new market opportunities with innovative approaches such as Daikin Active CA.

Last year saw the merger of COSCO and China Shipping to form COSCO Shipping, a wide-ranging group with interests in container shipping and ports, shipbuilding, bulk shipping, energy transport, finance and trade services and more. At the heart of the company is the newly-named COSCO Shipping Lines. With a carrying capacity of 1.58m TEU, COSCO Shipping Lines is now the world's fourth largest

container carrier and has announced plans to expand its fleet to 2m TEU by the end of 2018. Daikin has supplied over 15,000 reefer machines to COSCO since 2010 and looks forward to continuing and strengthening our relationship with COSCO Shipping Lines as the company enters a new chapter. Read more on page 6.

Also in this edition you can learn about Daikin's relationship with Taiwanese carrier Interasia, a pioneer of containerization which this year celebrates 50 years serving intra-Asia trade. Today, the company provides services linking China, Hong Kong, Taiwan, India, Vietnam, Indonesia, The Philippines, Thailand, Myanmar and Korea, among other key Asian markets.

We also report on Sogeco International, a leader in leasing and sales of containers in Europe and beyond with special focus on refrigerated containers for domestic and maritime use. Regular readers of the Daikin newsletter will be aware of our evolving relationship with Dole and in this issue we are pleased to confirm that Dole selected the Daikin Zestia model for the third consecutive year in 2016, leading an additional 100 units.

Next generation environmental and energy-efficient solutions are important for everyone involved in supplying - and using - refrigeration and air conditioning technology. Daikin remains committed to "diversity in refrigeration choices" and in this edition we provide more information on Daikin's recent acquisition of Italian company Zanotti,



a cold chain specialist with experience of natural gas, refrigerant blends and other innovative approaches for a clean cold chain. Zanotti brings expertise in the food chain 'from farm to fork', extending and complementing Daikin's existing experience and product line in Europe and worldwide.

On page 8-9 we also invite you to meet some of the key people behind Daikin's global service network, with profiles of our dedicated and experienced regional service team members working in Asia, Europe and North and South America.

If you have a story to share, or a topic that you would like us to discuss in future editions, please do not hesitate to contact us. We look forward to meeting many of you in person at Intermodal South America in Sao Paolo this April, where Daikin as usual will exhibit. Come and see the Daikin team at booth 8-133.

Katsuhiro Tetsuya Director, Daikin Reefer

Daikin Technologies

CA update

Controlled Atmosphere technology supports growing global avocado trade

ne of the great success stories of controlled atmosphere (CA) reefer container technology is the avocado. Packed with high-quality protein, minerals, vitamins and healthy fats, avocados are actually a fruit - more precisely a singleseeded berry. This savoury, green 'super-food' is perhaps most famous as the base ingredient for guacamole, the Mexican dip that has found international favour, first and foremost in the USA, but also across Europe and more recently Asia, with the worldwide spread of Mexican cuisine.

Over the past decade, the global appetite for avocados has grown consistently, both as a healthy food and as an ingredient in hair and skin products. Mexico, where avocados

can be grown year-round, is by far the world's largest producer and supplier of avocados, currently responsible for 50% of global exports. Other established and emerging export regions include Argentina, Brazil, the US state of California, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Israel, Kenya, Morocco, New Zealand, Peru, South Africa and Spain.

CA reefer containers are playing a vital role in supporting world trade growth in avocados

The US and Canada have historically been the world's largest importers of avocados, but demand has also been growing fast across Europe in recent years. In the UK alone, the market is reported to be rising 30% year-on-year. Asian avocado imports are also on the increase, especially in China, which could be a key global market for the future.

CA reefer containers are playing a vital role in supporting world trade growth in avocados, enabling short and long distance transport by sea at a reduced cost compared to airfreight, and ensuring competitive logistics costs while maintaining produce quality. The latest sophisticated technology, such as Daikin Active CA, supports emerging consumer demand for 'ripe





An example of our latest successful work on avocados with our CA in Mexico

and ready to eat' avocados, which command a premium price on the shop shelf.

As reported in recent editions of our newsletter, Daikin Active CA provides industry-leading protection for a wide range of fresh commodities, slowing down the ripening process during transit to allow perishable products to be transported in better condition for longer periods of time and extend their shelf life. The Daikin system is built around vacuum pressure swing adsorption (VPSA), an active atmosphere separation technology that is able to create the optimal controlled atmosphere very quickly.

VPSA uses the mineral adsorbent zeolite to capture a large quantity

of nitrogen from the air and transfer it into the reefer container, allowing oxygen levels to be quickly reduced by dilution, without the need for additional gas to be added. The Daikin active system achieves the CA set point in half of the time of conventional passive CA, meaning that CA is now also viable for shorter voyages such as intra-Asia and other regional trades.

Daikin is pleased to offer its Active CA system for avocado transport, as well as the shipment of many other high-value, sensitive fruits and vegetables that benefit greatly from – or totally rely on – CA reefer container technology.

Customer focus

Dole orders for three consecutive years

or the third consecutive year, Dole has selected the Daikin Zestia model by leasing additional 100 units in 2016. Dole first placed an order for the Daikin Zestia units in 2014.

Dole has experienced high reliability in use of the Zestia model in the field and has confirmed good performance. By the end of October 2016, the Zestia units operating in their fleet made a total of 3,148 loaded voyages and have reported only a few warranty claims.

With this new order Dole will now operate a total of 375 Zestia units.

President Furuta from Daikin states, "This repeat order from such an important customer as Dole is the result of the reliability and cost performance of our Zestia unit and the dedication and support of our local team. Our commitment is to supply the most reliable units in the industry and to create close relationships with our customers, working together with them and providing support with their daily operations."



Dole will soon operate 375 Zestia units – testimony to the unit's reliability and Daikin's strong working relationship with Dole.



Customer focus

Sogeco International confirms partnership with Daikin



nitially founded in 1987 as a consulting firm serving the intermodal industry,
Sogeco International has since progressively expanded the scope of its business and is now a key reference in leasing and sales of containers in Europe and beyond.

Sogeco offers a wide range of units and the experience of its team in providing tailored solutions and global service at competitive prices has earned the company a reputation for quality, knowledge and value in the container sales and leasing market.

In the refrigerated transport market, Sogeco has expertise in box designs for use in the chemical, pharmaceutical, agricultural and food industries that includes features such as internal illumination, silent operation, alarm systems and easy access. Add to this the inhouse procurement and technical supervision at its reefer box manufacturers in China, it is easy to understand why many end users choose Sogeco. The company also runs a fleet of reefer containers for lease to shipping lines.

Sogeco has chosen Daikin LXE10E units to deliver its solutions to market. Fabio Artz says - "the reliability of the LXE10E unit ensures we are comfortable in recommending it to

Sogeco has chosen Daikin LXE10E units to deliver its solutions to market.

end users, whether for static storage or liner shipping transport usage. During 2016, as a result, Tarros Line, based in La Spezia joined as end user of LXE10E units.

In early 2017, Sogeco has placed additional orders with Daikin for various sizes/types of refrigerated units for domestic lease. Daikin welcomes the opportunity to expand its business by reaching new end users as a result of the recommendations made for its LXE10E units by the experienced and knowledgeable Sogeco International team.



Sogeco International recently recommended LXE10E units to Tarros Line in La Spezia.

Customer focus

COSCO

A world-leading shipping giant, Daikin is proud to have been partners with COSCO since 2010.

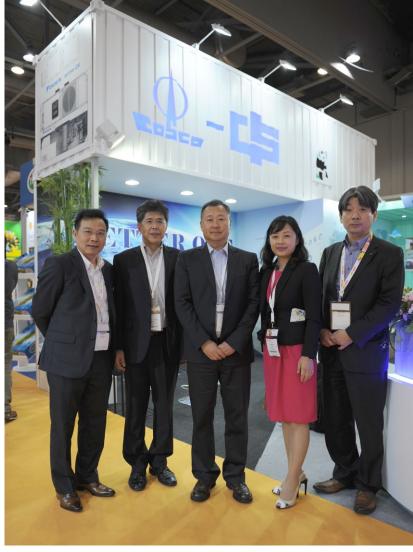
hinese shipping company giant
COSCO is ranked first and fourth
in the world for its vessel capacity
of 85.32 million DWT and container fleet
capacity of 1.58 million TEU respectively. The
company's 46 container terminals across the world
see a throughput of 90 million TEU – the world's
second highest.

With a self-owned dry bulk fleet of 365 vessels/33.52 million DWT, a tanker fleet of 120 vessels/17.85 million DWT, general cargo and a specialized cargo fleet of three

COSCO leads the world in terms of fleet capacity. At the Asia Fruit Logiistica event in Hong Kong in September 2016, COSCO Shipping Lines displayed Daikin units fitted with Active CA.

million DWT, COSCO leads the world in terms of fleet capacity. The company is committed to globalising the Chinese economy and building an industry- and world-leading business that provides integrated logistics and supply chain services.

Daikin and COSCO Shipping Lines are proud to have been partners since 2010 and today COSCO Shipping Lines uses more than 15,000 Daikin units in its fleet.



COSCO Shipping Lines representatives at the recent Asia Fruit Logistica show in Hong Kong. This key event was attended by over 11,000 visitor from 74 countries.

At the Asia Fruit Logistica event in Hong Kong in September 2016, COSCO Shipping Lines displayed Daikin units fitted with Active CA on its stand. With over 11,000 visitors from 74 countries attending this key event, there is every chance that Daikin's units were seen by high numbers of attendees.

Despite challenging market conditions, in 2016 COSCO achieved growth in its TEU transportation, reporting total transportation of approximately three million TEU in the period from January to October, a 16% increase over the same period in 2015.

The President of Daikin Reefer, Mr Shin Furuta, has expressed his thanks to COSCO for the successful long-term and strong partnership that the two companies have, and expects their close collaboration to continue well into the future. In turn, COSCO values Daikin's dedicated support extremely highly and hopes that Daikin will continue to play an important role in COSCO's future commercial success.



Customer focus

Interasia

Interasia

nterasia is celebrating 50 years of maintaining a dedicated network of container cargo services throughout Asia. Interasia (principal office in Taipei, Taiwan) was founded in 1967 in Tokyo under the name Nichinankaiun Co, with the aim of providing regular sea cargo services between Japan and Southeast Asia.

Interasia was at the forefront of the shipping industry's move towards containerization in the late 1960s and the company is proud to be one of the longest-operating container shipping carriers in the region.

With a commitment to maintaining consistency and dependability in its services, Interasia has also sought over the years to innovate and broaden its service network to include many other areas, including but not limited to China, Hong Kong, Taiwan, India, Vietnam, Indonesia, The Philippines, Thailand, Myanmar and Korea.

Last year, Interasia decided to lease 180 Daikin 40HC reefer container units via Florens

To support efforts to expand further into new routes in India, Interasia has once again recognized Daikin's high quality and world-leading technology with its decision last year to lease 180 Daikin 40HC reefer container units via Florens.

With no reported technical issues, Interasia values the smart temperature control and evident reliability of Daikin's technology. This year Interasia will open its local office in India and can count on Daikin to assist it in its important and challenging new business venture in the region.

"We have received positive reviews from our customers regarding the compressor stable function, its reliable quality and its neat design appearance. Providing such trustworthy services, Daikin is a good partner for those carriers that offer professional RF services," commented Sophia Lin, RF Section Manager of Interasia's Commercial Department.

Interasia recognizes that the journey to its 50th anniversary celebration would not have been possible without the close cooperation it has enjoyed with its customers, partners, vendors and colleagues past and present. Interasia thanks all of its business partners for their support and looks forward to continuing their working relationship for many years to come.



Interasia is celebrating 50 years of a dedicated network of container cargo services across Asia.

Resale market

Phillippines resale seminar

n November 16, 2016, Daikin hosted one of its popular Touch & Feel seminars in Manila, the capital city of the Philippines. Specifically targeted at the resale community, the seminar was attended by representatives of 14 companies active in the domestic after-sale market.

As usual, the seminar was a chance to introduce representatives to Daikin and its LXE reefer container technology, and to talk about key machine features as well as service support. Daikin's global resale promotion initiative covers dealer development, technical training seminars, and education on key sales

features of the unit including energy saving technology, fast pull down speed, reliability and low noise levels.

Attendees heard case studies of resale applications in China, Indonesia, USA and Thailand, as reported in past editions of our newsletter.



Daikin people

Meet some of our Regional Service Managers

Jin-Tarng Lin
Regional Service Manager Taiwan and Hong Kong

J-T Lin is based in Taipei with responsibility for customer service in Taiwan and Hong Kong. Before joining Daikin, he was a service manager for Mitsubishi Heavy Industries. "Daikin is a world leader in innovative technologies and great ongoing service," says J-T. "As part of the Daikin team, I am committed to the concept that providing excellent customer service is not something you can do once in a while. To know what customers are thinking and satisfy their needs are the key points in building good relationships and growing their profits."





Goh Choon Leng
Regional manager/Reefer Service for South-East Asia and Oceania

Go Choon Leng is based in Singapore as Regional Manager for South-East Asia and Oceana. "I moved from Malaysia to Singapore to work in the reefer industry 20 years ago and I've been with Daikin for about 14 years", he says. "Before moving to Singapore, I worked in the container service industry. Now I have the opportunity to work with the manufacturer directly and it continues to be a wonderful experience".

Richard Boshuijer Regional Service Manager for Africa, Middle East and Russia

Richard Boshuijer joined Daikin in 2005 and is now Regional Service Manager for the Middle East, Africa, Russia, UK and Italy. He has 21 years' experience and uses his extensive knowledge of reefer machinery to train service technicians on Daikin's LXE and ZeSTIA units. "I have daily contact with service dealers within my region for 24/7 support, visiting them regularly to keep their technicians updated, and check the performance of the machinery during daily operation," Richard explains. "If technical failures exceed Daikin's standards, we inform our QC team in Japan for further action. He adds. "Together with our sales managers, I also visit customers to perform 'Touch & Feel' sessions to familiarize customers with Daikin's reefer machinery."





Ma Wei (Mike) Regional Service Manager China

Mike Ma joined Daikin's After-Sale Service team for mainland China in 2008. He has a master's degree in refrigeration engineering and over 11 years' experience. Mike previously worked for GE Seaco as Regional Operation and M&R manager, covering mainland China, Hong Kong and Korea, and helped establish GE Seaco's domestic reefer business in China. He says: "After sale service is an extremely important element of reefer marketing. Both I and our service contractors in the area share our customers' sense of urgency and provide quality service!"

Alvaro D Quintana Regional Manager/Reefer Service for North America and Latin America

Alvaro Quintana has 31 years' experience in the container field, mainly with reefers. He joined Daikin in 2003, when the company sold its first units to Maersk Line, and previously worked as manager of Daikin's service dealer in Montevideo, Uruguay. Says Alvaro: "I like the dynamism of the job, which constantly changes with new developments and challenges. I also like the team work and the commitment Daikin has with customers, showing that we are ready to serve them 24/7."





Arnel Nunez Service engineer fo Latin America

Arnel Nuñez joined Daikin's After Sales department in Montevideo, Uruguay in September 2007. He previously worked for the local Maersk repair company for more than 6 years. For the last 3 years, Arnel was based in Montevideo port, supervising reefer operations including PTI, repairs, plugging onboard and reefer monitoring. At Daikin, his main responsibilities are to assist with service activities, including training seminars, administer warranties and provide technical assistance and back-up to service agents and customers within South and Central America.

Ronald van Andel Regional Service Manager for Europe

Ronald van Andel joined Daikin in December 2007 as a Regional Field Service Manager for the European region. He has already 30-years' experience in the reefer service industry, starting his career at Smith-Holland, one of the biggest European reefer service and repair company. He worked in the field for over 10 years repairing all types of units, rising to the rank of senior engineer and later he worked another 12 years at Smith Holland Service Center, the focal point between Customer, Supplier and Technicians and then moved to Daikin. Says Ronald: "Giving service to our customers and keeping them satisfied is my top priority."





Steven Fedor Regional manager/Reefer Service

Steven Fedor joined Daikin/Goodman (Americas) Inc in 2012. As an After-Sales Service Engineer, his role is to further strengthen Daikin's service network and technical support for customers in North America. Steven delivers technical training for service contracts and customers. He has over 12 years' technical experience with transportation refrigeration equipment.



Core technologies created in-house, focusing on the details.

Speedy, customer-oriented support from global locations.

Continuous improvement for optimal performance and efficiency.

Combined expertise in multiple fields to generate new solutions.

All ensured by the highest Daikin quality.





Events report

Intermodal Europe 2016





aikin was pleased to present and exhibit at Intermodal Europe, which took place at the Ahoy Rotterdam convention centre, Tuesday 15th to Thursday 17th November 2016.

The event comprised a free-to-attend exhibition and conference and attracted some of the intermodal industry's biggest names showcasing their latest products and services. Five thousand global participants attend the event every year, including key shippers, shipping lines, container

professionals and all those involved in the intermodal supply chain.

Daikin was delighted to launch a newly designed stand for the event, which was borne out of the concept, "Listen – create new value".

During the conference, Arjan Bezemer, General Manager EMEA at Daikin, talked to the delegation about Daikin's innovative technologies to increase efficiency, reduce waste and improve reliability.

Upcoming: Intermodal South America 2017



4-6 April 2017, Transamérica Expo Centre, São Paulo, Brazil

Daikin will exhibit at the 23rd annual Intermodal South America show. Reflecting the importance of the Latin markets to our business, this will be the 11th year that Daikin has had a stand at this leading event. Please come to visit us on booth 8-133. For more information, visit **intermodal.com.br/en/**

Upcoming: NPSA Annual Conference 2017



30 April-2 May 2017, Las Vegas, NV, USA

Daikin became a Member of the US National Portable Storage Association (NPSA) in 2014 as part of our growing focus on the after-sale market. Please stop by our booth at the NPSA Conference in Las Vegas, NV, from 30 April–2 May. For more information, see **www.npsa-us.org**

Upcoming: Intermodal Europe 2017



28-30 November 2017, RAI Amsterdam Convention Centre

Daikin will exhibit again at Intermodal Europe, which this year takes place at the RAI Amsterdam Convention Center from Tuesday 28 – Thursday 30 November. We are looking forward to seeing many of our customers and business partners at Daikin's stand. For further details, visit **www.intermodal-events.com**



We are tweeting daily about Daikin's activities and market news. Be sure to check us out at

twitter.com/DaikinReefer

Feel free to follow us, DM us or send us a tweet! We would love to hear from you! #DaikinReeferTeam





Daikin on LinkedIn

We are also keeping our followers in the loop on Linkedin, so be sure to check us out at www.linkedin.com/company/daikin-industries

Feel free to follow us and comment on our posts! We would love to hear from you!