

Calorex DH300

A Calorex DH300 dehumidifier provides a reliable and efficient method of solving problems of excess moisture and condensation that can cause damage and deterioration.

Processing plants

AB Vickers, a market leader in the technology of specialist products used in brewing beer, has opted for a Calorex dehumidifier, for the second time, to ensure optimum environmental conditions are sustained in the drying room of its Burton Upon Trent processing plant.

When an updated model was required due to process changes that required a higher drying room temperature, Williams Air Conditioning recommended a Calorex DH300 to replace a Calorex DH150 unit that has been in situ for more than a decade.

“The original DH150 had been successfully maintaining the conditions within the drying room, however, the



client required a unit that would run at a higher temperature. The DH300 model was specified for this reason,” explains Bill Pratt of Williams Air Conditioning.

“DH300s run at an average of 30°C, so the unit we installed was modified to run at the desired temperature of 40°C and humidity at 15%.”



Stock image of warehouse

AB Vickers is a market leader the technology of isinglass and other brewing aids. Isinglass is a pure form of collagen collected from the dried swim bladders of tropical and sub-tropical fish, typically cat fish, and is used to accelerate the clarification of beer. As part of the production process, isinglass must be dried before it can be made into a powder and it is in the drying room that this process takes place at the AB Vickers factory.

Precious metals

As the leading supplier of commercial water heaters in the UK, Andrews Water Heaters must ensure its products are kept in mint condition.

With this in mind, the company has specified two Calorex DH300 dehumidification units for storage areas at its West Midlands base.

Dehumidification is heating with hidden talents. Unlike traditional heating methods, dehumidifiers don't just raise temperatures

but, at the same time, they will control atmospheric conditions by taking potentially damaging moisture out of the air.

Removing potentially harmful moisture from the atmosphere alleviates problems caused to materials such as metal, paper and soft furnishings that are vulnerable to damp and condensation.

Traditionally, this type of problem is disguised by heat and ventilation that is far less energy-efficient and more expensive. By comparison, Calorex dehumidifiers re-circulate the internal air and positively, in a controllable, efficient manner remove moisture from it. In doing so, humidity can be controlled without the need for heat, regardless of outside air conditions.

“Calorex means the best in quality and reliability for industrial dehumidification with the added bonus of a team of friendly people,” explains Paul Yunnie, of Andrews Water Heaters.



Livishie Power Station



“Calorex was the obvious choice because its products are strongly specified by many of the country’s most prominent consulting practices and clients.”

Power stations

Sensitive equipment at the newly refurbished Livishie Power Station, in the Scottish Highlands, is being protected from potentially damaging moisture – thanks to a high capacity DH 300BY dehumidifier from Calorex Heat Pumps of Essex.

The hydro-electric power station, owned by Scottish and Southern Energy, is located in an underground ‘cave’ cut out of a mountain near Inverness.

“This is an unmanned station which is reached via a 300-metre tunnel that has been dug into the mountainside,” explains project consultant Doug Soutar.

“There is a fair bit of moisture in the air because it is so deep into the mountain, and so dehumidification is necessary to protect the turbines and sensitive control equipment.

“There had been a dehumidifier at the site previously, but it needed updating as part of the overall plant refurbishment project,” he adds. “The Calorex DH300BY was considered the most appropriate

replacement – and everyone is very happy with it.”

The dehumidifier was fitted and commissioned by Active Air Conditioning, of Aberdeen, complete with a two-year warranty. This was the first project of its kind undertaken by the firm, but went ahead without a hitch, says Active’s Air Conditioning Manager Stuart Flint.

“It is all self-contained and the fitting and commissioning proved very straightforward, despite the unusual location of the site,” he adds.

The Calorex DH300BY provides humidity and dew-point control in a wide variety of situations. Typically, it is capable of removing 300 litres of water in a 24-hour period – and can play a vital role in protecting machinery and equipment from corrosion.

DH300

Drying by traditional heating involves continuously warming a stream of outside air on a constant ‘in and out’ cycle equivalent to eight times the volume of the room every hour.

Dehumidification, on the other hand, is much more sophisticated. It re-circulates the same air and physically removes moisture from it. Typically, for every unit of energy that a Calorex dehumidifier consumes, it will convert 2.5 times this amount to useable heat. The potential energy savings are huge. In fact, compared to traditional heat and ventilation energy, cost savings of 500% are not unusual.

The DH300 dehumidifier from Calorex are versatile floor standing units that are suitable for a number of applications including:

- Industrial agricultural
- Warehousing/equipment stores
- Metals storage
- Pumping stations
- Spare part stores
- Museums and art galleries
- Electrical sub-stations