

Aqua

The Temperature
Control People.

Case Study | Facilities Management



**Temporary Cooling
Prevents Warehouse
Getting Hampered
During Summer**

Client

London based, high end retailer

Challenge

Warehouse cooling in a new facility

Solution

Industrial air handler and chiller
hire solution

For clients working within the warehousing and distribution sector, temperature control plays a pivotal role in ensuring the quality, integrity, and freshness of stored products. This in turn increases shelf life, reduces wastage, and protects business performance and brand reputation. Aqua were approached by a high end retailer, looking for support with cooling their new storage facility.



Situation

The client had taken on a new, shared, warehouse in which to store their range of luxury hampers & gifts. A number of these included products which would spoil unless stored at an optimum temperature of sub 20°C. With summer and warmer temperatures fast approaching, time was of the essence, making a rental solution the best option.





Solution

Aqua supplied a combination of industrial air handling units, paired with large process chillers, all connected with flexible hosing and ancillaries. The full equipment package included:

- 12 x air handlers
- 4 x 340kW Aqua Pro+ chillers
- Ancillaries including gate valves, adaptors, condensate pumps and insulation

Air handlers are ideal for warehouse cooling applications and other large scale environments such as factories and distribution centres. They condition the air by pulling it through an internal coil. This coil is cooled by cold water from the chiller, so as the air travels over the coil the heat is removed, and the air temperature subsequently reduces. The air is also filtered, to preserve overall air quality. Once this process is complete, the air is returned and pushed back out to cool the space at a consistent temperature.

There are a multitude of available options for ducting and diffusing air. For this application, the air handlers were stacked, in pairs, with a 45° ducting bend. This ensures all the cool air is blown above head height, giving the best distribution around the facility, whilst keeping the environment comfortable for the staff (after all, no one likes being blasted by lots of cold air!).

The Aqua Pro+ chillers were positioned outside of the warehouse building, with the air handlers sited inside. Aqua's air handlers are stackable, so have a smaller footprint than other models, plus they incorporate electronically commutated (EC) fans. Units with EC fans are smaller again than those using centrifugal fans, as there's no need for motors, inverters, or pulleys. They also achieve a more efficient operation and are more reliable as there's less risk of mechanical failure.

The Aqua Pro+ chiller units operate on low GWP refrigerant, are highly efficient and incorporate an innovative evaporator design. As well as minimise running costs, they are extremely reliable and a more sustainable choice for businesses looking to improve their eco credentials.

Results

Within 24 hours from the initial call, air handlers and chillers were on their way from Aqua HQ. Within 48 hours, engineers had installed and commissioned all the equipment ready to hand over to the client. With the warehouse achieving a consistent optimum temperature, their hamper range, business, and people were now protected for the summer months.

"Temperature control dramatically impacts the efficiency and effectiveness of a storage facility"

Aqua's Hire Director, Ben Davies.

"We provide similar warehouse cooling rental solutions every year to a wide variety of retailers who can't risk being without during a hot spell. Just a few days of high temperatures can really affect business performance. By hiring the air handlers and chillers, there's no capital outlay and when the equipment's no longer needed, it's simply off hired by a simple phone call to our rental desk."



For more information on your next warehouse cooling project, chat with the team 0330 818 7969.