

FINDING THE RIGHT SOLUTION

A high pressure humidification system from Humidity Solutions is improving productivity at VGL. We find out more.

Humidity Solutions recently came to the rescue at VGL – Vinyl Graphics Ltd, a family run digital and screen print company based in Reading, which manufactures vinyl graphics from vehicle or building wraps to branded pop up stands.

The warehouse at VGL occupies approximately 15000 m³, with several printing machines within it generating considerable heat. The building has three large roller shutter doors that are often open, allowing outside temperature and humidity levels into the factory. VGL knew that stable conditions of 55% to 65% relative humidity (rH) were required within the space to eliminate static and paper curl whilst also providing dust suppression of any airborne particles.

Relative humidity needs to be maintained at between 55 to 65% rH for machines to run at optimum efficiency and also ensure stock is maintained in best condition whilst ensuring dimensional stability required for high quality finishing. However, having monitored and collected over a month's worth of data, the company could see that levels varied considerably over the period, and had only reached a maximum of 50% once, hence the call to Humidity Solutions.

EFFECTIVE APPROACH

Due to the large factory size, and the fresh volumes coming into the environment, a system with good capacity and the ability to deliver the moisture over the areas of concern would be the correct equipment so Humidity Solutions recommended the Airtec Hydrosens system as the most effective and appropriate solution. This system uses a high pressure pump to run water through flexible pipework at high level out of the way of production, which branches off into sections of the production area with the water atomised through nozzles that produce a fine mist over target areas.

Tom Barker, sales executive at Humidity Solutions, commented: 'This localised approach means that even when the roller doors are open the required relative humidity levels are achieved in the key areas of the production facility. A further benefit of this system is the 'free' cooling effect of anything up to 4 to 8° C which occurs as the water is evaporated.'

Once installed, the Hydrosens system has some of the lowest ongoing costs of any alternative humidification options such as steam or compressed air systems.

COLLABORATION

Due to the high demand for VGL's products, no factory shutdown was possible, so Humidity Solutions was happy to work with the customer to manage full installation of the system as operation continued. In fact, the on-site presence of VGL staff as a result meant that operators could quickly become familiar with the Hydrosens system, and full collaboration and training could be achieved from the outset with Humidity Solutions' team of experienced engineers.

Rupert Dadd from VGL confirmed that the new system has been 'doing a great job' and has resolved all the previous issues they experienced. Productivity has improved as machines are working under optimum conditions. VGL has also taken out a planned maintenance contract with Humidity Solutions. This is a cost effective way of ensuring that all the equipment is maintained regularly, spares are replaced as required, reducing the need for costly emergency callouts and giving peace of mind to the production team.

The result is a trouble free system that supports the company's production quality and productivity, reducing downtime and allowing VGL to focus on its printing without worrying about environmental issues. **PS.**



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