

Puradigm Case Study (Ireland)

Background

Our client is a regional food processing company involved in the dairy business. During recent months they encountered significant issues with airborne mould in one of their production units. Readings on a daily basis showed mould counts >1000 on up to 10 locations in the hall

The HVAC system at the plant incorporates 3-stage filtration, with G4 prefilters, F7/ISO ePM2.5 secondary filters and third stage HEPA filtration. All of this ensures the air from the air handling units is filtering >99.97% of pathogens.

The production hall, however, is not operating under positive pressure at all times: doors are opening, loading bays are being accessed and personnel are entering and leaving.

All this leads to airborne mould entering the building.

Solution

We installed a Puradigm HVAC cell in the AHU, immediately after the HEPA filters. The cell is a 14" unit with the power to create 30,000 ions per cubic centimetre. The ions flood the ductwork and proceed down into the production hall, carried by water vapour in the airstream.

HVAC Cell in ductwork



We then installed a secondary Puradigm Pro unit, wall mounted, in the production hall at a pre-determined location.

The combination of the Pro and HVAC cells provide an output of 90,000 ions per cubic centimetre.

Both units are completely safe to operate in any area where personnel are working. Each unit operates 24/7 using advanced photo-catalytic oxidation with no ozone generation.

Results

After 24 hours operation the airborne sampling showed mould counts reduced to zero at eight locations and between 0-20 at two locations. The system remained in place for 4 weeks with the same results showing on a daily basis.

Conclusion

Puradigm advanced ionisation and high energy clusters are highly effective at neutralising airborne mould. In this instance we installed the system in a food producer, however it is suitable for a wide range of applications such as medical, pharmaceutical and commercial.

For more information on this case study or a free consultation please email us on sales@cliniair.com