



Advanced Temperature Control

# World-class Innovation Worldwide Installation

Cross delivers advanced temperature control solutions in refrigeration, air conditioning and fruit ripening. With decades of expertise and a proven reputation for innovation, we manage major projects worldwide, ensuring technical excellence and seamless installation.

Our operations now span the globe, supported by dedicated maintenance and service teams across the UK and Ireland.

The business began in commercial and industrial refrigeration, with air conditioning remaining a core strength. Over time, we expanded into complementary sectors and built a combined annual turnover of more than £100 million.



Today, **CROSS** is recognised globally as a leader in energy-efficient temperature control technologies for commercial and industrial use.

- + Industrial Temperature Control
- + Commercial Refrigeration
- + Food Retail Refrigeration
- + Fruit Ripening Technology



## Perfect Ripening

### INNOVATIVE ENERGY SAVING RIPENING SOLUTIONS

High-efficiency fan motors for reduced energy use

Reversible air-flow with temperature precision to +/- 0.1°C

Environmentally friendly refrigeration systems, including chilled water, eliminating the need for leak detection in ripening rooms

Reliable colour and texture consistency without the need for inspection

Intelligent load-adjusting control valves with inverter-driven pumps

### WORLD-CLASS INNOVATION & TECHNOLOGY

Random access rooms designed to ripen exotic fruits effectively

Complete support from design through to delivery and project management

Energy and running costs reduced by up to 50%

High-quality manufacturing for extended system life

Independently verified energy savings

### EXPERIENCE YOU CAN COUNT ON

Over 35 years of continuous refinement in banana and fruit ripening technology

Proven global experience in delivering projects worldwide

Trusted by world-leading producers and retailers

Installations designed for lifespans of up to 25 years

Specialist engineers with extensive service experience



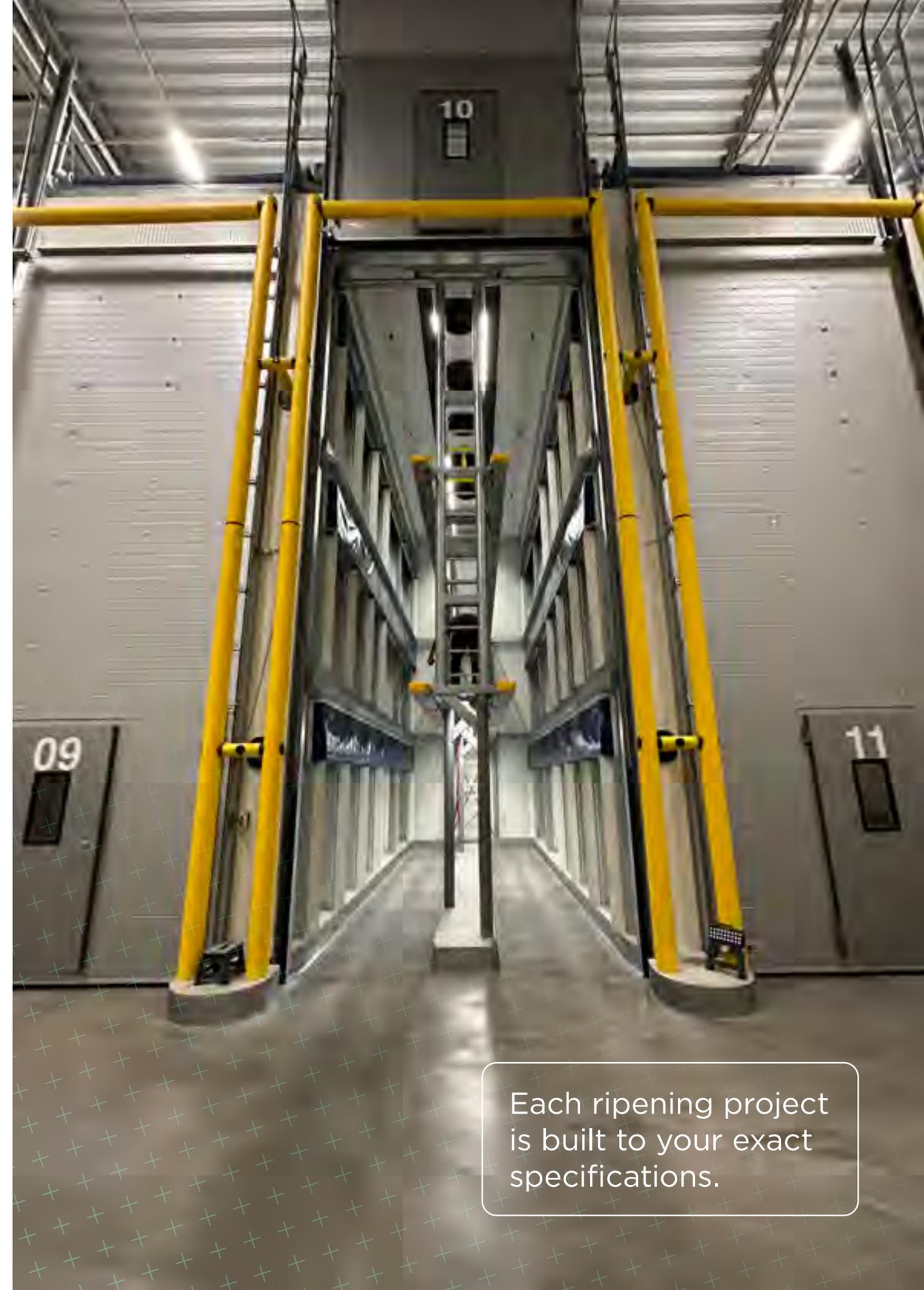
# Controlled Atmosphere Fruit Ripening Rooms

Cooling coils are centrally mounted along the full length of the ripening chamber, providing a large cooling surface area. They operate within a small temperature differential to reduce product weight loss.

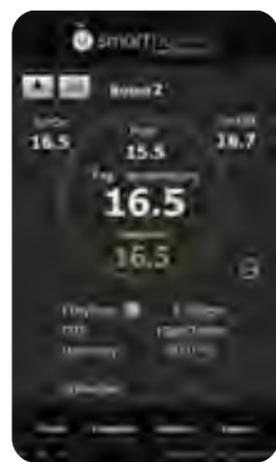


Air passing through the coil is directed into the space between pallets and the chamber walls. Combined with our sealing system, this delivers consistent ripening across the entire room. Each chamber is equipped with reversible air circulation to guarantee uniform results.

Only the most energy-efficient motors are specified to minimise power consumption, and every design is created with easy maintenance in mind.



Each ripening project is built to your exact specifications.



Stone fruit ripening coolers are mounted on the left and right-hand walls, providing clear access along the full length of the room. They operate with a small temperature differential to preserve fruit quality. Air moves through the cooling coil and is directed into the space between pallets and the wall, with specialised sealing curtains preventing airflow across the pallet.

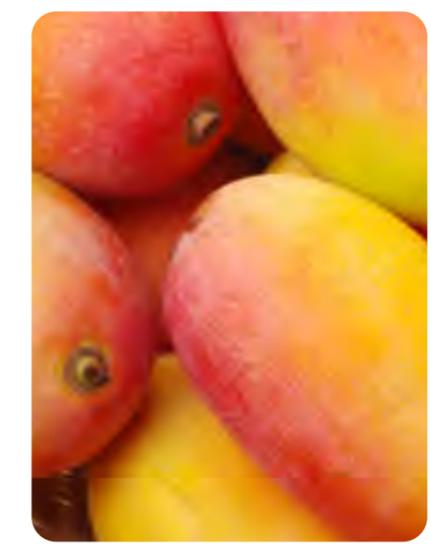
Each chamber includes its own independent, self-cleaning high-pressure misting humidifier.

When combined with the sealing system of your choice, this setup delivers consistent ripening throughout the room. A two-way air circulation system further improves results, ensuring stable product temperatures. Fans use special low-energy motors, while the design focuses on easy maintenance.

With no moving parts, operating and maintenance costs remain low.

Speak to our sales team to discuss your next project.  
Call **+44 (0) 28 3752 6090**

# Advanced Climate Atmosphere Control





# Automated Ripening Systems



In 2019, Cross delivered the world's first fully automated banana ripening facility near London.

This innovation transformed ripening by cutting labour requirements by 80%, reducing energy use by 60% and increasing on-site storage capacity by 40%.

A fleet of smart robot pallet taxis and automated lifts ensures efficient movement between the intake area and ripening rooms.

Operating autonomously from intake to dispatch, the system uses our expertise to manage ripening conditions with precision. Finished product is timed with carrier collection schedules, preventing spoilage.

Our robot pallet taxis handle all lifting, eliminating forklifts and pallet trucks in the storage area, while reducing human interaction by up to 80%.

Smart lifts enable storage across multiple levels and guide pallet taxis on the most efficient routes between ripening rooms and inbound/outbound zones.

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LEARN MORE



Scan to watch the Cross Ripe<sup>®</sup> Automated Ripening Facility solution in action.





# World Class Innovation & Technology

## Gas-tight Sectional Doors

Our gas-tight sectional doors are designed for storage rooms and ripening chambers, including tropical fruit and bananas. Tracks are self-supporting and, depending on the rail system, the door leaf can be guided horizontally, vertically or along the roof pitch. The insulating core is made from CFC-free solid polyurethane foam, with both interior and exterior sheets formed from 0.5 mm galvanised coated steel.

Advanced panel connections with special sealing, combined with three flap gaskets around the perimeter, ensure maximum gas-tightness.

Each door comes as standard with a kick-out window which functions as an emergency exit.

## Adjustable Air Curtains

Air curtains can be operated manually or electrically to suit customer requirements. They support part or full pallet loads, reduce energy use and maintain even airflow through fruit produce.

## Side Curtain System

Our patented side curtain system delivers dual-direction airflow for consistent air and temperature distribution across the chamber, ensuring even ripening of all product. Adjustable height curtains accommodate different pallet sizes, while the absence of moving parts keeps both maintenance and running costs low.





Multi-level ripening rooms maximise available space



# Packing, Intake & Dispatch Areas

We place the highest importance on the health, safety and wellbeing of staff in every working environment. While our systems protect the quality of your fruit, we care equally about the safety of your people.

Our solutions include a full range of ventilation and climate control functions for manual process areas, along with safety barriers that protect workers from machinery and products in transit.

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Push-back racking for ease of loading and unloading



# Pulsion Airflow Management System

Cross Ripe® offers this unique patented technology as part of our fruit ripening solution.

The Pulser system moves the entire air volume within the chamber, maintaining uniform temperatures to within +/- 1°C.

[LEARN MORE](#)



Scan to watch the Cross Ripe® Pulsion Airflow Management System in action.

- + **Consistent air distribution**
- + **Even ripening across the chamber**
- + **Gentle airflow for a more natural ripening process**
- + **Greater energy efficiency**
- + **Extended shelf life**



# Electronic Control System

Our bespoke electronic control system integrates the latest world-class fruit ripening technology.

Developed with our in-house team, it provides:

- + Full facility management
- + Maximum energy efficiency
- + Remote access and plant interrogation
- + Faster maintenance and repair response
- + Automated algorithms that lower fan energy use



energy  
efficient



## Easy Maintenance

Cross Ripe® is designed for minimal maintenance, with all key components easily accessible for cleaning and servicing. Hinged fan plates provide safe, straightforward access, while our experienced service team and smart logistics keep your ripening operation running at peak performance.



## Centralised Refrigeration Packaged Units

Sustainability is central to our approach. Our systems use natural refrigerant technologies including CO<sub>2</sub>, water, glycol, ammonia and HFC refrigerants, making them the natural choice for environmentally responsible operations.



# Making Ripening Profitable

Cross Ripe® significantly cuts manual handling, forced interventions, energy use and waste from rejects.

Unlike traditional methods, each room can be configured for all types of tropical fruit, giving your business a flexible and efficient solution.

With Cross Ripe®, you gain premium fruit quality, longer shelf-life, minimal losses and consistently low operating costs.

*Speak to our sales team to discuss your next project.*

Call **+44 (0) 28 3752 6090**

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