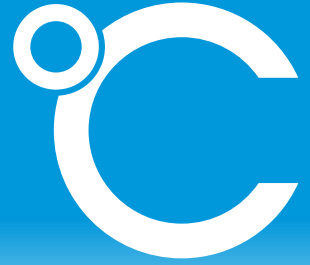




THE NEWSLETTER  
FROM DAIKIN REEFER  
SPRING 2024



DEGREE CELSIUS

# 100<sup>th</sup> ANNIVERSARY

**DAIKIN CELEBRATES  
100TH ANNIVERSARY**

# Welcome

From Kenji Takata, Director of Daikin Reefer Sales Division

**W**elcome to the Daikin Reefer Spring 2024 newsletter, published each year to coincide with our team's visit to Intermodal South America, a key industry event that we enjoy returning to. This edition of our newsletter brings you our latest news and views, and we hope you enjoy reading.

We are incredibly proud to be celebrating our 100th anniversary in 2024. We couldn't have reached this major milestone without the loyalty and support of our customers across the globe. In 2023, we also celebrated another milestone, as we became the number one reefer supplier in the world and we thank our customers in helping us reach this goal. We are looking forward to strengthening our customer relationships even further in 2024 and beyond. So from all of our team – we thank you!

## Daikin controlled atmosphere leading the industry

Daikin Active CA continues to lead the way in safeguarding the transportation of delicate perishable cargoes. We're particularly proud of our collaboration with the floriculture industry on converting cut flower shipments from air to sea – a move that until recently would have been considered almost impossible. "Daikin has improved the efficacy of sea logistics, and this exceptional performance is a game changer in sea logistics" is just some of the excellent feedback we have received. You can find out more inside this newsletter.

We also report on FRUFIVA, a Mexican producer and supplier of the globally-popular Hass avocados. With over 50 years' experience in production, supply, marketing and distribution, the team at FRUFIVA exports hundreds of containers of avocados each year, both nationally and internationally. FRUFIVA's exports to Japan are shipped in Daikin Reefer units fitted with our CA technology. The team is able to fulfil its important weekly shipments of avocados to Japanese consumers, safe in the knowledge that our technology safeguards their produce.

## Celebrating long-standing customer relationships

We're proud of our long-standing customer relationships, and are pleased to share some recent news with you in this newsletter edition. We've been working with Dole Fresh Fruit since 2010, and with a total holding of over 3,500 Daikin units now, the Dole Fresh Fruit team know that our units can be relied upon to contribute to their sustainability goals, as well as give peace of mind that their produce is transported until optimal conditions.

Chiquita placed its first order for our units in 2018, and today, Daikin's units are being used on all Chiquita routes. Our ZeSTIA unit delivers reliability and low failure rates, both of which are important for Chiquita. This is another business relationship that goes from strength to strength.

## Daikin Reefer's contribution to our group's sustainability targets

In our Autumn 2023 newsletter, we updated you on the work that the Daikin Reefer team has been undertaking

on refrigerants. In this edition, we discuss the work we are doing to contribute to Daikin Group's sustainability targets. We are proud of our contribution and our team is committed to delivering sustainable manufacturing practices at our DRS factory, as well as continuing to develop world-class environmentally-efficient CA technology.

## Enhanced service initiatives launched in South East Asia

Thailand is the largest fruit exporter in South East Asia, and the major durian producer in the world. More than 20,000 reefer containers full of this popular tropical fruit are transported to China each year either by vessel, or cross-border by truck. Daikin Reefer is supporting shipping lines, exporters and technicians of our equipment in Thailand with the launch of our new Durian 24/7 telephone hotline, giving advice on packaging, transportation and offloading of this fruit.

## Daikin Reefer's Touch and Feel sessions expand globally

Daikin Reefer is committed to providing support throughout the entire useful life of our reefers, until such time that they are disposed of. For this reason, our Touch & Feel (T&F) sessions are for logistics companies and 2nd hand container traders, and provide hands-on introductions to the workings of our reefer container

technology, using a mixture of both in-field and theory training. Our team has been travelling the globe during 2023 and into 2024 to deliver T&F sessions.

As ever, do please let us know if you have a story you would like us to feature. If you're attending Intermodal South America, do please stop by our stand and say hello to our team.



Kenji Takata, Director of Daikin Reefer Sales Division

# CA Update

## Daikin collaborates with the industry to convert flower shipments from air to sea

**In 2023 we announced Daikin Reefer's collaboration with key industry stakeholders to convert cut flower shipments from air to sea, in a move that that will ultimately allow the floriculture industry to lower its transportation costs and reduce its carbon footprint.**

The global cut flower market had an estimated value of USD36.4 billion in 2022 and is expected to grow further\*, potentially up to USD53.37 billion by 2030\*\*. Flowers are highly perishable and need specific post-harvesting treatment and proper handling before they are even ready for temperature-controlled transportation.

Nearly all cut flowers are transported by costly air freight due to their extreme time-sensitivity and are nearly always bound for distant export markets. Air freight has traditionally been seen as the only way to reduce the farm-to-market time: one of the biggest challenges for exporters is maintaining the vase life of flowers from the moment they are picked right through to their arrival at destination, and cut flowers need to be transported under precise atmospheric conditions to maintain their optimum condition and value.

Demand for cut flowers can peak in particular around special occasions across the globe, as people gift flowers to express sentiments and celebrate these special occasions. Cut flowers can be used for medicinal purposes due to their various health benefits, and are known to have an immediate impact on mood, with their vibrant colours and fragrances able to reduce stress, anxiety and depression, thereby helping to improve mental well-being.

In recent years, cut flower exporters have found it increasingly difficult to secure freight capacity and have also endured extremely high freight rates, resulting in the need to identify alternative logistical and transportation solutions, without putting the condition of the flowers at risk.

A number of successful cut flower shipment trials using Daikin Active CA (controlled atmosphere) have

been undertaken in collaboration with the industry stakeholders involved in the project, which included cut-flower exporters and shipping lines.

As a result of these trials, live commercial shipments by sea have since taken place, converting cut flower shipments from air to sea and confirming the efficacy of Daikin Active CA. Kenyan roses to Europe, and chrysanthemums and carnations from South East Asia to Japan and Colombia to Asia were all successfully shipped by sea. Cargo outturn for these shipments was excellent, due to the unique technological advantages that Daikin Active CA offers exporters and shippers of cut flowers.

Firstly, Daikin Active CA has customised control logic that continually monitors and fine-tunes both temperature and atmospheric composition inside the container. A rich nitrogen gas with humidity is charged into the container, reducing the respiration of the cargo by reducing oxygen content, which means both O2 and CO2 levels can be controlled and humidity is conserved.

Secondly, unlike other CA offerings in the market, Daikin Active CA does not use membrane technology to inject dry nitrogen into the container, which is largely considered unfavourable for horticultural perishable produce, particularly cut flowers.

Katrine Yam, Business Development Director for Daido Hana Sdn Bhd, one of the cut flower exporters involved in the project had this to say:

*“The remarkable performance of Daikin’s Controlled Atmosphere technology has significantly revolutionised the logistics landscape for shipments of our perishable cut flower chrysanthemums to Japan. Daikin has not only unlocked a more efficient and cost-effective mode of transporting fresh cut flowers,*

*but has also mitigated the challenges posed by vessel delays. We are able to safely declare sea logistics with Daikin Controlled Atmosphere as an alternative to air logistics. Daikin has improved the efficiency of sea logistics and further positively impacted the global supply chain. This exceptional performance is a game-changer in sea logistics for us.”*

Nippon Express were also involved in the project and its General Manager Mr. Takashi Adachi added “As a logistics provider serving floriculture exporters, we are confident that our customers’ produce will get to market in prime condition with Daikin Active CA, thanks to its quality, reliability and unique ability to maintain the freshness of cut flowers even on longer sea shipments.”

“Daikin Active CA has proven its success in both trial and live shipments of cut flowers and now sets

the standard that both we and our customers would expect for sea shipments of their valuable produce” commented Mr. Yu Kurimoto, Managing Director of Ocean Network Express (ONE). “Combining Daikin’s technology with ONE’s expertise in ocean transport and young reefer fleet, we can offer best-in-class service to our customers to deliver their cargo to the market in optimal condition.”

These successful trials and live shipments have confirmed that Daikin Active is now the preferred choice for exporters and shippers of cut flowers.

“We are confident that Daikin Active CA is now unquestionably the preferred choice for exporters and shippers of cut flowers” commented Mr. Ah Huat Goh, General Manager, Global Marketing & Service, Reefer Department at Daikin Reefer. “We are leading the way in providing technologically advanced, cost-effective and environmentally sustainable transportation solutions for cut flowers, reducing the previous dependency on air freight alone for their export.”



Chrysanthemums and carnations have been successfully shipped by sea using Daikin Active CA

\*Source – Markets and Markets

\*\*Source – The Insight Partners

# CA Update



## Leading Mexican Hass avocado producer and supplier FRUFIVA opts for Daikin Active CA technology

**F**RUFIVA has over 50 years' experience in the production, supply, marketing and distribution of Mexican Hass avocados. Based in Michoacán, Mexico, the company has achieved wide domestic and international recognition for its excellent service, quality produce and outstanding commitment to corporate social responsibility and sustainability.

The climate and topography of Michoacán and the extensive experience and knowledge of the FRUFIVA team ensure that Hass avocados of the highest quality are cultivated. FRUFIVA selects orchards with the right altitude and well-nourished fruits for its annual harvests which are completed by hand, using specialized equipment and qualified teams to ensure the valuable avocados are not damaged. With access to a broad portfolio of producers, FRUFIVA is able to guarantee supply of Hass avocados for twelve months of the year.



Hass avocados produced by FRUFIVA

FRUFIVA maintains robust quality control procedures from origin to export. With continuous investment in technology, and complete control of the entire end-to-end process, FRUFIVA ensures that the cultivation, selection, packaging and delivery of its produce consistently meet the highest possible standards.

Mexico is the leading producer and exporter of avocados in the world, and Michoacán is the largest producing state. Mexico's main export market is the USA, which receives 86% of Mexico's total avocado exports. The second biggest export market is Canada with 6% of exports, followed by Japan with 3% of the total export market with a value in excess of USD\$109million. However, Japan is the leading market for Mexican maritime avocado exports. 2377 full container loads of Mexican avocados were shipped to Japan in 2023.

The global avocado market is forecast to achieve exponential growth in the next decade, with Mexico alone predicted to achieve annual average export growth of 5.2%. Mexico's role in the continued success and growth of the global avocado market is considered

vital, with a future potential annual production of 12 billion tonnes. Avocados are considered the "green gold" of Mexico as they are the main agricultural export product.

FRUFIVA exported 160 full container loads of avocados in 2023 and delivers this valuable and popular produce to national and international customers by land, sea and air.

The avocados typically undergo long journeys to reach their final destination, and need to be maintained in optimum temperature—controlled conditions during transit to avoid over-ripening or spoiling.

Japan's consumers expect the highest possible standards of flavour, colour and texture of their Hass avocados. When exporting to Japan, FRUFIVA uses Daikin Reefer units fitted with our market-leading Active CA technology: this technology not only ensures that FRUFIVA's avocados arrive in prime condition, but it also extends their shelf life.

Daikin Active CA is equipped with a self-contained nitrogen generator that injects rich nitrogen and generates positive pressure inside the reefer container which ensures reliable and precise atmosphere management when compared with other controlled atmosphere solutions available that the FRUFIVA team have used in the past without good outturn results. Daikin Active CA maintains high quality conditions from the moment the avocado is picked through to its arrival in destination ports for onward travel to importers' warehouses. FRUFIVA's customers know they can expect high-quality produce and FRUFIVA knows it can depend on Daikin Reefer's Active CA to meet its customers' exacting standards.

"Thanks to Daikin Active CA, we are able to fulfil even more weekly shipments of avocados via our shipping providers, safe in the knowledge that our produce will arrive in Asia within typical transit times of 21 days. Daikin's leading technology reduces the risk of over-ripening and extends the shelf life of our produce by 15 days after arrival, something that our customers depend upon" commented Mr. Antonio Lopez, International Business Director at FRUFIVA. "We can offer stable long-term supply contracts to our customers with confidence, knowing that our trusted and regular shipping providers use Daikin Active CA to deliver our avocados".

For more information on FRUFIVA, visit [www.frufiva.com](http://www.frufiva.com) or email [exportaciones@frufiva.com](mailto:exportaciones@frufiva.com)



# Customer Updates

## Dole and Daikin Reefer continue to develop strong, long-lasting business relationship

**D**ole Fresh Fruit is Daikin Reefer's longest-standing customer in the Americas - our business relationship dates back to 2010. Dole Fresh Fruit is part of Dole plc, the world's leading fresh produce provider which grows, sources, packs, ships, markets and distributes over 300 lines of fresh produce across the globe. Dole Fresh Fruit has more than a century of banana and pineapple farming knowledge, and produces its fruit from own farms and independent producers throughout Latin America such as Costa Rica, Honduras, Guatemala, Ecuador, Colombia, Peru, Mexico and the Dominican Republic.

Daikin Reefer received its first order from Dole in 2014, closely followed by a second order in 2015. Since 2017, we have received an order for our units from the Dole Fresh Fruit team every year, bringing their total holding of Daikin units to 3,567, of which 180 are fitted with Daikin Active CA. In 2023, 1,350 ZeSTIA units were ordered, customised to Dole Fresh Fruit's own specification.

*"Daikin's units can be relied upon to deliver low power consumption which makes an important contribution to our sustainability goals. We also experienced a significant reduction in on-vessel technical failures with Daikin's units, giving us greater peace of mind that our products are kept in optimal conditions during transit", said Ana L Anchia, Equipment Manager in Dole Tropical Products. "We know that we can rely on Daikin Reefer's units to safeguard our fresh product, thanks to the many technical benefits afforded by Daikin Active CA"* she concluded.

"The longevity of our business relationship demonstrates the mutual trust and respect that our organisations have" commented Mr. Kenji Takata, Director of Daikin Reefer Sales Division. "We look forward to continued collaboration and partnership in the years ahead."



Dole Fresh Fruit can rely upon Daikin Reefer's units to safeguard their fresh product

# Customer Updates

## Chiquita and Daikin Reefer: A Flourishing Partnership

**T**he enduring partnership between Daikin Reefer and Chiquita has been a cornerstone of innovation and reliability in the global shipping industry. Originating in 2018 with Chiquita's initial investment in Daikin's ZeSTIA units, the collaboration has continually evolved to meet the demanding needs of perishable cargo transportation.

Chiquita, a prominent grower and distributor of bananas, operates a substantial shipping fleet through the esteemed ocean carrier, Great White Fleet. With banana cultivation hubs throughout Latin America, Chiquita's exports predominantly target the markets of North America and Europe.

Bananas, ranked as the world's fourth most crucial food crop, are highly susceptible to changes in their environment and require meticulous cold supply chain conditions during transportation. Recognizing this, Chiquita has progressively expanded its fleet of Daikin Reefer units. Presently, about half of ZeSTIA units in Great White Fleet's equipment are supported with Daikin CA (controlled atmosphere) technology. In a recent development, Chiquita reinforced its commitment to excellence by procuring an additional 1,000 Daikin units featuring Daikin CA, along with 380 standard ZeSTIA units in the summer of 2023.

Daikin's ZeSTIA container refrigeration units, a highlight of the market-leading LXE series, have garnered acclaim for their unmatched reliability and performance. These units boast an array of features and benefits, including superior energy efficiency, reduced CO2 emissions, and the preservation of cargo freshness and quality during transit. Specifically engineered to maintain precise cooling performance and stable temperatures, Daikin's technology is instrumental in safeguarding Chiquita's banana exports from Latin America to various global destinations.

Central to this success is Daikin's CA technology, integrated into select units since its inception in 2017. Utilizing a self-contained nitrogen generator, the Daikin CA unit optimizes oxygen and carbon dioxide levels within shipping containers, thereby extending the shelf life of fresh produce. This cutting-edge technology ensures optimal atmospheric conditions throughout the journey, making it suitable for both short and long-haul shipments.

Stefano Di Paolo, President of Great White Fleet, expressed satisfaction with the reliability and performance of Daikin's ZeSTIA units.

*"Daikin's CA technology provides precise temperature and atmosphere control crucial for maintaining the freshness of our valuable produce," remarked Di Paolo. "We appreciate the excellent support from the Daikin team, and our partnership continues to thrive."*

The enduring collaboration between Chiquita and Daikin Reefer exemplifies a commitment to excellence, innovation, and sustainability in the global logistics industry.

For media inquiries, please contact: Tina Varjabedian, Head of Global Communications TVarjabedian@chiquita.com



Daikin units are utilized along Chiquita's transportation route for bananas



## Daikin's DRS factory team welcome Seaco

**D**aikin's DRS factory team hosted a visit from Seaco in July 2023 last year.

Daikin Reefer and Seaco have a business relationship that dates back to the 1980s, based on shared values and ethics that underpin a strong and successful partnership. With over 200,000 reefer units in its fleet, Seaco has been leasing reefer containers to its customers for almost 50 years, and is one of the largest and most diverse container leasing companies in the world. Seaco has invested in both Daikin's LXE and ZeSTIA reefer units and has also upgraded some of its fleet with Daikin's Active CA, and places great value not only on Daikin's machinery, but also on its international service network that ensures Seaco's global customers receive first class support when and where they need it.

Seaco's visit to DRS was not their first, but the team was still keen to take its time viewing the production line and understanding how the strict and precise quality control measures at DRS are implemented.

Mr. Trevor Brooks, Vice President Reefers and Tanks, Mr. Eric Wong, Product Marketing Manager, Reefers and Tanks and Mr. Evan Qu, Technical Manager represented Seaco on the tour.

*"We are very impressed with DRS and in particular, with the production line" commented Mr. Brooks. "We have visited many factories over the years, but the organisation and procedures here at DRS are exceptional and set the gold standard. Daikin's strict and exacting quality control procedures have really impressed us and lead the way in reefer container manufacturing."*

The DRS team was delighted to receive the highest possible feedback rating of "Excellent" for all items reviewed by the Seaco team during their tour.

"We look forward to welcoming our colleagues from Seaco at DRS again in the future" commented Junya Matsuzaki, President of DRS/Daikin Reefer.



The Seaco, DRS and Daikin Reefer teams during Seaco's visit in July 2023

# Customer Updates



## Florens top management team visit Daikin's Technology and Innovation Centre (TIC)

In November 2023, the top management team from Florens visited Osaka for a tour of the Technology and Innovation Centre (TIC) and to attend a team meeting.

Florens is the 3rd largest container leasing company in the world. Headquartered in Hong Kong, the company leases, manages and sells containers all over the world. With a sizeable reefer fleet that has grown remarkably in recent years, the company is now focused on expanding its reefer business further, based on the solid growth it has achieved in the EU, Central and South America and Asia. With such a positive outlook for the refrigerated container market, the Florens team is looking to build a successful relationship with Daikin Reefer to help it achieve its reefer market growth plan.

Chairman and CEO Mr. Fan Wei, Senior Vice President Mr. Pei Feng, and Marketing Manager Mr. Tom Cheng were in attendance from Florens. Mr. Yagi from TIC led the Florens team on their tour, explaining and demonstrating Daikin's latest technology developments and R&D initiatives. There was also the opportunity to learn more about Daikin's FUSION 25 strategic management plan, that aims to enhance Daikin's strengths in technology and products, as well as maintain and increase its competitive advantage and its contribution to the environment and society.

The Florens team were very impressed with their tour of TIC, and left with a greater understanding of Daikin's excellent manufacturing credentials, its commitment to R&D and its team's ability to rise to challenges.

*"We are looking forward to establishing a fruitful relationship based on innovation and cooperation," commented Mr. Fan Wei, Chairman and CEO of Florens. "We see a bright future for Florens, Daikin and ITOCHU as they work together to help grow the reefer market" he concluded.*

Plans are being developed for a larger delegation from Florens to visit DRS in 2024, in order that the Florens team members can view and better understand Daikin's manufacturing procedures. "We are honoured to welcome our colleagues from Florens and look forward to a successful business partnership moving forward" commented Mr. Shin Furuta, President of Daikin Reefer.

TIC was established in 2015 as the core centre for technology development for the Daikin Group. TIC allows for cross-functional collaboration to generate innovative technologies and products for the Daikin Group that also provide refrigeration solutions to issues affecting society.



The Florens and Daikin teams at TIC in November 2023

# Environment

## Daikin Reefer delivers on sustainability targets and carbon footprint reduction

In our Daikin Reefer Autumn 2023 newsletter, we brought you news of Daikin's environmental vision and commitment, and Daikin Reefer's progress to date on meeting sustainability targets and developing environmentally-efficient practices, with a particular focus on refrigerants.

In this newsletter edition, we update you further on our team's ongoing contribution: firstly, we report on the contribution Daikin Refrigeration Suzhou (DRS) factory is making to sustainability targets. We then update you on the increasing importance of making changes to the transport modes for perishable goods, which is a key component of reducing emissions and carbon footprint.

### Daikin's Environmental Vision 2025 and Fusion 25 Strategic Management Plan

Daikin established its Environmental Vision 2050 in 2018 to set out our commitment to reducing the environmental impact of our development and production activities in order to balance sustainable business growth and environmental conservation.

Alongside our Environmental Vision 2050, our Fusion 25 strategic management plan and our targets for sustainability ensure that our entire group has a philosophy based on offering new value for the environment, resolving environmental and social issues and making contributions to a sustainable society whilst achieving business growth.

### The role of Daikin's DRS manufacturing site in contributing to sustainability targets

Daikin has established sustainability targets and indicators at all our manufacturing sites, as part of our commitment to reduce the environmental impacts from our production activities. Inspections are undertaken by certification bodies and we conduct strict internal audits so that standards are maintained.

In 2022, Daikin exceeded the targets set at group level as follows, by implementing a variety of measures as indicated in the table below.

| Initiative       | Results in 2022                                       | Measures used   |
|------------------|---|---|
| Greenhouse gases | We reduced GHG by 43% compared to 2015                | <ul style="list-style-type: none"> <li>Expanded purchase of renewable energy</li> <li>More solar panels installed</li> <li>Increased use of green electricity</li> <li>Increased use of renewable energy including solar, wind and hydro</li> </ul>   |
| Emissions        | We reduced emissions by 13% compared to 2015          | <ul style="list-style-type: none"> <li>Transport methods switched from trucks to rail and ferries</li> <li>Greater use of energy-efficient trucks</li> <li>Greater use of electric-powered forklifts</li> <li>Reduced energy consumption with shorter working hours</li> <li>Improved transport efficiency</li> </ul> |
| Water            | We reduced water intake by 26% compared to 2015       | <ul style="list-style-type: none"> <li>Used water treated and purified and returned to water intake sources</li> <li>Water reused for cleaning and other processes</li> </ul>   |
| Chemicals        | We reduced chemical emissions by 51% compared to 2015 | <ul style="list-style-type: none"> <li>Reduced emissions of chemical substances used in manufacturing</li> </ul>  |

Daikin Refrigeration Suzhou (DRS) factory has its own sustainability initiatives that ensure its production activities contribute to the group-level targets. The team at DRS has implemented many of the group-level measures as highlighted in the table above, and as such, DRS is on target to meet its sustainability initiative targets.

In 2023, the DRS team welcomed visits from CMA CGM and ONE, with both organisations highly impressed with Daikin’s sustainable manufacturing practices and environmental initiatives. DRS’s measures to save water, minimising the use of electricity and installing solar panels as an alternative source of power were all praised by the visiting delegations.

“DRS is on target to meet its sustainability targets, thanks to the commitment and laser-focus of our team” said Junya Matsuzaki, President of DRS. “We are proud of our sustainable production practices and invite our customers and colleagues to visit us to view these practices at first hand and to understand more about the work that we do.”

**Why modal shift from air to sea is key for Daikin Reefer**

Thanks to Daikin controlled atmosphere (CA) technology, conversion from air to sea is now possible for many perishable produce items that previously could only have been transported using costly air freight.

Air freight generates considerable greenhouse gases and has a big “carbon footprint”, with air shipment CO2 emissions measured in kilos or pounds. Decarbonisation of the aviation industry is a hot topic, and the International Air Transport Association (IATA) launched its CO2 Connect emissions calculator in 2023\* to improve measuring the industry’s emissions in order that that data can be shared globally.

In 2023, shipping consultant Drewry reported that airfreight\*\* was costing 16.7 times more than seafreight, with the cost difference between air and ocean now above pre-pandemic levels. More and more cargoes are shifting from air to ocean transport, with shippers considering this modal shift in order to reduce their freight costs, if transit times allow.

For the perishables industry, air freight has traditionally been the only choice for certain types of perishable cargo, notably expensive cut-flowers, as well as perishables that need to travel long distances

quickly. Whilst transporting delicate perishables via ocean differs considerably to air freight, there are many benefits including lower costs and a reduced carbon footprint.

Recently, Daikin Reefer has led two key initiatives that have proved this important shift from air to sea is now possible with the support of its CA technology in safeguarding delicate perishable cargoes.

Firstly, collaboration with key stakeholders from the floriculture industry has resulted in live commercial shipments by sea of cut-flowers including Kenyan roses to Europe, and chrysanthemums and carnations from South East Asia to Japan and Colombia to Asia. Cargo outturn for these shipments was excellent, due to the unique technological advantages that Daikin Active CA offers exporters and shippers of cut flowers. “Daikin Active CA is now the preferred choice for exporters and shippers of cut flowers, and we are leading the way in providing technologically advanced, cost-effective and environmentally sustainable transportation solutions for cut flowers, reducing the previous dependency on air freight alone for their export” commented Mr. Ah Huat Goh, General Manager, Global Marketing & Service, Reefer Department at Daikin Reefer.

Secondly, live shipments of Thai mangoes using a container provided by CMA CGM and fitted with Daikin Active CA proved highly successful, once again proving the efficacy of Daikin CA in safeguarding delicate perishable cargo on ocean shipments where previously, air freight was relied upon. “Mangoes are a popular tropical fruit and their consumption is increasing. The ability to transport them via sea rather than air thanks to our CLIMACTIVE means that new and distant markets can be reached”, commented Mr. Julian Carbutaru of CMA CGM.

**Daikin Reefer’s ongoing contribution and commitment**

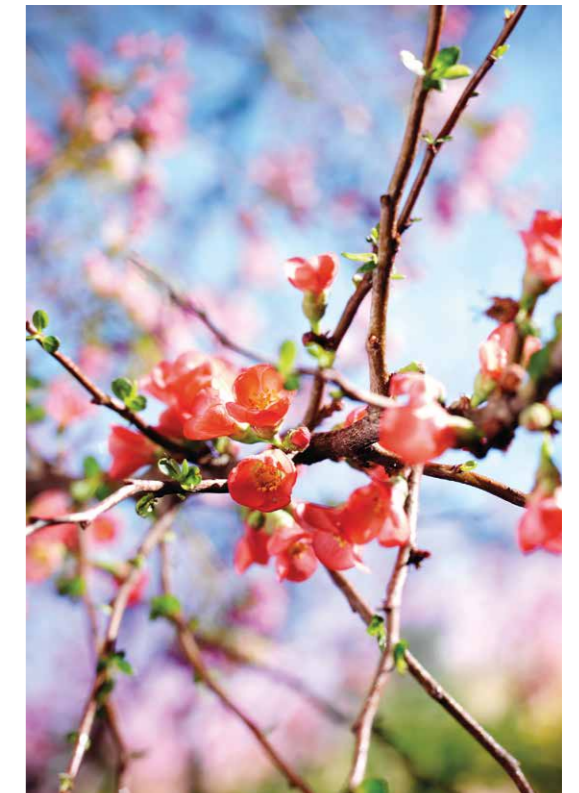
“Once again, Daikin Reefer continues to contribute to sustainability initiatives and environmentally-friendly practices, both in manufacturing and in the application of our CA technology”, commented Kenji Takata, Director, Reefer Container Division at Daikin Reefer. “Our central philosophy remains achieving net-zero emissions by 2050 and continuing to develop environmentally-efficient technologies that deliver real benefits.”

\*Source – IATA

\*\*Source – Air Cargo News



**Daikin Reefer is contributing to Daikin Group’s sustainability targets both at our DRS factory and with our environmentally-efficient CA technology**



# Training and Service

## Daikin launches enhanced after-Sales service network for Thailand, including unique Durian hotline

**T**hailand is the largest fruit exporter in South East Asia, famous for exporting a wide variety of tropical fruit including durian, mangosteen, longan and mangoes.

Thailand's Commerce Ministry is aiming for a 4% growth in the volume of fresh and processed fruit exports in 2024. According to Commerce Minister Phumtham Wechayachai, the Ministry is optimistic about fruit exports, anticipating a 4% increase in both volume and value for shipments of both fresh and processed fruits. This growth is expected to reach 4.19 million tons and 300 billion baht.

Exports of fresh fruits alone are expected to rise by 4% in volume to 2.1 million tons, with the value anticipated to increase by 5% to 175 billion baht. China is Thailand's biggest export market, and receives 75% of the total exports, followed by the US, Malaysia and Hong Kong. Chinese fruit imports from Thailand arrive via ocean shipment or cross-border trucking.

Thailand shipped fresh and processed fruit exports worth 284 billion baht in the first 11 months of 2023, with fresh fruit making up 178 billion baht, up 27% year-on-year, frozen and dried fruit at 50.1 billion baht, up by 25.2%, and processed fruit at 56.3 billion baht, down by 10.4%\*.

Amongst Thailand's popular export fruits are durian, mangosteen, longan and mangoes. These fruits are unique and much-loved in South East Asian markets in particular.

Thailand is the major durian producer in the world, and cultivation takes place across the whole of the country. The harvest and export of durians form a vital part of Thailand's economy and culture. Durians make up the largest volume of exports into China, with more than 20,000 reefer containers full of the popular fruit being transported across the border by either vessel or truck during the busy durian season which lasts from April to September. The Thai durian harvest season starts in Chonburi in the east, culminating in Surat Thani in the south.

Durian, often known as the "King of Fruits" in Thailand, are characterised by their unique appearance and very distinctive aroma. Fans of the durian love the custard-like texture of its flesh, described as sweet and creamy with a slight hint of spices. The popularity of durians in China has increased significantly in recent years.

Mangosteen are regarded as the "powerhouse" of tropical fruits, and have been used in folk medicine for years: this fruit is packed with minerals, and its rind and leaves are both used to treat a variety of medical symptoms in folk culture.

Longan - or "dragon's eye" due to its translucent white flesh with a central black seed - has a flavour similar to lychee and also packs lots of health benefits.

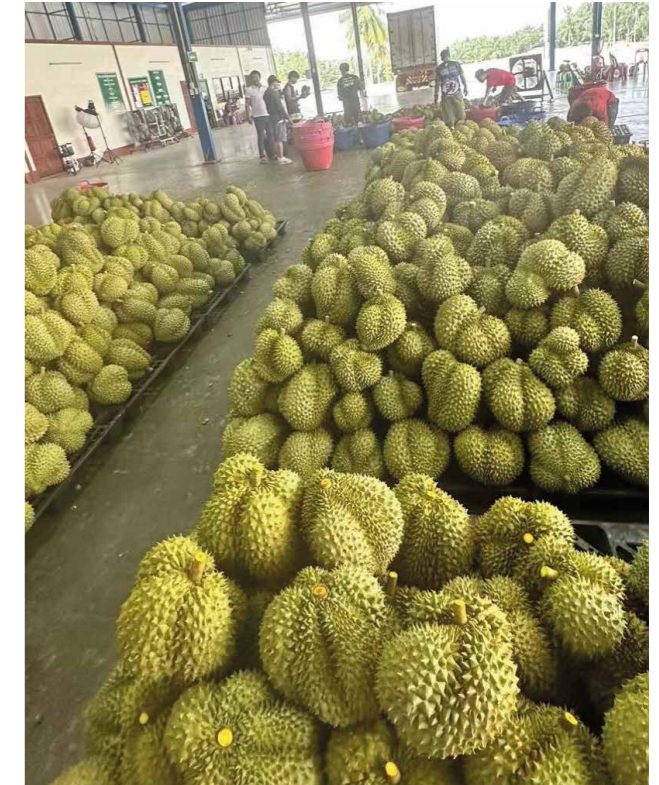
Mangoes are perhaps the most globally popular fruit that Thailand produces and exports, and there are many varieties, with the most popular being Nam Dok Mai.

Ambient conditions in Thailand can create complicated harvest-, packing- and transit conditions, with temperature and humidity both high and infrastructure still under development, so pre-cooling processes and cold storage facilities can often be absent. The durian is a high-respiring fruit and it is typically not pre-cooled after it is harvested in Thailand before it is transported across the border.

The Daikin Reefer team has been busy supporting its customers in Thailand, delivering intensive training courses for shipping lines, exporters and technicians of our equipment. Our new Durian Hotline has been launched to provide proactive support and services to our Thai customers and users. With telephone support available 24/7 in English, Mandarin and Thai, the Durian hotline team is ready and available to advise on the transportation of durian, including how to stuff, how to load trucks before loading for shipment by sea or truck, and how to handle durian when offloading in transport terminals.



Daikin ZeSTIA loaded with durians on Board vessel



Preparation of durians for export

**For support on durian loading, please contact Daikin's service centre Greating Fortune (Thailand) who are able to provide support in three languages as listed below.**

**For Chinese, contact Dow Peng on telephone +65624233023  
For Thai, please contact Viro on telephone +6671314640  
For English, please contact Garn on telephone +66814144244**



More than 70 participants joined the technical training courses in Bangkok, Thailand in Nov 2023



A Daikin Service Manager led a trouble-shooting session to help participants improve their understanding of servicing Daikin's units

\*Source Fresh Plaza



# Daikin Reefer team leads programme of Touch & Feel sessions for second hand container market

**D**aikin Reefer's Touch & Feel (T&F) sessions are for logistics companies and 2nd hand container traders, and provide hands-on introductions to the workings of our reefer container technology, using a mixture of both in-field and theory training.

T&F sessions create awareness of Daikin Reefer in the 2nd hand container market. They are a useful forum for our team to gather feedback and understand the needs of 2nd hand container users. The ultimate aim of our T&F sessions is to help enhance the value of 2nd hand Daikin Reefer assets that are owned by the participating companies.

2nd hand container users often use these reefer assets for domestic or cross border perishables trade (for example exporting perishables from Thailand or Vietnam overland to China). 2nd hand containers are also rented to third party organisations for cold storage purposes.

The 2nd hand reefers in question are usually over 10 years old, and are sold by shipping and leasing companies who deem them too old to be now used for international reefer shipping.

Throughout 2023 and into 2024, our team has been leading a programme of T&F courses in the Middle East, South

East Asia and the USA, with sessions held in Jakarta in Indonesia, Qingdao and Xiamen in China, Dubai in the UAE, Bangkok in Thailand, Miami in the USA and Mumbai in India.

T&F session attendees typically include 2nd hand container traders and users, NVOCC, logistics companies, as well as leasing and shipping teams that are tasked with selling their fully depreciated asset.

Attendees receive hands-on technical training as well as updates on our technology, and they get the chance to meet our Sales and Service teams. During the sessions we make sure that the benefits of the functions our units provide – for example, hot-gas and energy-saving – are understood by the teams that need to maintain Daikin's units.

Daikin Reefer is committed to providing support throughout the entire useful life of our reefers, until such time that they are disposed of.

For more information on our Touch & Feel sessions and on our wider Training & Education programme, please contact your local Daikin representatives.



2nd hand container traders and users, NVOCC and logistics companies attended our T&F session in Mumbai, India in January 2024



Participants at the Mumbai T&F session learned a lot and welcomed the hands-on technical training