

dry facts[®]

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Institutionalizing Innovation for Today & Tomorrow . . .

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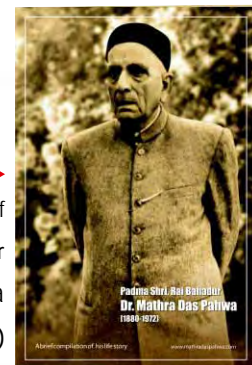
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Going Forward . . .

While going forward, we also revered the past. A brief compilation of the Life of Dr. Mathra Das Pahwa, renowned philanthropist and eye surgeon and grandfather of Deepak Pahwa, Group Chairman, Pahwa Enterprises was launched on December 2, 2012 at Moga, Punjab.

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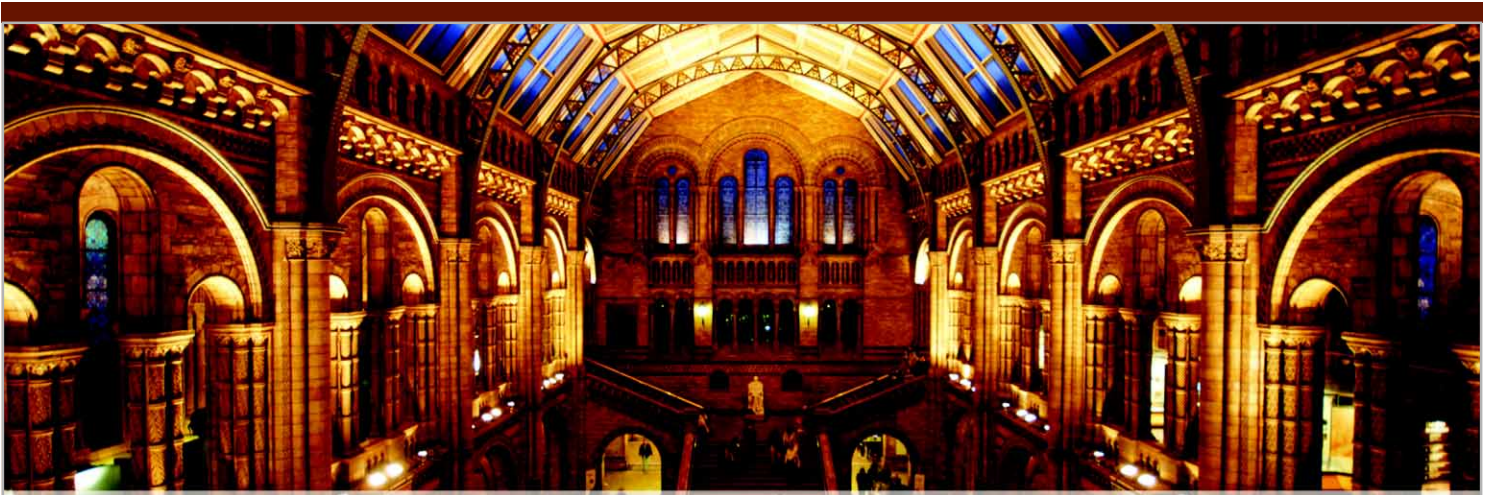
Showtime Ahead! We look forward to meet you at:

AAHAR
THE INTERNATIONAL FOOD & HOSPITALITY FAIR

Aahar International Food & Hospitality Fair 2013 –
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Preserve the History and Culture of Our Society through Gas Phase Filtration

Essence of preservation

Collection and preservation of artifacts and other objects of scientific, artistic, cultural, or historical importance is an essential process for museums and archives. It is dependent upon two main aspects: firstly, creating an ambient environment so that the degradation of artifacts and material is minimized; and, secondly, neutralization of unwanted gaseous contaminants so that there is no further deterioration of artifacts and other material.

Environmental influence – Threat to preserved material

Decay of artifacts takes place due to the influence of environment. There are a number of factors which contribute to airborne contamination, like temperature, humidity, particulates and gaseous contaminants. The list of environmental sources which add to airborne contamination is given below:

| External sources | Internal sources |
|---|---|
| Auto exhausts coming in from high density traffic outside | Food service areas – Cafeterias |
| Industrial facilities or residential furnaces | Furniture and computer systems |
| Waste disposal units and open drains | Materials used in preservation and cleaning |
| Building construction site nearby | Bio-effluents from guests |

Failure to maintain the acceptable levels of unwanted gases can lead to:

- Deterioration of valuable pieces of archival material / artifacts
- Corrosion of metal statues and frames
- Decay of paper and parchment
- Loss of readable data



Bry-Air® solution for museums and archives

Museums and archives facing deterioration of preserved artifacts and archival material can easily be benefited by going in for a gas phase filtration solution. Bry-Air *EcoScrub* Gas Phase Filtration System is an ideal and cost effective solution for removing corrosive and toxic gases. It has a Honeycomb Chemical Filter which has the following advantages over an Extruded Honeycomb Chemical Filter:

- Low pressure drop (due to laminar flow)
- Smaller footprint
- 400-600 FPM face velocity

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.

Yeast Drying

Just imagine life without yeast . . . where would we be without the discovery of yeast? Our life would be void of many of our day-to-day products, like freshly puffed bread, refreshing beer, wine and other alcohol products, which are the gifts of yeast to us.

Yeast is a living organism that feeds on natural sugars, producing carbon dioxide to leaven bread. Yeast is also responsible for fermentation, and is used to make wine as well as beer.

History

It is believed that yeast is the man's oldest industrial micro-organism. Without knowing its role or its existence, man has used yeast even before the development of a written language.

Yeast production is truly an age old technique and process. The story of yeast is as old as the story of bread. For centuries, yeast has been associated with bread making as a fermenting agent. The origin of bread, though obscure, dates back to the Stone Age, while raised bread developed around 4000 B.C. Traces of yeast were discovered in beer jars and beer breads were used as offerings in the ban tombs in 2000 B.C. Fermentation, originally a matter of chance contamination of airborne yeast, was promoted by using a piece of old dough. To this day, this is the method the most well-known bakers choose.

Today, yeast-making has become a specialized profession. Yeast is now commonly available in packets and foil sachets in the supermarket. However, there is nothing new in the function of a raising agent for imparting that special light texture to the bread we eat. Yeast is made up of living cells with the ability to change sugar and carbon dioxide.

Yeast Making

Drying of yeast an intricate process, requiring cold dry air to produce quality yeast without destroying the organism. The quality of air required for drying of yeast has to be controlled and moisture content kept between 10-14 grains/lb (1.6 gm/kg-2gm/kg) or the dewpoint of air must be in the region of 12-18°F. (-11 to 7°C).



Yeast making is truly an art and science. It involves growing the organism in suitable media. The most popular yeast for winemaking, baking and brewing since ancient times is *Saccharomyces cerevisiae*. *Saccharomyces cerevisiae* is the microorganism which is prepared in the laboratory as the seed yeast.

The crop is harvested when a sufficient crop of cells has appeared. This is then transferred into a clear mineral salt-sugar solution, used as the medium, where fermentation occurs. The temperature is kept constant for rapid growth to take place. The yeast cells are then separated from the fluid in which they have grown by a filtration process. The yeast cells are mixed with starch cells and pressed into large cakes. Fresh yeast can survive only for a few weeks at controlled temperature of 4°C. Hence, it needs to be stored in specially constructed cold stores. On the other hand, dry active yeast can be kept for two to three years without any loss of properties.

Bry-Air® provides the right solution

Bry-Air dehumidifiers maintain the required stringent conditions in the drying area during the manufacturing of yeast. The manufacturing yeast, as we have seen involves low temperature drying. Though elevated temperature ensures faster drying, it can affect the product quality. Bry-Air equipment specializes in such applications. In conjunction with air-conditioning plants, very dry air at low temperatures can be supplied for the product drying applications since they are capable of maintaining RH as low as 1% or even lower at a constant level, regardless of ambient conditions.



Enter Bry-Air... exit moisture

Rewinding 2012 . . .

Trade Shows



Plast India 2012, India, Feb. 2012



ACREX India 2012, India, Feb. 2012



China Refrigeration 2012, China, April 2012



Food & Bev Tech 2012, India, April 2012



PSECE 2012, Philippines, June 2012



Big 5 Show 2012, UAE, Nov. 2012

CSR Activities



Eye Camp at Dr. Mathra Das Civil Hospital, Moga, Punjab



Prize distribution of drawing Competition at Bry-Air Library, Tapkan village, Mewat



Bry-Air Pathshala students participating in drawing competition at Sanjay Van, Delhi



Seminar on 'Energy Saving Technology and Equipment' organized by Bry-Air



Diwali Celebration with Bry-Air Pathshala children



Check Dam at Nalhar village, Mewat

www.bryair.com

For more information on any product, application covered in this issue, please write to :

Marketing: Bry-Air (Asia) Pvt. Ltd.
21C, Sector 18, Gurgaon, 122015 (Haryana)
Phone: +91-124-4091111
Fax: +91-124-4091100
E-mail: bryairmarketing@pahwa.com
Web: www.bryair.com

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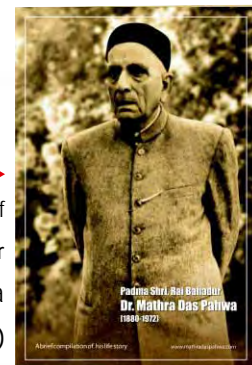
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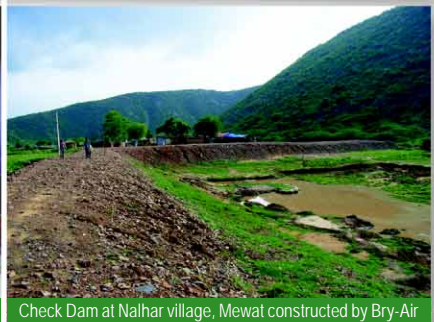
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