

# dry facts

www.bryair.com

Leaders in Dehumidification...Worldwide

PAWA GROUP  
Innovation is life

DRI™  
Innovative Air Solutions

delair  
The Compressed Air Treatment System Company

TDS™  
Air Solutions on Rent

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**NEW**

## Bry-Air® launches **Adsorption Chillers**

### Energysmart Cooling using Waste Heat



Hot water in...

50°C to 100°C

Low Grade waste heat

- Process waste heat
- Tri-generation
- Solar heat

Cold water out...

5°C to 15°C

Process cooling  
and  
Air-conditioning (HVAC)

It's not magic !

It's an advanced green technology using  
inert 'Silica Gel-Water' pair

Adsorbent

Refrigerant

The Bry-Air Adsorption Chiller is based on an innovative green technology, and is the first of its kind in India, and will be manufactured in India under license from Power Partners, Inc., USA. It is the first ever product being launched in India to tap the abundant low grade waste heat available in process industries and use it for process cooling or air-conditioning (HVAC). A lot of low grade process heat (50°C - 100°C) generally goes waste, which can now be used for cooling.

This eco-friendly solution also cuts down CO<sub>2</sub> emission and reduces energy expenses. Adsorption chillers use energy from waste heat, with negligible electricity consumption, to provide chilled water for process cooling and air-conditioning, and they do this with "green" refrigerant (water) and desiccant (silica gel).

It is ideal for process industries like power plants, food and beverages, chemical, etc. and for commercial areas like offices, building, hotels, malls, etc.

**NEW**

## ADDITIONS TO THE Bry-Air® DEHUMIDIFIER RANGE

### BryCool™ for Cool Dry Air



### FFB Series expands its range to 3000 cmh



Compact Dehumidifier range now available from  
170 cmh to 3000 cmh

# BryCool™

## COMPACT DEHUMIDIFIER FOR COOL DRY AIR

NEW



The BryCool Compact Dehumidifier is another energy efficient compact dehumidifier from Bry-Air. BryCool accomplishes the task of providing cool dry air for any enclosed facility which requires desiccant assisted drying capability in a compact package. The unit uses the heat dissipated in refrigeration cycle for regenerating the desiccant rotor. Most of the time, it also helps to avoid installing additional air-conditioning unit in the conditioned space as supply air is typically temperature neutral. BryCool operates cost effectively because all the energy required for the operation of the desiccant dehumidifier cycle is coming from the integrated refrigeration unit which is cooling the inlet air.

It is ideal for facilities where human comfort is also required along with dehumidification. BryCool™ incorporates the high performance EcoDry™ rotor and it comes with BryCare™ program which offers a highly cost effective after sales service.

NEW

## Remote Control & Monitoring through Android devices for **Bry-Air** Dehumidifiers



- Real time monitoring/control of dehumidifier for both stand-alone and customized systems from remote locations
- Quick trouble shooting by expert technical staff without being at site, thus reducing break-down time & related costs
- OIM & Spare parts listing available on real time basis
- Helps optimize energy utilization based on data logging & corresponding solutions
- IP based controls results in low running costs
- Assists customer in authorization on data logging and set parameter changes
- Availability of trend analysis on real time basis

# When *moisture* is Torture

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

## MOISTURE CAUSES POWDER TO STICK TO CONVEYOR

INCREASE THROUGHPUT  
OF SPRAY DRYERS  
UPTO 30%



Spray drying systems are widely used in food & beverage and many other industries to produce free flowing dry powder. Spray dryers require large quantities of hot air for drying. The quality of the final product is affected by the quality of air (inlet air) entering the dryer. Therefore, inlet air has to be dry, free from contamination and odorless. However, since the ambient conditions change continuously, the humidity level of the air entering

the dryer is not constant, resulting in lower productivity, quality and frequent downtime. Strict humidity control is crucial to maintain optimum production, quality irrespective of ambient conditions.

Due to high humidity, the powdery material tends to stick to the hopper conveyors and packing machine, leading to frequent breakdowns in the conveyor drive mechanism. This hinders the free flow of powders/ granules, making many downstream operations (e.g. packaging, filtering, and handling) difficult and expensive.

During the processing of powdery foods such as milk powders, eggs, whey powders, soup concentrates, etc., the presence of moisture in the air can cause lumping and caking. This affects the free and easy movement of the food and beverage powders in the processing machine and pneumatic conveyors.

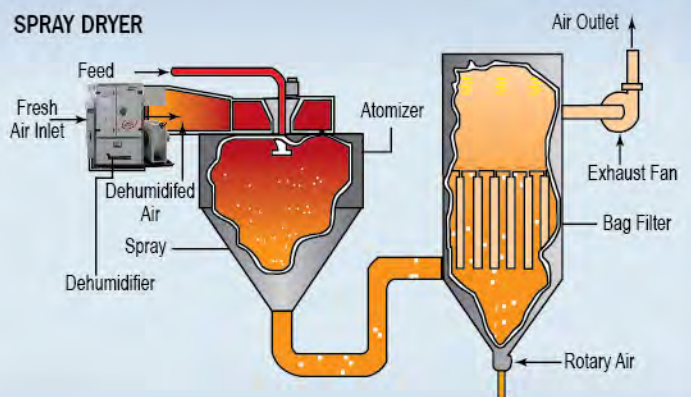
### High humidity results in:

- Inconsistent product quality
- Inconsistent production
- Longer drying time
- Rapid downtime and production loss



### **Bry-Air** provides the ideal solution

Install a Bry-Air Desiccant Dehumidifier at the inlet (source of air) of the spray/ fluid bed dryer for a constant moisture controlled supply of (dry) air inside the dryer. This helps in reducing the physical monitoring of the drying temperature and time, thereby reducing costs and ensuring consistent quality year around. The dehumidifier, by controlling the relative humidity in the supply air, provides the most simple and economic solution to overcome lumping and caking. It also avoids the sticking of powder on packaging machines, hoppers and other parts. Moreover, it ensures an easy free flow of powder through the packaging machine into containers.



# Event Update

**Spices & Herbs** Spices & Herbs Exhibition cum Seminar  
18th April, New Delhi



**IIDE 2015** India International Dairy Expo  
23-25 April, BEC, Mumbai



**FoodTech KERALA** Foodtech Kerala  
14-16 May, CIAL Exhibition Centre, Cochin



## Bry-Air INVITES YOU

- 7-9 Aug **IILF, Delhi**
- 11-13 Aug **AIFPA Food Promach, Delhi**
- 21-23 Aug **India Foodex 2015, Bangalore**
- 25-27 Aug **Asia Labex 2015, Delhi**
- 28-30 Aug **Foodpro, Chennai**

**POWER-GEN** Power Gen 2015  
14-16 May, Pragati Maidan, New Delhi



**JIMEX 2015** Jimex 2015  
18-21 May, Amman, Jordan



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An ISO 9001 : 2008 and 14001:2004 COMPANY