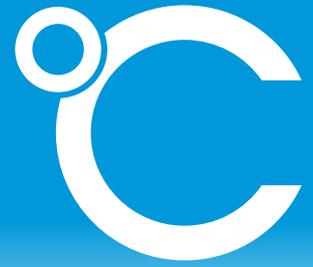




THE NEWSLETTER  
FROM DAIKIN REEFER  
WINTER 2021



DEGREE CELSIUS

# THE GREEN TRANSITION BEGINS



# Welcome

From Kenji Takata, Director  
of Daikin Reefer  
Sales Division



## W elcome to the Winter 2021 Edition of the Daikin Reefer Newsletter

As 2021 draws to a close, we are pleased to share our latest news and developments with you. In previous years, our newsletters were distributed at the industry events that our team attended. However as the world continues to experience travel restrictions due to the ongoing pandemic, we are unfortunately yet to return to these large industry events in-person. We hope you enjoy this latest edition of our newsletter which we are able to deliver direct to your inbox!

### 2021: year in focus

2021 has been a year of challenges and opportunities: we've seen delays and congestion at global ports, disruption to the supply chain and problems with container capacity and displacement. Demand for seaborne reefer trade remains extremely high. Reefer production globally is expected to reach record levels of 170,000 feu in 2021\*. In particular we have seen record reefer container freight rates. The reefer shipping market outlook therefore remains positive.

### The green transition begins

In this Winter 2021 edition of our newsletter, we turn our attention to the challenges presented by climate change: we discuss the responsibility we all share to drive towards sustainability, carbon neutrality and 'net zero impact'. No industry is immune from this responsibility: here at Daikin our Environmental Vision 2050 and our Fusion 25 Strategic Management Plan both clearly set out our target of reducing greenhouse gas emissions to net zero by 2050, as well as our plans to lead the AC industry in low carbonization and contributing to a sustainable society.

### Customers take centre stage

As ever, our relationships with our customers are at the centre of everything we do. In this edition, we share news from three of our customers. Firstly, we introduce Braun Containers, a Hamburg-based family-run company with a reputation for reliability, flexibility and excellence. The team

at Braun has detailed reefer knowledge and experience and have recently purchased the company's first ZeSTIA units. Seaco and Daikin Reefer enjoy a business partnership dating back to the 1980s and we are pleased to update you on Seaco's business activities and continued growth. Container Applications International (CAI) has an expanding reefer fleet and has invested in Daikin's ZeSTIA unit as well as serving its resale market with our LXE model: the team at CAI shares its views on the current market outlook.

### Daikin Reefer team out and about

*"Despite some ongoing travel restrictions, our team has taken every opportunity possible to engage with our customers via online training events and recently, we're delighted to have been able to hold training seminars in person once more."*

Our team was in Shanghai recently to host a seminar and reception, attended by reefer industry professionals and we report on that in this edition. All the seminar attendees agreed that meeting in-person once more after a long period of travel restrictions was so welcome. We will take every opportunity to meet our customers, our partners and the wider industry in person in 2022 as long as it is safe to do so.

### Looking ahead to 2022

We wish our customers and partners a successful, prosperous, safe and healthy conclusion to this challenging year. We are optimistic that we'll make a return to in-person large industry events in 2022 and look forward to seeing you in-person once more.

\*source – Drewry's Reefer Shipping Forecaster 4A21

# Focus on sustainability, the environment and the net zero challenge



## The global climate crisis

The world faces a climate crisis that has significant implications for every area of society and every industry sector. The wider supply chain in particular is under scrutiny with the shipping industry facing a huge challenge to decarbonise: shipping alone accounts for roughly 3% of all global greenhouse gas (GHG) emissions. The wider shipping industry hasn't been subject to climate regulation before, but the industry now faces increasingly urgent calls to become greener and achieve net zero by 2050. The recent COP26 conference saw a coalition of countries including the US and the UK sign a declaration committing to strengthen global efforts to reach this net zero target. Against the backdrop of the climate crisis, the pandemic has also highlighted the urgent need to build a robust global supply chain and boost business resilience with improved sustainability so that the world can 'build back better' from the global public health crisis. The pandemic has revealed weaknesses in the supply chain that need to be addressed, especially in the transportation of vital perishable cargoes such as food and medicines.

## The "net zero" and carbon neutrality challenge

The quest for 'net zero impact' means many key issues need to be discussed and addressed by governments and industries, ideally working together to maximum effect: these issues include improving energy efficiency, resource efficiency and the transition to green solutions; the increased use of clean cooling and clean power to reduce emissions; how best to achieve carbon neutrality; driving sustainability by reducing waste in food, packaging and materials; improving food security and safety; and implementing a circular economy (reuse, reclaim and recycle).

## Food production and the food supply chain

Food production including the food supply chain is a major contributor to GHG emissions and is now the focus of many regulatory and non-regulatory initiatives. Most notably, The EU's Green New Deal has a 'Farm to Fork Strategy' at its heart and aims to accelerate the transition to a sustainable

food system. Recently the new EU Code of Conduct on Sustainable Food Processing was launched and is one of the first deliverables of the aforementioned Farm to Fork Strategy. Global food production alone accounts for almost 17.3 billion metric tonnes of carbon dioxide per year – 19 times the amount from the commercial aviation industry. Overall, food production emissions make up more than a third of the global total.

## Cooling, refrigeration and air conditioning technologies

For the cold chain, air conditioning and refrigerated transport industries, the technologies that power their equipment are major contributors to global well-being and quality of life, even more so as the world gets hotter as a result of climate change. However these technologies contribute to climate change via the emissions produced and the power and energy that are used. The technologies are therefore uniquely both part of the problem and part of the solution.

*Put simply, the climate crisis, the need to build back from the pandemic better than before, the quest for net zero and the world's reliance on refrigeration and air conditioning technology mean global companies need to take the initiative in actively seeking solutions that address these huge challenges.*

## Daikin's energy-saving and environmental technology

Daikin's Environmental Vision 2050 roadmap launched in 2018 and sets out our target of reducing greenhouse gas emissions to net zero by 2050, including a reduction target for 2030. Most recently, we announced our Daikin Fusion25 Strategic Management Plan which will see us lead the AC industry in low carbonization and contributing to a sustainable society. For refrigeration solutions, we will develop the energy-saving and environmental technologies that have been cultivated in the air conditioning business. Through this, we will contribute to solving social issues such as food loss, food safety and food security. We will also take on the challenge of connecting the entire cold chain from place of production to place of consumption.



# Daikin Reefer rises to the challenge

**D**aikin's commitment to using our resources, technology and expertise to solve environmental issues and contribute to a sustainable society is clear. Our Degree Celsius newsletter team spoke to Arjan Bezemer, General Manager of Daikin Reefer for Europe, the Middle East & Africa about some of the specific activities and initiatives that the Daikin team has been leading on a host of important environmental issues, as well as his views on some of the other challenges that the wider industry faces.

**Degree Celsius team:** *There has been a lot of manufacturing and supply chain disruption during the covid-19 pandemic. Demand for new reefer containers is now at an all-time high. How is Daikin Reefer managing this together with the reefer box manufacturers in a sustainable way?*

**Arjan:** Daikin Reefer is part of Daikin Industries which includes a big group of refrigerated divisions, factories and products, so we can easily make use of similar parts that are used to manufacture other Daikin products. This helps avoid certain parts shortages as the parts in question are produced in high quantities for more than one product. We also use the same type of transport shipping components globally where we can, not just for the reefer container alone. Daikin Reefer has increased the parts stock for our production line. As the routes are very short and Daikin is producing reefers in China, the delivery of the machinery to box manufacturers is quick over short transport routes. We communicate closely with box manufacturers to plan the unit delivery as close to the box production as possible.

**Degree Celsius team:** *Daikin has been researching how*

*to mitigate the environmental impact of refrigerants, including eco-friendly alternatives for container refrigeration as well as marine vessel refrigeration and air conditioning. Can you update us on your latest work and thinking in this area as a major manufacturer of fluorochemicals, refrigeration and HVAC systems?*

**Arjan:** Daikin's Environmental Vision 2050 sets out our target to reduce greenhouse gas emissions to net zero by 2050. To achieve this, we will reduce net CO2 emissions by 30% in 2025 and 50% in 2030. We will focus on 7 key areas: CO2 reduction during manufacturing; energy-saving product sales; enhancing the heat pump unit to replace combustion heaters; our low GWP refrigerant initiative; the creation of a new environment-focused business and finally, researching new technology for CO2 decomposition, recovery and reuse.

**Degree Celsius team:** *Energy efficiency to reduce carbon emissions and the amount of power needed for container refrigeration on ships, at ports and in landside logistics is also a major focus of attention. What are Daikin's current solutions and future plans?*

**Arjan:** Energy efficiency is vital to reduce carbon emissions, but so is reliability. Our ZeSTIA unit has been developed for this reason: it uses inverter technology to ensure lower power consumption with the highest efficiency. This low power consumption ensures reefers are using less power from the onboard generators or inland power facilities. This is a key part of our research and development focus not just now but also for the future.

**Degree Celsius team:** *The circular economy of reuse, reclaim and recycle is becoming a big part of the*



*sustainability agenda. Could you tell us how Daikin Reefer is incorporating this into your manufacturing, spare parts and after-sales service operations?*

**Arjan:** Daikin's reefer machinery has a very high recycle rate. During our manufacturing process, everything is recycled and reused. We encourage and motivate our dealers to recycle, reclaim and reuse materials. In addition Daikin is requesting certain parts to be returned so that we can re-use components to be rebuilt as spare parts. We also conduct a lot of online training, leading seminars to ensure technicians understand the reefers well and can undertake repairs quickly and easily if needed. In turn this reduces the number of wrongly-replaced parts and no unnecessary repairs are undertaken.

**Degree Celsius team:** *Reducing food waste and improving food safety and security are major sustainability challenges for the world, as discussed in Daikin's new Fusion 25 Strategic Management Plan. How is Daikin Reefer contributing to this with its container refrigeration and controlled atmosphere solutions today and for the future?*

**Arjan:** It starts with reliability. This is the key to reducing food waste. Our Active CA helps transport certain perishables over long distances whilst maintaining that 'just-picked' quality that many consumers want. Even if transit is delayed, Daikin's Active CA will maintain the perishable cargo's quality. Active CA has now made it possible to shift the transport mode for certain perishables from air to sea.

By applying a communication device, the cargo monitoring environment is drastically improved. Shipping carriers can monitor their precious cargo online and not rely on the vessel engineer's manual check. Necessary remedial action can be taken in a timely manner and it will reduce the food loss eventually.

**Degree Celsius team:** *The Fusion 25 Plan outlines how Daikin plans to "take on the challenge of connecting the entire cold chain from place of production to place of consumption." What does this mean for Daikin Reefer and your customers as vital trade connectors in the global cold chain?*

**Arjan:** Daikin has an extensive range of products in-house and is therefore able to control the complete cold chain, from field to fork. We provide warehouse and storage refrigeration, reefer containers, supermarket refrigerated

show cases and the newly introduced Truck & Trailer unit, which complements the smaller van and truck refrigeration. With this full range of products, Daikin can help our customers control their cargo and ensure its integrity in transit from the grower to the consumer (farm to fork).

**Degree Celsius team:** *More cold chain participants are looking for data to help them monitor, record and report on energy consumption and emissions. Data are also needed to feed AI/digital twin/analytics engines to map energy usage patterns, identify problem areas and drive predictive improvements. How is Daikin responding to this trend?*

**Arjan:** Any Daikin Reefer unit, whether LXE or ZeSTIA, is able to make use of 3rd party communication devices, as selected by our customers. Data is shared with our customers who are able to monitor their equipment on location as well as actual temperature control. PTI can be activated and downloads can be made remotely as well. In agreement with customers who are sharing data with Daikin, we will be able to provide added-value solutions like failure prediction, preventive maintenance indications and real-time 24/7 support. We expect further development in this field.

**Degree Celsius team:** *Daikin has identified IoT, AI and other advanced digital technologies as important for improving cold chain efficiency and resilience. Could you tell us more about what this means for your customers? DCSA and COA have both launched standards for IoT telematics data in refrigerated containers, how has Daikin been involved?*

**Arjan:** We have been involved in the discussions with the DCSA and COA from the start, providing technical input as well as support to make the data communication and data sharing possible. To a certain extent, data sharing is essential to make the whole cold chain transparent to customers. A reefer container with IoT is hugely valuable to customers, through better visibility of the container, improved quality of transport and making effective use of the container. For example, IoT allows shipping lines to take corrective action if repairs are needed when a reefer alarm code is generated. Such technology also means shipping lines can prepare for the cargo arrival by updating the container's GPS location information.

**Degree Celsius team:** *When and how will Daikin Reefer phase in alternatives to R-134a for newbuild and retrofit applications?*

**Arjan:** Currently all Daikin Reefers are produced with R134a. Soon it will be possible to retrofit LXE and ZeSTIA reefers to R513A, using a retrofit kit. This kit includes software, decals and other essential items retrofitting the unit into a R513A charged reefer. Daikin expects that R134a will continue to be the main refrigerant for some time to come. Daikin is currently undertaking a risk assessment of the R1234yf low GWP refrigerant. Our expertise as a refrigerant manufacturer means we constantly strive to find the best solution for each of our product ranges. As new refrigerant solutions become available, we will consider their suitability for our reefers too.

**Degree Celsius team:** *What are the key issues that reefer container users (carriers/lessors) need to consider when switching refrigerants?*

**Arjan:** The main issue is having the right refrigerant onboard. Daikin Reefer units are known to be highly reliable but in the rare case that the unit is operating with a refrigerant shortage, R513A is needed to repair a reefer. It is also possible to operate the unit of R134a again, in an emergency case.

**Degree Celsius team:** *What other measures such as reclamation and recycling, and reducing leakage are important to reduce the eco impact of refrigerants?*

**Arjan:** Reliability is the key. Less unit failures means less repairs, less parts to be shipped and less technicians travelling to undertake repairs. Daikin has a reclaim and recycling program for AC equipment. Even though reefer operation and end-of-life is different, such reclaim and reuse of refrigerants is essential to reduce their environmental impact. Our training programmes include instruction on the importance of refrigerant recovery.

**Degree Celsius team:** *From July 2021, reefer box builders in China moved over to more eco-friendly paints and coatings. Would Daikin like to comment on this?*

**Arjan:** It is important to consider the environment in every step of the reefer production process. Eco-friendly paints are just as important as product quality. Daikin trusts that the whole industry is taking responsibility for reducing its environmental impact. We are open to working closely together with customers, suppliers and other industry experts to take considerable steps moving forward.



# Customer focus



## Braun Container Hamburg: We contain it all

**B**raun Container is a family-run company steeped in tradition for over 30 years, the company has built and maintained a reputation for reliability, flexibility and excellence. Since 1983, Braun has been based in the proud and traditional Hanseatic city of Hamburg with its world-famous port and rich maritime history.

Initially the company was focussed on leasing used refrigerated containers to shipping companies, but soon expanded its core business to include static container rental and container conversion. Today Braun is one of the most established names in the container trade not only in Hamburg, Germany but also far beyond. The company's depots in Berlin, Düsseldorf, Mannheim, Munich, Nuremberg, Stuttgart and Rotterdam ensure an extensive operational scope.

Reefer container knowledge remains a core value at Braun. When it comes to selling or renting refrigerated containers, Braun Container is the specialist in Hamburg, Germany and across the whole of Europe. The team has wide expertise in all matters relating to reefer containers. For example: which cargo type is suitable for a refrigerated container and which is not? What is the maximum temperature the freezer container can reach? What are the advantages of an insulated container that was previously used as a refrigerated container? Just some of the key questions the team helps answer for its customers.

*“It is a pleasure to welcome Braun Container as a Daikin customer. The team at Braun is famous for its detailed reefer knowledge and experience and really knows what it is doing in this segment”, comments Arjan Bezemer, General Manager for Daikin Reefer for Europe, Middle East & Africa*

Braun has a differentiated leasing model, with equipment for every need, including containers with T-floors, flat floors and HACCP safety/hygiene compliant containers, in addition to the premium reefer containers. These premium containers attract a higher per diem because of the lower noise level

of the unit in operation as well as using up to 50% less power consumption compared with the standard refrigerated container. “It is for this purpose we have decided to buy our first Daikin ZeSTIA reefer units” adds Hannes Braun, Managing Director of Braun Container.

“We know that Daikin units are reliable, but even the most reliable machine runs into trouble now and again. We are therefore delighted to now also be able to buy our Daikin spare parts directly from Daikin Reefer, to service our customers even faster” added Hannes.



In the current turbulent times, where any type of equipment is in short supply, Braun Container has been stocking up to ensure that they can help their customers with static storage needs ahead of the Christmas season. The team has purposely reduced sales of equipment to ensure it can assist where other companies may run out of stock during this peak trade season.

The responsible use of precious energy resources is an important issue for Braun Container. As a QuB-certified company (quality association of environmentally conscious companies) and environmental partner of the City of Hamburg, the company has been striving for years to continuously optimize its operational processes and thus be able to make a contribution to environmental protection. The low consumption (and therefore less carbon-emitting) Daikin ZeSTIA reefer unit additions to Braun's fleet seem a perfect match with the company's environmental focus.

# Customer focus



## CAI goes from strength to strength

**C**AI (NYSE:CAI) is a global transportation company offering intermodal container leasing and sales, headquartered in San Francisco, USA. CAI has an extensive fleet of containers: approximately 2 million TEU representing over \$3 billion in assets. The scale and scope of the fleet allows CAI to meet the needs of more than 300 global container leasing customers, including the world's largest shipping lines, shippers and logistics companies.

CAI's reefer fleet of approximately 40,000 units is expanding, as is the number of Daikin reefers within this fleet: in particular, the company has invested significantly in Daikin's ZeSTIA unit due to its strong performance, reliability, growing popularity and reputation. CAI also serves it resale market with Daikin's LXE model. As such, CAI offers a complete range of Daikin products to both its lease and sale markets.

Daikin's units enjoy a very good reputation with CAI's customer base, as their reliability and improved energy consumption are renowned. With environmental concerns regarding refrigerants a key concern for the wider industry, CAI is able to pass the technological advantages of Daikin's machinery on to its customers. Daikin's global service network

with wide availability of spare parts is second to none and also popular with CAI's customers.

With the leasing market outlook positive and as demand for refrigerated equipment continues to grow as a result of multiple market factors, not least the present need to ship COVID vaccines and other pharmaceuticals under controlled temperature conditions, the team at CAI is optimistic that the market will remain buoyant.

The Daikin team delivers a focussed, attentive and high-quality customer service programme and the company is well-known for its keen focus on and awareness of customer needs and trends. "The CAI team has regular interaction with all levels of Daikin management, which is very important for us", commented Danny Hallahan, Senior Vice President Global Marketing, Container Applications International (U.K.) Limited. "Daikin's strong order book demonstrates not only the positive market outlook but also its market-leading products, its customer focus and knowledge and its extensive global service network and superior customer service programme. We are proud to work together with Daikin to serve the needs of our customers" concluded Danny.





# seaco

## Customer focus

### Seaco's success continues

**S**eaco is the longest serving shipping container leasing company in the world today, run on a day-to-day basis from its operating office in Singapore. With regional and satellite offices in EMEA, Asia, the Americas and Oceania, Seaco is not only one of the largest container leasing companies in the world but also one of the most diverse, with its leading positions in the dry freight, reefer, dry freight specials and tank container sectors. With over 200,000 reefer units in its fleet, Seaco has been leasing reefer containers to its customers for almost 50 years – such service to the industry is testament to its long-held belief in the market, the product and its commitment to its customers.

Daikin's reefer business relationship with Seaco dates back to the 1980s, as the company was one of its material suppliers of reefers. Today, Daikin and Seaco continue to enjoy a successful business relationship based on shared values and ethics. The relationship reflects the expansion of global demand for not only Daikin's machinery but also for its extensive international support and service network that Seaco has successfully generated across its customer base. Seaco has not only invested in Daikin's LXE and ZeSTIA reefer units, but has also upgraded some of its fleet with Daikin's Proprietary Active Controlled Atmosphere system – a technological innovation for the refrigerated transportation sector which Seaco believes has a bright and prosperous future.

"Seaco's customers demand high standards of both product and service and it is our role to meet these demands. Our reefer partners must therefore demonstrate the highest professional standards of design and manufacturing quality, as well as consistently maintain high levels of service and support throughout the life cycle of an asset", said Seaco's Chief Operating Officer, Paul Merritt.

*"Daikin ticks all these important product, service and support boxes and meets our rigorous partner quality standards each and every time".*

Seaco's customers increasingly rely upon the company to provide a much larger proportion of their overall reefer needs, driven in part by the steady

growth of the global perishables trade. "We take our expanding role in meeting more and more of our customers' broader reefer needs very seriously" continued Mr Merritt "For this and many other reasons, the quality of our supplier partners is one of our most important corporate goals, to ensure we consistently deliver for our customers".

With the industry requirement to move towards more



environmentally acceptable and sustainable methods of protective coating for insulated containers, some short-term manufacturing disruption may occur, but the Seaco team is committed to limiting such disruption and ensuring continued and smooth supply of refrigerated containers. "We will continue to work for solutions that do not impact the container standard and performance that we and our customers expect today" concluded Mr Merritt.

Daikin Reefer and Seaco share common values and have built a strong, successful business relationship that has customer satisfaction at its core. Both teams look forward to continued successes and working together to deliver excellence for customers.

# Event Reports

## Daikin Reefer hosts industry seminar and reception in Shanghai

**The Daikin Reefer team touched down in Shanghai, China on 19 July to host a seminar and reception. More than 100 reefer industry professionals were in attendance representing shipping lines, leasing companies, box makers and service centres.**

This important seminar takes place twice a year and the aim of the Daikin Reefer team is to build and enhance customer relationships and engagement during the event. The Shanghai attendees enjoyed presentations on new and updated Daikin reefer unit features, as well as a CA market update.

The Daikin team also talked through case studies of several new shipments of perishables that were supported by Daikin Active CA, together with outlining unique and innovative CA strategic developments. The seminar attendees really benefited from meeting in-person after a long period of business travel restrictions due to the pandemic.



**Seminar participants in Shanghai listened to a wide range of presentations**

## Daikin Reefer attends Asiafruit Business Forum

**The organisers of the Asiafruit Business Forum invited Daikin Reefer to speak exclusively at its event during the Fresh Tech sessions. This important trade forum and exhibition for the Asian perishables industry took place on 28 and 29 September and Mr. Goh Ah Huat, Daikin's General Manager, Global Marketing and Service, was online to address the forum attendees on 28 September.**

A representative of AsiaFruit Business Forum commented "Being a world leader in controlled atmosphere (CA) container technology, we thought Daikin Reefer would be well placed to discuss how the technology works and its benefits, how the technology is helping to facilitate fresh produce trade into key Asian markets, and the potential for wider application in the fresh produce industry including opening up new markets for global suppliers".

Mr. Goh Ah Huat covered a wide range of topics in his presentation, including:

- Why can't perishables endure long transportation?

- An overview of Controlled Atmosphere – the types of CA (active versus passive) and the benefits of CA
- Daikin Active CA – its unique VPSA technology with humidity retention, including active control of atmosphere and cargo protection with reliable CA management
- CA market development
- Opening up new markets and expanding cargo ranges

Of particular note in his presentation were the specific and unique technological advantages of Daikin Active CA, such as rapid pull down, positive pressure and humidity retention. He also highlighted the recent landmark shipment of Taiwanese custard apples to the Middle East that was powered by Daikin Active CA.

"It was my pleasure to explain the benefits of Daikin Active CA to the Asiafruit Business Forum and we look forward to the next opportunity to engage with our colleagues in the Asian fresh produce industry" said Mr. Goh Ah Huat.

# CA Update

## Daikin controlled atmosphere (CA) container technology ships Taiwanese custard apples to the Middle East for the first time

**E**arlier this year Yang Ming Line and leading fruit exporter Fruit Days International Co. selected Daikin's Active controlled atmosphere (CA) container technology for the first ever container shipment of Taiwanese custard apples to Dubai in the Middle East. The containerload carrying 10 tons of custard apples was shipped by Yang Ming Line and left Kaohsiung port in Taiwan on 1st Feb 2021 and arrived in Dubai on 19th Feb 2021, a total transit time of 18 days.

The majority of Taiwan's fresh produce exports, including Taiwanese custard apples, are bound for Asian countries. This delicate fruit can often have a limited shelf life even after short ocean shipment journeys, due to its tendency to spoil easily or ripen quickly.

However increased demand for Asian fruit globally together with changes to market conditions in Asia mean Taiwan now has the opportunity to reach new and distant markets with its renowned custard apples as well as other fresh produce. To successfully ship over long distances, the custard apple must be kept in optimum conditions during transit so that it arrives in a 'just-picked' state, ready for onwards distribution to supermarkets and then to consumers. Finding ways in which to ship this fruit under the correct atmospheric conditions has traditionally been a problem that has frustrated Taiwanese growers and international shippers.

The custard apple is popular with the health conscious with a low GI (Glycemic index) and is naturally sweet with a distinct flavour of custard. It varies in size, colour and shape and can bruise easily as well as ripen very quickly. Exporters and shippers face challenges when transporting it over longer distances because of the speed at which the fruit can spoil and discolour when transported in normal reefers that rely on natural respiration.

Yang Ming Line's shipment supported by Daikin's Active CA meant the custard apples arrived in Dubai after 18 days at sea in optimum condition ready for onwards distribution to leading high-end supermarkets in Dubai. Even after a total 18 days in transit the custard apples still had a shelf life of 8 days in Dubai, thanks to the precise atmospheric conditions provided by Daikin's Active CA.

The Daikin Active CA system is unique in that it reduces oxygen and manages carbon dioxide levels, as well as boosting nitrogen levels to quickly put fresh produce into a state of hibernation inside the reefer. This helps to maintain the quality of the fruit and extend both the shelf life (i.e. the selling days on shelf in stores) and the overall storage life of a wide range of fresh produce, even on the longest of journeys.

*'Shipping Taiwanese custard apples to Dubai for the first time is an exciting development, opening up Jebel Ali Port and the country of Dubai as new import destinations, thanks to Daikin's Active CA. We are excited that we can now open up new distant markets beyond the traditional near market destination of Taiwanese custard apples with Daikin's leading Active CA technology'*

said Alex Huang of Fruit Days International Co.



**Custard apples shipped with Daikin Active CA arrive at Jebel Ali port in Dubai**

# Daikin People

Daikin Reefer and IRS International establish new European headquarters to support growth.

New one-stop office will meet customer demand for Sales, Service and Spare Parts

**D**aikin Reefer and IRS International have joined forces and in early November relocated into a single premises in the Rotterdam region to operate as a Sales, Service and Spare Parts supply centre for their customers' needs.

IRS International, which became part of the Daikin family in 2008, has been specialising in 24-hour cargo care services for over 40 years. Since 2011 IRS International has opened spare parts centres in Dubai, South Africa and now Rotterdam, together with its operations in New Zealand and Australia.

Until recently, Daikin Reefer spare parts supply for LXE10E and ZeSTIA machines in Europe was under the control of Daikin's air conditioning division, Daikin Europe.

However with the current very tight availability of container equipment and with equipment always needed to be on the move and ready for its next shipment, the rapid availability and steady supply of spare parts is more important than ever before.

The new spare parts supply warehouse in the Rotterdam region now operates as a one-stop-shop, dedicated exclusively to Daikin Reefer under the operation of IRS International and will ensure the highest levels of service.

Peter Labbad, Managing Director of IRS International commented: "As the reefers evolve and technology continues to move forward, we are there to support our customers with excellent and fast parts supply. We will be listening to Daikin's customers closely and ensuring that we deliver their needs"

In addition to maintaining direct customer communication, offering increased spare parts stock and ensuring fast delivery, the Daikin Reefer and IRS International teams will develop a comprehensive offering including reefer spare parts supply, ship kits supply, ship kits management, service parts control and supply, service support, training and reefer unit sales.

Arjan Bezemer, General Manager Daikin Reefer Europe, Middle East and Africa added: "With this new setup of Daikin Reefer and IRS International operating from one strong combined base, we are setting the direction for further growth".

The new office for IRS International and Daikin Reefer is located at:

**Westbaan 324  
2841 MC Moordrecht  
The Netherlands**



The Daikin and IRS team outside the new office