



Insect Barrier

A MNC manufacturing specialty chemicals & adhesives, as lead supplier to a leading MNC manufacturing hygiene products faced severe insect issues at their production set up.

Acme Air Curtain Team was called in to remedy this situation – at stake was our prospective buyer's reputation and their relationship with their customer.

Problem

A SOS from leading MNC specialty chemical & adhesive manufacturer to help prevent insects entering from outside within their production facilities, led us to evaluate their site conditions for determining types of air curtains required at their locations.

Site Conditions

- ✔ A huge well laid out production set up situated amidst dedicated industrial area, within vast farmlands.
- ✔ Agriculture land reason for insect ingress. Extreme insect invasion experienced during monsoon breeding periods.
- ✔ Insect ingress occurs through fast roll up doors and synchronized air lock areas when used for material movement or man movement.
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- ✔ Insects were entering despite of having other brand air curtains + insect killer UV lights + pest control methods and fast rollup doors at all material movement airlock openings. This was because insects passed through the weak air drafts of previously installed air curtains,



to further travel from warehouses to the packing / production area within the plant. Though largely a closed production circuit, insect did get into packed finished products. This resulted in rejection of batches from customer end affecting the client's reputation.

Solution

Acme designed and supplied a combination of high speed and high cfm units (different air curtains models for various opening sizes), good for opening sizes starting from 5m W x 4.0m H to 1.0m W x 2.1m H. All units supplied were near 100% insect barrier industrial air curtains generating an air draft of high cfm and high floor level velocities meeting ANSI standards of 4-6 m/sec floor velocities.

Acme Air Curtains engineered custom air barriers ranging from multiple units of SEHV[XXX]-60 for larger openings to SEHV-54 for smallest openings. All units or combination of units were installed to ensure the entire width of each opening is well covered with an effective and efficient air barrier. These air barriers were largely uniform in offering velocities all across horizontal plane within the air draft. The percentage of air velocity variation across any horizontal point in air draft was absolutely minimal, if any. Initial order of 27 units was executed to client's full satisfaction. . All units functioning were synchronized with working of doors or fast rolling shutters.

Management of this MNC was extremely delighted with the performance of initial order and hence decided to confirm further orders totaling to 73 units all in 6 months from initial order. All heavy duty, high speed and high cfm units within one plant.

Acme Field Team supervised installation of all these units by the client's utility services department.

It's been a few years since we supplied our first batch of 27 units. Still going strong with hardly any inputs or resources of client towards preventive maintenance, other than de-dusting of flow fans and cleaning of actuation panel contactors.

End result

Senior management with all floor staff extremely happy with the outcome of insect free environment, which resulted in client's team receiving recognition from their MNC client as well as their own Asia Pacific head for job well accomplished.

Team Acme was asked to address a situation, which was more than just preventing insects effectively. Addressing the problem was an effort towards reinstating the confidence between two old associates. At Acme Air Curtains, we are glad to be a part of their solution initiatives.