



Güntner air coolers for fresh strawberries from the producer

Strawberries should be cooled down as soon as possible after picking to achieve a long shelf life, which in turn ensures retailers are supplied with fresh fruits on a daily basis. Therefore, producers require modern refrigeration equipment and need to cooperate with experienced plant contractors and manufacturers. The new refrigerating plant installed at a fruit farm in Chichester/UK hence was equipped with four special Güntner evaporators to perfectly preserve the strawberries' freshness.

The grower team at the fruit farm in Chichester/UK works on an open area of approx. 440 ha as well as on about 18 ha of glasshouse production. The new refrigerating plant with the Güntner air coolers was integrated into the existing cooling tunnel. The design data of the evaporators are specifically adapted to two Zanotti Dorin GCU condensing units. The refrigeration equipment was installed and put into service by Cold Control Refrigeration.

Each of the four Güntner air coolers rapidly cools 10 pallets of freshly harvested strawberries, which equates to about 3,400 kg per batch. The cooling equipment cools the fresh strawberries from 25 °C to 4 °C within two hours. Justin Scofield,

Overview

Business line:	Industrial
Application:	Fruit and vegetable cooling
Country/Region:	UK / Chichester
Fluid:	R-404
Product:	Güntner CUBIC Vario evaporator, type GHN

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▲ The cooling equipment cools strawberries from 25 °C to 4 °C in the two-hour post-harvest period.



▲ In the cooling tunnel system at the site of the strawberry farmers, each one of the four cooling modules provides rapid post-harvest cooling to 10 pallets, around 3,400 kg per batch of fruit.

Managing Director at Güntner UK, explained: „Quickly cooling down fresh fruits and preserving their quality are the greatest challenges producers are faced with. If not cooled and stored correctly, the fruits will deteriorate quickly, reducing quality and saleable weight.“

Laurie Fisk, Technical Director at Cold Control, said: „Essentially, we use the air coolers to suck cool air through punnets and trays. We made the existing cooling tunnels more efficient by adding equipment to suit the high duty requirement. Optimising the rate of cooling means we are able to reduce the moisture loss of the strawberries and thus improve the shelf life of the product.“

Tailor-made construction

The integrated Güntner CUBIC Vario air coolers give the client the choice of solution to match their specific needs for various applications, e.g. with regard to fin spacing, tube pattern, air volume and the number of fans. This allows for meeting the specific requirements for the cooling process. What's more, the well-proven Güntner floating coil principle guarantees our customers a long service life, also under changing operating conditions. All air coolers of the CUBIC Vario series can be manufactured for use with HFC refrigerants, ammonia, CO₂ or brine.“

The tray and drip plate can be hinged and thus provide good access for inspection and cleaning. The thermally decoupled tray prevents the formation of condensation water. Optional swivelling fans save time when cleaning the heat exchanger and the unit's interior. All connections and fittings are easily accessible through the hinged side coverings, making inspection quick and easy.

Güntner Streamer option

Every air cooler is equipped with high efficiency fans as a standard. The fans – available in standard and reinforced design – can additionally be equipped with the Güntner Streamer. Streamers convert the radial current into an axial current, bundle the air jet and thus improve the air throw of the fans. This extends the depth of penetration and improves air circulation in long rooms without additional energy input. The streamers, available as an accessory, can be factory-fitted.

A defrost flap in the evaporator ensures safe and complete defrosting with the defrosting heat remaining in the evaporator casing. Finally, the evaporators come with the proven Güntner floating coil principle so that the fin coil can expand without straining the fluid-carrying tubes. This prevents leakage of fluid and extends the service life of the unit.

The CUBIC Vario evaporator can be supplied with a wide range of accessories and special equipment including electric defrost, hot gas defrost, water spray defrost, peripheral fan heating, aluminium, copper and stainless steel fins, stainless steel tubes, EC fans and fans with external pressure.