Dampness, Moisture or Humidity is *NOT* Good For You

at Tripti's we make sure to keep you *DRY*

TRIPTI

Dehumidifiers

The problems related to product drying are typically: Quality of Drying & Speed of Drying Conventionally, products are dried with hot air. However most products which require drying are temperature sensitive.

Moisture is present in the products as:

- Free moisture in form of surface moisture generated due to washing or mixing the product with water prior to drying.
- Hygroscopic moisture which is held within the product.
- Combination of both.

Drying operations involve the removal of all moisture to the required level. Surface moisture(and it is often assumed that it is only type of moisture present) is conventionally removed by raising the product temperature by using hot air to vaporize the moisture. However this can result in product spoilage as many products like cocoa, gelatin, coffee etc are temperature sensitive and need to be dried at low temperature. Proper removal of the hygroscopic moisture depends on the difference between the relative humidity of the air surrounding the product and of the product's equilibrium condition. If the RH of surrounding air is lower ,then the product will give up its hygroscopic moisture to the drier air to be in equilibrium with its surrounding velocity of the air over the product has little or no bearing on the drying speed.

Product Drying application are typically:

- Bulk (Batch)drying when material is loaded into a compartment and entire load is dried as a batch.

- Continuous drying is when the wet material continuously is fed into the drying room/chamber and it leaves the chamber, dried to the desired result.

As every material has different physical characteristics, which determine how it holds or gives up moisture, and published data on their drying is generally not available, selecting appropriate air-drying equipment must be done experimentally. Usually the sudden change in drying rate (at the critical point) donates where the initial drying via removal of free moisture ends, and hygroscopic drying takes place over. In other words, the product has lost its free moisture but is still hygroscopic ally saturated. However the net effective drying surface and hygroscopic properties cannot be determined in any other way.

Advantages of Using Dehumidification over other methods:
Dehumidification is the most cost effective and easy method to ensure drying without spoilage as the drying is based on the difference in vapor pressures of water in the product and the surrounding air. By physically removing the moisture from air, through the condensation the evaporative potential of the air is maximized.

- Why Dehumidification if better:
- Better quality drying with more uniform drying
- Faster drying rate without the risk of product spoilage
- Reduction in speed for drying
- Low power consumption


Corrosion


Drying Building

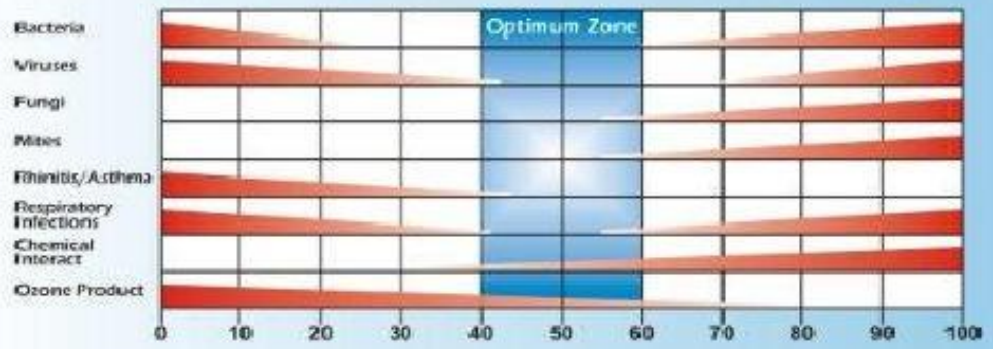

Mould


Condensation


Hydroscopic material


Ice Formation


Bacteria



Where humidity control is vital ?

- Pharmaceutical Laboratories
- Punch card Storage rooms
- Capsule, Strip packing, Tablet Section
- Photographic Industries
- Coating Dept.
- Communication Equipment cabins
- Spectrophotometer & Instrument Rooms
- Computer and data storage rooms
- Library
- Electrodes Storage
- Pharmaceutical Laboratories
- Packing Rooms
- Locker Rooms
- Processing Industries
- Textile wrapping & Quilling rooms
- Printing & Lithography
- Wood Seasoning
- Painting Booths & Painting Industry
- Food Storage
- Powdered sugar users
- Banes

Axial Fan with Heaters

Dehumidifiers

Wood Seasoning Plant

Panel




Technical Specifications:

MODEL	DIMENSIONS	VOLTS	AMPS	NO. OF	RECOMMENDED ROOM SIZE*	
					RESIDENTIAL	COMMERCIAL
	L X D X H(INCH)			FANS	IN SQ FT(10' HT)	
TDV20	16X15X24	230V	1.9	1	75	30
TDV30	17X15X25	230V	2.1	1	100	50
TDV50	21X17X29	230V	4.5	1	150	75
TDV75	25X17X34	230V	5.9	1	200	100
TDV100	27X19X35	230V	8.0	1	250	150
TDV150	27X19X35	230V	9.0/4.5	1	300	200
TDV200	27X19X35	230V/440V	12.5/5.2	1	400	300
TDV250	29X21X37	230V/440V	14.8/5.8	1	500	375
TDV300	29X21X37	230V/440V	18.0/7.3	1/2	600	400
TDV400	31X23X39	230V/440V	24.3/9.9	1/2	800	600
TDV500	33X25X44	230V/440V	29/13.2	1/2	1000	750
TDV600	35X27X44	230V/440V	36/14.6	1/2	1200	800

(a) Type : Water condensing type
(b) Capacity : Compressors 0.2 TR to 20.0 TR.
(c) Compressor : Hermetically sealed Compressor to operate on Single Phase & 3 Phase.
(d) Coil : Both Heat exchanger and Water condensing coils are made of Copper pipes finned with Aluminum sheets.
(e) Fan Motor : Single shaft motor fitted with blower/fan dynamically balanced.
(f) Chassis : The sheet metal components made out of heavy Galvanized sheet and Powder Coated after 7 tank hot dip chemical pre-treatment. The unit is designed to mount on trolley with castors.
Easily removable casing panels makes all parts easily accessible.
(g) Humidistat : Dehumidifier is fitted with Digital Controller for accurate humidity with built TDR (Time Delay Relay)
(h) Pump : Automatic water level controller with automatic water disposal pump available (Optional)

Our Other Product Range

Air conditioners, Chilling Units, Air curtains, Clean Room Equipments

Dealer

Perfect Airconditioning Trading Company
A-269, Okhla Industrial Area, Phase - 1
New Delhi - 110 020(INDIA)
Telefax : 26811832, 26817098, 26817099
Email : ac@tripti.in Website : tripti.in

9810031168, 9810270433