



TEXTILE HUMIDIFICATION

Improving profits with
humidity control

Humidification and Evaporative Cooling

 **condair**

TRUSTED TECHNOLOGY

Condair humidifiers are used in textile processing facilities around the world to maintain product weight, improve quality, reduce static and provide air cooling.

Some of the World's leading textile 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, North America and Europe as well as sales operations in 19 countries and distributors in over 50 more.

The company has been serving the global textile industry for more than 65 years and is highly experienced in many different processing

technologies, products, climates and all types of production facility.

Humidification systems are designed for each individual application by textile 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 textile processes.

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

IMPROVING PROFITS WITH HUMIDITY CONTROL

Optimal humidity in textile manufacturing has many benefits that will enhance profitability. These include improving product quality, maintaining product weight, reducing machine downtime and improving employee comfort.



Product weight

Maintaining the correct relative humidity will prevent moisture loss during a textile's processing and storage. Typically losses can be reduced from 4% to just 0.5%, which results in an immediate 3.5% increase in product yield and profitability.

Static control

Static build-up can cause reduced productivity and product quality due to lint and fly attraction, machine jams and employee discomfort or even accidents. Higher humidity naturally dissipates static charges alleviating these problems.

Yarn product quality

Fibre that is exposed to low humidity will become more brittle, be prone to breakage and suffer increased fibre shedding during yarn manufacture. This results in a poorer quality yarn and increased wastage. Correct humidification maintains yarn strength and elasticity, producing a better quality product with higher margins.

Weaving efficiency

Optimal humidification reduces yarn breakages in weaving, reducing machine downtime as well as loom stop marks and weavers knots in the finished product. Condair has helped manufacturers increase their production efficiencies from as low as 49% up to 96% through effective humidity control.

Employee comfort

Cold water humidifiers can deliver around 5°C of evaporative cooling to a textile production facility. The increased humidity will also suppress dust, fly and lint creating a healthier and more productive atmosphere for employees.

Optimal humidity levels

| | Spinning | Twisting | Winding | Weaving |
|-----------------|----------|----------|----------|----------|
| Wool | 50-85%RH | 60-65%RH | 55-60%RH | 50-60%RH |
| Cotton | 35-65%RH | 50-65%RH | 55-65%RH | 70-85%RH |
| Man-made fibres | 45-65%RH | 45-65%RH | 60-65%RH | 60-70%RH |
| Silk | 60-65%RH | 60-65%RH | 60-65%RH | 60-65%RH |
| Jute | 75%RH | 75%RH | 75%RH | 75%RH |
| Linen | 80%RH | 80%RH | 80%RH | 80%RH |

SOLUTIONS FOR TEXTILE HUMIDIFICATION

Condair has a comprehensive range of humidification products to suit any textile processing facility. From wall-mounted steam units for textile testing laboratories to extensive spray systems for the largest of mills.

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

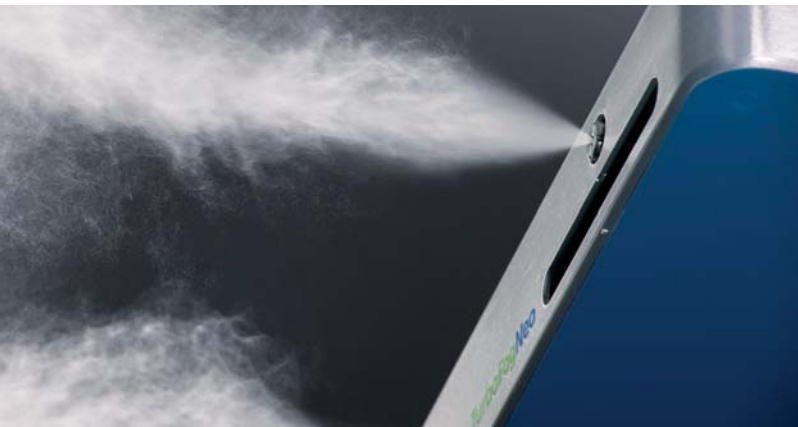
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ML Princess high pressure humidifier



Draabe TurboFogNeo high pressure humidifier



Condair CP3 steam humidifier