

Case Study

The Chocolate Garden of Ireland Carlow (Ireland)



No more chocolate melting, thanks to hyper-efficient Indirect Evaporative cooling Climate Wizard

Chocolate Garden

Confectionery industry

System installed Indirect Evaporative Cooling System

Supplier & Installer JL Intelligent Cooling

Equipment & Configuration 2 x Climate Wizard H15S Plus

Established in 2001 by Jim and Mary Healy, The Chocolate Garden of Ireland is an Award-winning family business making hand made chocolates, premium ice cream (Tipperary Ice Cream brand) and a wide range of delicious treats. The business employs around 20 people and is located in a rural area on the Carlow-Wicklow border.



The company

"We commenced our confectionery business 21 years ago and moved to our new premises of approximately 10 thousand square feet in 2009".

That is how Jim Healy, Managing Director of The Chocolate Garden of Ireland, proudly introduces us to his business. "We began making waffles, but soon diversified into chocolate making and in 2008, into making ice cream and sorbets. Our main production is making high quality chocolate gifts for the speciality and fine food market."

The new premise also accommodates a visitor experience, a café and ice cream parlour and attracts visitors of all ages to explore the joy of chocolate-making for themselves.

The project requirements

Since moving to the new premises, they tried many cooling systems to cool their production space. Over the years, they have tried topping up the initial cooling system previously installed by adding air conditioning and extractor fans.

However, during 2020 and 2021 production had to be closed down for at least three weeks during the Summer months, due to the staff's discomfort and the temperature of the production area going over 24°C and at times up to 29°C.

For this reason, the Management approached John Lawton of JL Cooling Solutions to suggest a technology that could improve temperature inside the workshop, without adding moisture to the air, as this would have had a negative effect on the chocolate.

For this reason, John suggested installation of 2 x Climate Wizard H15S Plus hyper-efficient indirect evaporative coolers to replace the existing systems that were running 24/7 during the Summer months, thus consuming a considerable amount of energy.

The installation

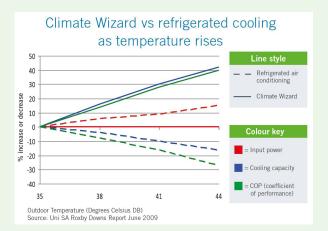
The Climate Wizard hyper-efficient indirect evaporative cooling system was installed in April 2022.

The results were outstanding: running costs for cooling substantially reduced and they were able to maintain a constant 20°C inside the production area, even when the outdoor temperatures went as high as 30°C during the Summer of 2022.

The management also decided to install a 40kva of PV Solar panels to their roof to counter the increase of electricity cost on the same year. Their overall electric consumption dropped by approximately 50%.

Moreover, not using chemical refrigerants to cool the air, but just water and electricity, Climate Wizard perfectly matches The Chocolate Garden of Ireland's green and sustainability orientation.





The Climate Wizard innovation

Climate Wizard indirect evaporative air conditioners use a hyperefficient counter-flow heat exchanger to produce 100% fresh, cool, outside air, with no added moisture.

The fresh cold air produced by Climate Wizard can be similar to that produced by refrigerated systems, with temperatures that approach the ambient dew-point temperature.

That's not only great for reducing power bills; it's also great for the environment. And, no matter how hot it gets outside, Climate Wizard uses the same amount of power and still delivers 100% fresh, cool air inside.

This is in direct contrast to refrigerated systems, which require increasing amounts of power as outside temperatures rise. Climate Wizard's cost-saving capabilities actually increase, when the heat is at its highest.

At the same time, Climate Wizard's performance also increases as temperatures rise – again, in complete contrast to refrigerated systems.

"The Climate Wizard is a great system and has helped to reduce our running costs for cooling. Now we finally have a cooling system that works effectively and efficiently. I would recommend this breakthrough technology to anyone wishing to provide temperature control in a working area. In addition, I was very pleased with both the installation team, the team who commissioned the equipment and the backup we received when we had any questions."

Jim Healy,

Managing Director - The Chocolate Garden of Ireland





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