

## EXHIBITION HALL 11, FRANKFURT (GERMANY)



TROX had already previously developed and supplied specially sized induction units for exhibition hall 3 in Frankfurt. In exhibition hall 11 with its new West entrance, a cooling effect of 27 kW per device needed to be produced. This posed a particular challenge to the ventilation technology.

Calculations using complex simulations established that the optimal result could be achieved using special active chilled beams, which can supply cooling air in a discharge angle varying from horizontal to vertical – depending on the current load. In total, 288 induction units with one or two-way air discharge have been installed in the two-story hall at a height of ten metres. The maximum dimensions of each device are 2.50 m x 1.80 m x 0.65 m.

The air-water systems supply the hall with 2,000 m<sup>3</sup>/h treated primary air. The Type IDH active chilled beams are designed for large halls and suitable for large thermal loads. The new exhibition hall opened for the 63rd International Motor Show, IAA Cars 2009, in September 2009.

Circulating two million cubic metres of air per hour without draughts or noise and using a minimum of energy? Yes, it can be done! The proof, courtesy of TROX can be inspected in the new exhibition hall, “Halle 11”, at Messe Frankfurt.