

Saturn Textiles Ltd.: Elevating Workers' Comfort with Cost-Effective HMX IDEC Solutions

Background

Saturn Textiles Ltd. is a leading garments manufacturers based in Ghazipur, Dhaka, Bangladesh. They manufacture garments for the well-renowned Tommy Hilfiger brand.

Challenges

During the summer, Dhaka's temperatures can reach a stifling 40°C. Saturn management was keen to provide a comfortable working environment for their workers. The challenge involved not only creating a comfortable work environment but also achieving this in a cost-efficient manner, considering the large workspace that required cooling and the essential nature of the garment industry. To begin with, they aimed to cool the first floor of their garments' processing section to maintain a desired temperature of 26-28°C while ensuring proper ventilation. Given the large space and the need for both ventilation and cooling, air conditioning was an expensive proposition. Therefore, Saturn Textiles sought other economical yet effective options.

Solution

Saturn Textiles management zeroed down on Indirect Direct Evaporative Cooling (IDEC) from HMX, as it was both an effective and economical solution. After analysing the heat load of the target area, it was concluded that 3 units of HMX IDEC 22K (22,000 CFM) were required to achieve the desired design conditions.





Result

Even during peak summer, it is possible to maintain temperatures of 28-29°C with uniform air distribution and adequate ventilation. HMX's IDEC units offer comfortable working conditions with lower operational expenses and improved indoor air quality, unlike conventional air conditioning. Satisfied with the performance of the existing HMX units, the management has decided to extend the HMX cooling solution to other floors of the facility.