

Case Study

UMA Converters enjoys improved indoor air quality with HMX-IDEC

Background

UMA Converters, a two decades old Ahmedabad based company, has become a force to reckon with in the field of manufacturing flexible packaging. The company provides packaging materials to a wide range of industries for multifarious packaging functions.

Challenges

In the hot and sometimes humid climate of Ahmedabad, the temperature inside the shop floor at UMA Converters used to shoot up to 50°C. This plant lacked a suitable ventilation system for sufficient air circulation in these demanding conditions.

The soaring temperature and the legacy air handling systems had been creating numerous problems for UMA Converters, such as:

- Increased solvent losses due to evaporation
- Ingress of dust on shop floor due to lack of positive pressure
- Increase in VOC (Volatile Organic Compounds) levels affecting workers productivity and efficiency
- Fumes generated in the printing process were recirculated without an escape route, resulting in severe deterioration in the Indoor Air Quality (IAQ)
- Reduction in product quality
- Low employee morale and low productivity

Solution

To overcome these perennial problems, the management decided to look for solutions that would address the above issues, and at the same time be economical. After a detailed study at the plant, HMX offered its well proven Indirect Direct Evaporative based cooling solution- IDEC, with a total capacity of 90,000 CFM to maintain the desired conditions inside the plant.



HMX-IDEC at UMA Converters

Solution

The HMX-IDEC proved to be a master stroke for UMA Converters – addressing all the problems at one go. With the installation of the IDEC, temperature is now maintained around 27°C year round. The IDEC have reduced the dust on the shop floor by creating positive pressure; as well as reduced solvent losses due to evaporation by bringing down the temperature inside shop floor considerably. Problems of static charges were also taken care of as the IDEC reduces dryness in air. VOC levels which can cause a gamut of health problems got reduced owing to inflow of 100% fresh air through the Ambiators. Employees are also very pleased with the good IAQ (Indoor Air Quality), which is improving productivity.

“ We were eagerly looking for some kind of comprehensive solution. The HMX Ambiator helped us to address multiple problems with a single solution. Conducive environment has given improved printing precision and working environment. Solvent consumption has reduced by 10-15% which has benefited the environment. Better employee satisfaction has resulted in better productivity. We are proud to use this eco-friendly solution and I thank HMX for bringing out such a good product. ”

– Mr Sumer Lodha, Director – UMA Converters Pvt. Ltd.