

Processing Plant Case Study



The Problem

The Gillette factory, based in Reading, produces a range of bath-care products. Its mixing room manufactures the base products which are then incorporated into shower gel, shaving foam and deodorant.

This area was extremely uncomfortable due to the energy intensive operations used in the manufacturing process.

The remainder of the factory is air conditioned but this was considered both too expensive and impractical for this area.

The Solution

Eleven down discharge evaporative coolers and three extract fans were installed as part of a balanced ventilation scheme, in the place of glazed panels in the roof.

Because of the lightweight nature of the roof all the weight of each cooler was supported by the duct, which in turn was supported by steelwork attached to the roof structure. Services were fed through the duct and then to the underneath of the cooler to minimise the number of roof penetrations.

Air was ducted to the mixing area and discharged using adjustable six way plenums.

The system was integrated into an existing Trend building management system which controls the operating time of the coolers and picks up any alarm conditions reported by the coolers.

The Results

The system is so effective that the shortcomings of the air conditioning system in the adjacent factory, such as its inability to cope with extreme conditions, high running costs and poor air distribution, have become obvious.

Interesting Facts

Because of the sensitive nature of their products, Gillette recorded the quality of the air in the mixing room before and after the system was installed, and found a significant improvement.