

Lexon case study

Warehousing that's cool for chemists

Effective, reliable I would not and economical hesitate to temperature control recommend are prerequisites for Clean Air. Their pharmaceutical engineers have storage. Clean Air the highest deliver just this at standards of Lexon's distribution workmanship centre in Redditch. and proved willing to go the extra mile

Air Conditioning Evap Cooling Heating Ventilation Maintenance

complex job. Yogesh Patel Lexon UK

on what was a



Where it started

Lexon are one of the largest independent pharmaceutical wholesalers in the UK. Providing a catalogue of over 8000 products to more than 3000 pharmacies requires large distribution hubs that have to maintain temperature below a set point in order to comply with Medicines and Healthcare Products Regulatory Agency (MHRA) guidelines. Whilst the existing extraction system removed heat from the building, it was now time for an upgrade. A system that would be reliable, economical and able to cope in a heatwave.

The brief

With a warehouse of over 7000 m² to cool and such exacting requirements, the choice of contractor and plant was critical. Fortunately the right heating, ventilation and air conditioning contractor were soon identified by Lexon who, after speaking with a satisfied customer in the same industry, and then seeing the product in action, quickly set our engineers to designing a cooling system to meet their brief. An order duly followed and the job was under way.

Design and Engineering

An important first step is the identification of hot or cold spots. Potential problem areas were considered. For example high storage areas, or the packing, loading and return bays. Also factors that can influence temperature such as doors and windows.

The Solution

29 CoolBreeze QAD230 evaporative coolers were the prescription. The units introduce fresh, filtered, cool air into the building, bringing temperatures within MHRA quidelines.

The racking at high levels received our particular attention. A continual flow of cool air is pushed along each aisle while carefully balanced ducts provide even distribution. Extra roof vents then expel the hot stale air.

During the design, alternative air conditioning technologies were considered. They too could have maintained the temperature in the building. However, they were expensive to install and prohibitively costly to run. For a building this size nothing else comes close to evaporative cooling. As water is the principle means of cooling, no CFC's are required and so average running costs - for an 8 hour shift - begin at just £1 a day. The results are big energy savings, vastly lower bills and superb CO² credentials.

The Result

The first result was an early one. The Lexon premises are a busy and complex distribution hub. Clean Air met the challenge and completed the installation with minimal disruption to daily operations.

However it was shortly afterwards, during the summer of 2018, that the 29 units established their true worth. Despite sweltering 30°C + highs outside, the temperatures inside remained within MHRA tolerances.

As an exemplar in how to cool a pharmaceutical warehouse, Clean Air are justifiably proud of this installation. Lexon too share in our delight. We now maintain and service all of the units we installed and our relationship with Lexon continues to thrive.

CLEAN AIR GROUP Freephone 0800 0266 383















