



## TOBACCO HUMIDIFICATION

Increasing profits with  
environmental control

Humidification and Evaporative Cooling



# TRUSTED TECHNOLOGY

Condair humidifiers are used in tobacco processing facilities around the world to maintain product moisture content and production efficiency.

Some of the World's leading tobacco manufacturers put their trust in Condair humidification systems to help them achieve their production objectives.



## GLOBAL EXPERTISE, LOCAL SOLUTIONS

Condair has manufacturing facilities in Asia, Europe and North America as well as sales operations in 14 countries and distributors in over 40 more.

The company has been serving the global tobacco industry for more than 30 years and is highly experienced in many different processing technologies, products, climates and all types of production.

Humidifier systems are designed for each individual application by tobacco humidification experts to create the optimal production environment. If required, Condair's regional R&D departments, can work with a production team to deliver innovative solutions for unique tobacco processes.

Condair's specialist humidifier engineering teams can provide installation, commissioning and maintenance support to ensure improved production efficiencies continue to return on the initial investment for many years.

# HUMIDIFICATION & HUMIDITY CONTROL IN THE TOBACCO INDUSTRY

Humidity control in the tobacco industry is essential in order to maintain product quality and reduce wastage from all manufacturing and storage areas.



## Primary production

Tobacco leaves most primary production areas with a moisture content of 13-16% by weight. An ambient relative humidity of 60-68%RH is needed to maintain equilibrium between the air and the moisture in the tobacco. If it is lower than 60%RH tobacco will be losing moisture, weight and quality.

## Cut tobacco storage

After the primary production processes, tobacco is normally bulked into large bins or silos. Smaller tobacco plants typically will use boxes in cut tobacco stores. These areas must be maintained at 60-70%RH and 21-24°C.

## Secondary production

The maintenance of around 60-70%RH is critical around the maker, catcher band and any on-machine storage systems. Cigarettes can be stored in a buffer for several hours or over a weekend and will lose moisture if the relative humidity is not maintained.

## Recovery & ripping areas

Any loss in moisture will lead to poor recovery of tobacco in ripping rooms where production waste is broken up and re-used. These areas need to be maintained at 65%RH at 21°C.

## Electrostatic build-up

If humidity falls below 50%RH electrostatic charges can occur, particularly in filter rod areas where extra humidity is not normally maintained. If conditions are maintained above 50%RH, then this will totally eliminate electrostatic charges.

## Papers

Cigarette paper must also be kept in equilibrium with the environment. If its moisture changes so will the dimension of the reel of paper along the exposed edges. These are then in tension as the paper runs, which can lead to tears, machine misfeeds and expensive downtime re-feeding the roll.

## Recommended humidity levels

Primary production	60-68%RH
Tobacco stores	60-70%RH
Filter production	50%RH
Cigarette production	65-68%RH
Ripping rooms	65%RH



# SOLUTIONS FOR TOBACCO HUMIDIFICATION

Condair has a comprehensive range of humidification products to suit any tobacco processing facility. From wall-mounted steam or spray units for a small tobacco plant or store to extensive humidification systems for the largest of manufacturers.

Condair also offers a wide range of associated products such as water treatment systems, air compressors, pumps and humidity monitors.

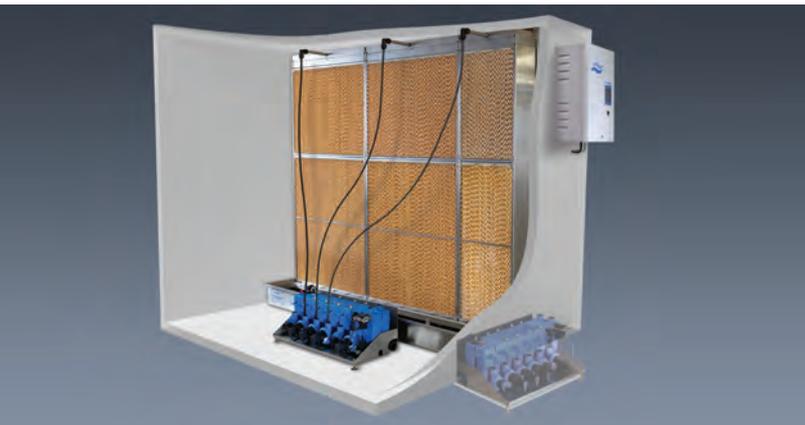
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