

ENERSHIELD EUROPE

Energy Saving Air Barriers



Creates up to a 90% seal on open doors using facility air

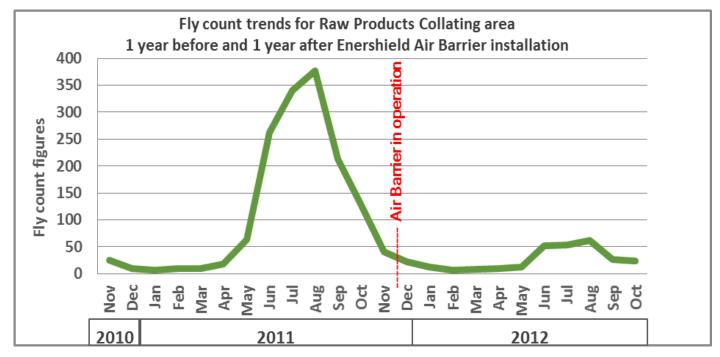
CASE STUDY 11

INDUSTRY

FOOD MANUFACTURING

APPLICATION AREA

COLLATING AREA FOR RAW PRODUCTS



Flying Insect Data for 1 year before and 1 year after Air Barrier Installation



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Customer Challenge:

Preventing flying insects entering the building

Enershield distributor C-Mech Services Limited were approached by a client which specialises in food manufacturing. Due to the nature of the product, flying insects are attracted to the facility.

Existing measures

The only large entrance door, 3m x 3m, leading into the facility already had a rapid opening PVC door but due to the frequency of use, the door opening was still a vulnerable point of entry for flying insects. Although the numbers of flies actually getting into the facility has always been kept within acceptable limits, achieving this sometimes meant adding more EFKs (electric fly killers) or periodically fogging.

Production Quality

As part of their continuous improvement program, the client wanted to ensure that fly numbers, especially those entering the building by this door opening, could be more tightly controlled. Essentially they wanted to achieve a higher level of Food Safety Integrity as required by their many high profile customers.



Enershield solution:

An Enershield DSH-120 Air Barrier was installed in front of the existing rapid roll door leading from outside to the raw products collating area within the main building. Enershield air barriers create a laminar flow of air, forced across an opening to create a virtual door and form up to a 90% seal which separates the environments on either side. The existing ambient air within the building is used to produce a high volume, high velocity laminar sheet of air that creates a barrier and prevents flying insects from passing through.

Result:

Detailed fly counts from the Electric Fly Killers (EFKs) in the collating area were taken illustrating a 73% reduction in fly numbers when comparing the 12 months before and after installation. Actual percentage reduction was 77% but adjusting for a general seasonal reduction in fly numbers for the year of study, the reduction was factored down to 73%.

Additional Benefits

In addition, since installation of the Enershield air barrier, there has been no need to carry out any fogging.

A secondary result in this case has been to conserve temperature within the facility. Enershield Air Barriers are commonly used to prevent temperature loss and this was achieved in this case.





