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PARAMETERS TO CONSIDER BEFORE CHOOSING AN AIR CURTAIN

There are two primary questions that need to be answered and understood:

1. Will Air Curtain work for me ?
2. What are the parameters required to choose the Right Model ?

Basically, there is very limited information you require to decide on the requirement of the air curtain:

The Basic information required to know, whether air curtain will be suitable for your facility or not, are as follows:

- a. Width and Height of the Opening
- b. Negative Pressure in the facility
- c. Outside Wind Draft
- d. Purpose of Installation
 - i. Insect Control
 - ii. Dust Control
 - iii. Save Conditioned Air
 - iv. Odour Control

With these basic information, we can judge whether the air curtains will work for us or not.

3. Factors affecting the selection of air curtains can be classified into 2 categories:
 - a. Primary Parameters.
 - b. Secondary Parameters.

Primary Parameters Secondary Parameters

Type	Voltage
Flow	MOC Blower
Mounting	MOC Chassis
Fan	Operation
Placement	

The Primary Parameters include a variety of options that affect the performance of an Air curtain like:

Type

- a. Recirculating
- b. Non-recirculating

Flow

As discussed above, there are three types of flow:

- Top to Bottom
- Sideways (L to R, R to L)
- Bottom to top

Mounting

Surface Mounted

Recessed

Fan

There are three types of fans to choose from:

- Centrifugal
- Crossflow
- Axial

Placement

Inside

Outside

The air curtain can be easily mounted on either side; whether inside or outside the conditioned area. Usually, it is recommended that the equipment should be installed towards the warmer side for optimum results. It implies, when installing a heated air curtain under cold conditions, it should be installed Inside. Places where the temperatures are too high and the

major problem are dust, flies and saving the cold air, it should be installed outside to get the best results.

Even the secondary factors play an equally important role in the selection of an air curtain. They include:

Voltage

The voltage output plays a major role in the selection of air curtains as these machines are specially designed to operate with the mentioned amount of electric outputs. For Indian markets, air curtains are designed with respect to these three outputs:

- 220V/ 1 phase/50Hz
- 220V/ 1 phase/60Hz
- 440V/ 3 phase/50Hz

Otherwise, for the Saudi Market, curtains that work with 220 V 1 P 60 Hz output are demanded. Air curtains can also be installed in buses and are specially built for 24 V/ DC. Thus, information on voltage is important for picking out the right air curtain for you.

MOC for blower

MOC or the “Material of Cover” for the blower is another specification on the basis of which air curtains are selected. The covers are made of different materials to suit different requirements, such as:

- Galvanised Iron
- Plastic
- Stainless Steel

Parameters to Consider before Choosing an Air Curtain

- Aluminium

MOC for Chassis

Chassis basically refers to the main mounting and the fixing plate of an air curtain. For the chassis, the customer usually has two options of either picking one of the two materials;

- Stainless Steel 304 or
- CRC Powder Coated

An air curtain consultant can help you in picking between various options.

Operation

- Switch Operated
- Remote

Automatic coupled with the Door

To find help in choosing the air curtains, you can go and visit www.mitzvah.in or choose one from the online store www.mitzvah.in/store