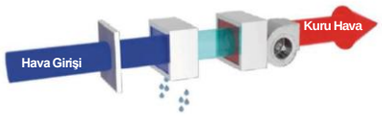
Dehumidifiers



In areas where high humidity is not desired, it is possible to reduce the humidity by condensing the moisture in the air or keeping it on the silica gel surfaces.

Condensing Dehumidifiers

This dehumidification technology exploits the physical process of condensation of water vapor through the cooling of the moist air through a heat exchanger (finned coils) producing water condensate. This process is more efficient at medium to high temperatures and under conditions of high relative humidity (greater than 40%). Condensing dehumidifiers TFT ensure high performance for industrial, commercial and private uses are generally used in environments where it is necessary to control the level of humidity or prevent condensation.

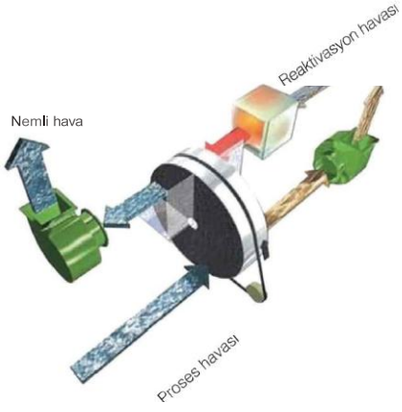
Condensing dehumidifier models are below.

- **Hercules :**Suitable for industrial buildings that are too large and with very high humidity conditions
- **Vega :** Suitable for indoor swimming pools,

designed to ensure maximum climatic and hygienic comfort.

- **Gemini :**Suitable for homes and offices, offers great flexibility of installation to suit the needs of space in urban environments of everyday use.

Adsorption Dehumidifiers



The adsorption dehumidifiers using technology based on the use of naturally drying materials (i.e. endowed with high physical-chemical affinity towards water vapor), as the silica gel. This operation technology makes them suitable for use in environments where they require humidity values even at low temperatures and

Constant values dew point very low (up to -60°).With this technique it is possible to dehumidify dehumidification of any type of environment in any condition. The Model AD is (Air Dry) to respond to the need for dehumidification to extreme temperatures (below 0 ° C) and very low humidity values. The dehumidifiers in this line are particularly suitable for continuous operation of stationery and mobile. To limit the energy consumption result TFT proposes integrative solutions like Heat Recovery Systems capable of recovering up to 70% of the heat generated by the machine to re-enter the cycle of operation, generating a considerable saving.

Where to Use Dehumidifiers

Fungus and Mold: The formation of mold and fungus directly on products and packaging containing them can be avoided by keeping the level below 70% relative humidity (RH) of the air. This is important in many situations, for example in the deposits of products, in production environments and packaging. In these cases, it is necessary to use a dehumidification system fixed or mobile to maintain the required values.

Hygroscopic : Some materials, such as powders and flour, in contact with humid air forming lumps, remain in a sticky status or degrade easily. In these cases, it is recommended to introduce into the production process an appropriate dehumidification system designed ad hoc. Most hygroscopic materials require very low dew point and controlled humidity conditions that are obtained only with the use of.

Bacteria: Bacteria need moisture to survive and multiply. This problem becomes particularly serious and impactful when treating hygroscopic materials, such as in installations of packaging of drugs or in the chemical and food industries. Maintaining the temperature and the relative humidity low (usually less than 50%) prevents the proliferation of most of the bacteria and thus avoids the damage to the products.

Bad Smells: To maintain a healthy environment and comfort, not only for the products but also for the personnel handling them, it is necessary to counteract the formation of unpleasant odors by maintaining the rate of relative humidity below 50% (RH) with the aid of air filtration systems. Thanks to new and efficient energy recovery systems, it is also possible to guarantee an appropriate better comfort in the environment with a considerable saving in money. These applications are very well suited in environments such as banks, supermarkets, hotels, large office buildings.

Humidity control: In production processes involving drying or dedication of sensitive products at elevated temperatures, it is necessary to install a dehumidification system that maintains the relative humidity low even at low temperature. This procedure avoids the formation of condensate and / or the formation of ice, ensuring a better resultant faster in the production cycle with a considerable saving of energy and money

Food: Processes of freezing, packaging and storage in cold storage at low temperatures. Cooling tunnel, handling raw food powder, sugar processing (milling, grain, powdered sugar). Drying and curing cells of meats and cheeses, drying with dry air for ready to use salads, drying with controlled temperature of vegetables, low temperature drying of herbs. Deposits industrial grain seed, automated storage. Pneumatic conveyors, storage silos.

Pharmaceutical: Local production, packaging, laboratories and warehouses, drying rooms, purification, sterilization, freeze-drying and sealing require controlled temperature and relative humidity. Hospitals, surgical and outpatient locals and analysis laboratories must be equipped with a dehumidifying system certified and guaranteed to keep the premises sterilized.

We can work on any phase of processing and production of medicines in powder, tablets or effervescent tablets, liquid or gel, coated with film, bottled or in syringes.

Chemical: Disintegration of metallic materials, production of chemicals, disposal, extraction, recovery and purification of chemicals, corrosive and explosive. Painting, textile and tanning industry, building materials, coatings, inks, adhesives, civil engineering, personal care, cleaning industry and institutions, oil field, polyurethane, agriculture, food and paper industries: all these processes processing and manufacturing sectors require dehumidifying system certified, easy to maintain and always working, even in extreme weather conditions, to maintain the treated substances, which could result in serious damage.

Storage: Situations where maintaining relative humidity becomes necessary to store objects and products. Cold storage warehouses and supermarkets, shopping malls, bars and restaurants, showrooms, pantries, lockers of shipping companies, shipyards, military and petroleum products, business records and public garage (public storage doors), containers for transport by road and by sea, gas carriers and oil tankers.

Electronics: Electronics SMD (Surface Mounting Device) requires conditions of low relative humidity to maintain the properties of the electronic components. Places Recommended application: machinery control room, server room. •

Energy: Machinery protection, boilers, turbines (once not used), stocking of material of first necessity that do not contain steel.

Oil and Gas: Workshops and plants to produce combustible gases through distillation reactions, mixture processing; warehouses and storage tanks; companies for the hydrogenation of oils and fats for the treatment of agricultural products for welding or cutting of metal; factories for the processing of crude oil, gasoline and lubricating mixtures

Automotive: Production and testing of airbags, manufacture of tires for cars, installation of windows, drying car paints plants, protection of the components stored in the car, cab assembly prototypes, wind tunnels, dehumidification for the compartments for trains, assembly lines chain.

Defence: Magazines, military units, storage of food and necessities. Maintaining healthy air in garages, workshops and dormitories

Public buildings and civil: Archives, museums and cultural heritage: dehumidification in relation to the sandblasting and painting (vases, containers). Sport and well-being: prevention of condensation on cold surfaces, drying of new constructions, Swimming pools, sports facilities, spas and wellness centers.

Raw Material & Recyclables: Manufacture of wood and derivatives, minerals, metals, agricultural products and animals. Production and recycling of plastics, glass, paper ferrous materials, aluminum, cork and oils.

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