

OCT-NOV-DEC 2022 VOL. 42 NO. 4

# **Bry**Shield<sup>™</sup>

## a first-of-its-kind air filtration system for small server rooms

Server rooms are housed with electronic equipment for the storage of important information and data. Electronic equipment is susceptible to moisture and electronic corrosion from gaseous contaminants making the server rooms highly vulnerable spaces.

Moreover, with the miniaturization of electronics, the risk of micro-corrosion/ e-corrosion is amplified. As per industry statistics 75 percent of micro-electronic failures are caused due to corrosion. It leads to downtime. of the machines with the threat of loss of data.

BryShield prevents server downtime and saves losses from server failures by preventing electronic corrosion in small server rooms, control rooms, and electronic equipment rooms across diverse sectors like banks, IT companies, telecom sites, hospitals, R&D centres smoking lounges and laboratories. The innovative air filtration system has been aesthetically designed to prevent e-corrosion in small server rooms by removing gaseous contaminants.

BryShield becomes even more important in a country like India with poor air quality. Here, the corrosion problem is intensified further in cities and industrial areas.









precision air conditioning removes gaseous contaminants and particulate matter. But precision air conditioning

> is not suitable to remove gaseous contaminants from the air.

Advanced technology like BryShield neutralizes toxic gases and releases clean air CERTIFIED with the help of Honeycomb



Chemical Filters - DRISORB™. The patented technology is backed up with macro-porous desiccant-based honeycomb matrix filters that come with a life span of more than a year and is easily replaceable.

The product is compact and light weight that can be easily mounted on the ceiling. At the same time, It

is energy efficient with no noise pollution and can be remote controlled. This product saves data and indirectly benefits the well-being of people by assuring the smooth functioning of the machines.

contaminants.



## Controlling the moisture content of the paper across various processes is of utmost importance

## Desiccant Dehumidifiers and Gas Phase Filtration System solves two huge problems of the Pulp and Paper industry namely Humidity and Corrosive Gases.

Paper has a high tendency to absorb moisture during the various stages of pulp and paper processing making it prone to changes in size and shape when exposed to temperature and humidity fluctuations. Additionally, the equipment in control rooms in paper factories is very sensitive to pollutants and corrosive gases in the air. Hence, it is quite important to maintain optimal air quality and control humidity levels across the pulp and paper processing. It's one of the critical parameters to ensure smooth and efficient operations in the pulp and paper industry.

### Uncontrolled moisture leading to inferior quality of paper

When it comes to controlling the humid environment, a minor deviation in the environmental conditions can lead to a high level of humidity. Bry-Air Dehumidifier can lower the moisture content of the surrounding air in the manufacturing, packaging and storage areas to the desired level and help maintain the quality of the paper in terms of its performance and durability.

### Prevention of production delays due to corrosive gases

Corrosive gases can corrode the machinery used in the manufacturing process. This can lead to breakdowns, production delays, and expensive repairs. To prevent these issues, manufacturers in the pulp and paper industry must carefully monitor the air quality in their facilities and take steps to control the levels of corrosive gases.

Gas Phase Filtration System is the most ideal and cost-effective system to deal with any issue of corrosion in various control rooms. It is critical to airborne molecular gaseous and particulate contamination removal.

When manufacturing paper and pulp, it's important to consider the presence of corrosive gases. In the pulp and paper industries, there are various chambers, including DCS rooms, recovery boiler control rooms, pulp milk control rooms, fiber line control rooms, evaporated line control rooms, and others, which are used to develop the products. These control rooms are exposed to a wide range of corrosive chemicals such as chlorine, sulphides, hypochlorite, and other similar substances as the pulp reacts at various stages during processing.

Bry-Air Desiccant Dehumidifiers and Gas Phase Filtration System have proven to be a game-changer for the pulp and paper industry, effectively solving the persistent problems of controlling humidity and removing corrosive gases. With the ability to regulate moisture content and eliminating the e-corrosion problems across various processes, these systems have become an indispensable tool for ensuring quality paper production.







for





## When MoiSTURE is Torture

In this column, we share our experience of major application areas where usage of dehumidification is both extensive and essential.

## Dehumidification controls rust problems of radial tyres during manufacturing

The steel belt of tyres get rusted over a period of time leading to the tyre's quicker wear and tear. However rusting can be delayed or prevented if due care is taken during the manufacturing stage, to ensure that rusting of steel belts does not occur during the bonding process.

### **Effects of Uncontrolled Humidity**

Presence of high humidity during the manufacturing of process radial tyres leads to:

- O Improper bonding between steel and rubber
- O Loss of strength
- O Large rejection rate

#### Causes of Uncontrolled Humidity

During Manufacturing process for preparing the multi-layer tyres, some use only steel belts for the added strength, others add cross knitted steel wires, which makes it stronger. The room in which steel wires are covered with fabric, converting it into a single bonded ribbon, which is, then braided, is referred to as the Creel Room.

In the Creel Room, various wires of fabric and steel pass through the winding machine from large spools. Presence of high humidity in this room leads to rusting of steel wires, leading to a large rejection rate and loss of strength. Rusting prevents proper bonding between the steel and rubber. Dehumidification of Creel Room therefore becomes a vital application area.

### **Bry-Air Solution**

Bry-Air dehumidifiers in creel rooms helps in maintaining conditions of  $20\pm5\%$  RH. Due to the nature of the manufacturing, the area surrounding the creel room may be at a temperature and humidity higher than normal ambient conditions.

In the Creel Room, various wires of fabric and steel pass to the winding machine from large spools. This total area is taken into consideration while calculating moisture load.

Also, sufficient make-up air is introduced to provide the positive pressure in the space. It is also imperative that when the cord leaves the creel room, it must travel through ambient air. At this time, if the temperature of the cord is below the dew point, temperature of the ambient moisture will condense on it and will be trapped in the finished ply. Therefore, the cord must never leave the creel room unless it is at a temperature above the dew point temperature of the ambient air.

Tyres incorporated with the superior radial tyre technology have withstood the test for a longer life than conventional tyres. All this has been made possible due to adherence to quality manufacturing practices. Adding a desiccant dehumidifier to protect the steel cord ensures a "lasting bond, which never tires.











## **Event Gallery**













Social Connect [ in]

#### BRY-AIR (Asia) Pvt. Ltd.

Corporate Office: 21C, Sector-18, Gurugram 122015 Phone: +91-124-4091111 E-mail: bryairmarketing@pahwa.com

Registered Office: 20, Rajpur Road, Delhi 110054 Phone: +91-11-23906666 E-mail: enquire@pahwa.com Web.: www.brvair.com

CIN:: U74210DL1981PTC012456

BRY-AIR (MALAYSIA) Phone: +60-3-89256622 E-mail: bryair@bryair.com.my

Website: www.bryair.com.my

BRY-AIR (USA) Phone: +1-740-965-2974 E-mail: bryair1@bry-air.com Website: www.bry-air.com

BRY-AIR (UAE) Phone: +971-6-5574622 E-mail: support@bryair.ae

Website: www.bryair.com/uae

BRY-AIR (CHINA) Phone: +86-21-34126537 E-mail: info@bryair.com.cn

Website: www.bryair.com.cn

BRY-AIR (INDONESIA) Phone: +62-21-83709388 E-mail: indomark@bryair.com.my Website: www.bryair.com.my/indonesia

BRY-AIR (BRAZIL) Phone: +55-41-36982222 E-mail: contato@bryair.com.br

Website: www.bryair.com.br

BRY-AIR (VIETNAM) Phone: +84-8-39956498 E-mail: vietmarketing@bryair.com.my

Website: www.bryair.com.my/vietnam

BRY-AIR (PROKON) Phone: +41-91-6830971 E-mail: info@pro-kon.ch Website: www.bryairprokon.com BRY-AIR (BANGLADESH) Phone: +880-1819409100 E-mail: bryairbangladesh@pahwa.com Website: www.bryair.com/bangladesh

BRY-AIR (PHILIPPINES) Phone: +63-2-8078436 E-mail: marketing@bryair.com.ph Website: www.bryair.com/philippines Phone: +234-8097276772 E-mail: bryairnigeria@pahwa.com Website: www.bryair.com/nigeria