



Dunstaple Farm Ltd Becomes First to Use Panasonic's 20HP Sustainable Cold Chain Condensing Unit Outside of Japan





Devon. UK

2024

Outdoor units: Panasonic 20HP R744 (CO2) Cold Chain unit

Indoor units:

Control:

Keep It Cool Refrigeration, Hawco

Dunstaple Farm Ltd, based near Holsworthy in Devon, home of the award-winning Farmer Tom's Ice



Cream, chose a Panasonic 20HP cold chain solution that utilises the natural refrigerant R744 (CO₂), was specified - the first of its kind in the UK and outside of Japan - installed by experienced and cooling specialists, Keep It Cool Refrigeration, along with the support of the Panasonic team and Mervin Chumun, Technical & Applications Manager for distributors Hawco.

Challenge

Dunstaple Farm Ltd sought to replace their existing freezer system with a more reliable, sustainable and energy efficient solution to reduce their carbon footprint and increase productivity. Dunstaple Farm installed two Panasonic 10HP LT CO₂ systems into their new low temperature ice cream cold store. Impressed by the units, it was decided to replace another system used for “blast freezing” the ice cream with a similar unit.

Solutions & Tech Applied

Dunstaple Farm Ltd, based near Holsworthy in Devon, home of the award-winning Farmer Tom's Ice Cream, sought to replace their existing freezer system with a more reliable, sustainable and energy efficient solution to reduce their carbon footprint and increase productivity. A Panasonic 20HP cold chain solution that utilises the natural refrigerant R744 (CO₂), was specified - the first of its kind in the UK and outside of Japan - installed by experienced and cooling specialists, Keep It Cool Refrigeration, along with the support of the Panasonic team and Mervin Chumun, Technical & Applications Manager for distributors Hawco. Farmer Tom's Ice Cream was first established over 25 years ago at Dunstaple Farm in Devon by Tom James. Now working with his two daughters, Beth and Molly, along with an enthusiastic team of 8 colleagues and chief taste tester Ted the dog, around 15,000 litres of top-quality ice cream in 45 different flavours are produced weekly during the summer season, utilising locally sourced Devon cream and milk. Farmer Tom's products can be found in many outlets across the Southwest of England. The business is committed to growing sustainably, both in its production and operations processes. As the ice cream business has expanded, Dunstaple Farm extended its cold room facilities 18 months ago, installing two Panasonic 10HP LT CO₂ systems into their new low temperature ice cream cold store. Impressed with the energy efficiency, reliability and sustainability of the Panasonic units, it was decided to replace another low temperature system used for “blast freezing” the ice cream with a similar unit. Tom James of Dunstaple Farm added, “The new 20HP Panasonic unit has not only helped to increase our energy efficiency but has additionally increased our productivity by reducing the time it takes to freeze the ice cream by as much as 6 hours each day.” Neil McCourt, Technical Manager at Keep It Cool, knew that Panasonic had recently launched a new 20HP cold chain unit, which perfectly met with Dunstaple Farm's requirements and further complimented the two Panasonic 10HP units already in operation. Neil commented, “As a business we have extensive experience across a wide range of customers when using refrigerant R744 (CO₂) technology and have great confidence in the adaptability and reliability of the Panasonic solution, making this an easy choice for Dunstaple Farm and Farmer Tom's Ice Cream.” The Panasonic systems provide the environmental benefits of using a low GWP refrigerant in the form of CO₂, also offer greater energy efficiency, exceptionally low sound levels, the lowest refrigerant charges and the smallest footprint size currently in the marketplace. Neil further added, “The Panasonic units are very reliable and provide a proven system that is easy to install and commission. All the equipment for the project was delivered on time, and ready for us to install. The installation process was straightforward, and the support provided by the Panasonic technical team was fantastic.” The Panasonic R744 (CO₂) Cold Chain units have a GWP (Global Warming Potential) of only 1, are suitable for both refrigerated and freezer cold rooms, as well as showcases and walk-in freezers – offering a solution for all



commercial refrigeration needs. The technology has been specifically developed for small to medium capacity applications within the retail and food service sectors. Additionally, the units are capable of functioning in outdoor temperatures as low as -20°C, ensuring consistent performance in challenging conditions. These cutting-edge units are engineered to redefine industry standards and environmental concerns, where new legislation is requiring the adoption of 'alternative' refrigerants of which R744 (CO2) is one. Ensuring seamless integration, these units are compatible with the most relevant control solutions from the market, supporting RS485 Modbus. With over 15 years of experience in Cold Chain production, Panasonic has established a reputation for excellent quality control, underscoring the reliability of its products. To find out more about the Panasonic wide range of heating and cooling solutions please visit www.aircon.panasonic.eu or visit Keep it Cool's website www.keepitcoolsouthwest.co.uk or to find out more about Dunstaple Farm and Tom's Ice Cream visit - <https://www.dunstaple.co.uk/products>.

Key Tech Features

Panasonic 20HP R744 (CO2) Cold Chain unit

Capacity

20HP