

# ECOPLAST™

6

 ... News From **Bry-Air**  
The Dryer Company

## Arctic India Sales merges with Bry-Air (Asia)

### The Power of Being One

#### The Air is changing... for better !

Arctic India Sales has merged with Bry-Air (Asia) to become, one strong team. The combined synergy between marketing and manufacturing will take the organisation to move closer to the organisation's vision "To exceed our Customers' expectations".

Thank you for helping us to continue innovating, not only with our products, but also the way we operate.

We look forward to a long and continuing mutually beneficial relationship, with you and the industry, in the years to come.



#### **Bry-Air**® - The Dryer Company

Drying is one of the most necessary criteria for quality processing of plastics, particularly the engineering polymers.

Increased usage of thermoplastic pellets/resins necessitates thorough removal of moisture absorbed during transportation, and when in storage, prior to processing. Bry-Air Plastic Dryers accelerate the process of production by speeding up the process of drying. You can be sure of a defect free moulding and a dramatic reduction in the rejection rate with a Bry-Air Dryer.

When it comes to Plastics Drying in all its aspects, no one knows - or does - as much as Bry-Air.

We now have a Dryer Range standardized to suit all your customized needs of drying for higher performance, reliability and shorter downtime.

## Bry-Air Malaysia turns **15** ... a Glimpse of the celebrations



Bry-Air Malaysia completed 15 years of its operations since its inception in the year 1989. The celebration was marked with a cake cutting ceremony and a journey down the memory lane. The event was attended by Bry-Air (Asia)'s Associates from all over the continent. Mr. Deepak Pahwa and Mrs. Vinita Pahwa made a special trip to Malaysia to be present for the celebrations.

## PET....the most popular 'plastic' today.

Polythylene terephthalate or PET, as it is commonly known, is one of the most popular packaging material today. Produced by biaxially oriented blow moulding process, PET combines outstanding performance and aesthetic qualities. It has the superb crystal clarity needed, to show any product to advantage. PET also has excellent carbonation retention properties and is a good barrier to oxygen. It is also extremely resistant to breakage, light to handle and transport, and safe for health and environment.

All these qualities make PET a great favourite with the packaging industries, specially in food and beverage industry.

For PET to have all the qualities, for which it is well known, the PET resins have to be absolutely moisture-free before being processed.

### Drying PET.....

PET resins are highly hygroscopic i.e. they absorb moisture very easily and comparatively more quickly than other plastics resins. This affinity of PET resin to moisture, makes it one of the most difficult resins to dry. Even traces of moisture present in the resin can result in:

- + Higher I V
- + Splay
- + Internal bubbles
- + Loss of clarity and
- + Reduced strength in the finished part/product.

Hence, proper drying of PET resins is the first critical step towards the final required quality of the moulded product. Drying PET requires stringent control over dewpoint drying temperature, residence time and air flows.

**Bry-Air Dehumidifying type Plastics Dryers ensure proper drying of PET resins at (-)40°C dewpoint.**



## **Bry-Air**® wins with a 20° dewpoint difference

**PET resins dried at (-)20°C dewpoint retain 8 times more moisture than PET resins dried at (-)40°C dewpoint, which can be disastrous for the end product.**

**Only Bry-Air dehumidifying type Plastic Dryers can guarantee (-)40°C as consistent dewpoint.**

### What happens if you dry PET at (-)20°C dewpoint?

**World's biggest suppliers of raw materials e.g. Eastman Kodak, Sabic, Reliance, SAP etc. recommend drying PET at (-)40°C.**

At (-)20°C dewpoint, PET resin cannot be dried properly and moisture is retained by the resins!

The residual moisture retained by the PET resins results in hydrolysis of the PET resins in screw barrel of the processing machine, due to high heat and pressure.

This degrades the polymer chain of the resins and causes loss in chemical and physical properties of the end product.

Due to high moisture, the Acetaldehyde content increases which results in reduced shelf life of the contents stored in the PET bottles. Typically, beverages packed in PET bottles with high Acetaldehyde content get a bitter taste.

### PET Manufacturers maintaining (-)40°C dewpoint with Bry-Air Dryers ...

- Jeevan Polymers Pvt. Ltd. • Bisleri • VMI Plastics • 3M • Surat Beverages • Alpha packaging
- Varali Plastics • PEZ Ltd. • Iceberg Aqua • Arham Plastics • Renuka Industries • Global PET



A view of the shop floor of Jeevan Plastics...  
Bry-Air Dryers along with their PET machines

## **Bry-Air**® Customer..... Jeevan Polymers Pvt. Ltd.

### A Success Story

The Hyderabad (India) based POWER PET group, a conglomerate of companies, is one of the leading manufacturers of a complete range of PET Preforms, PET Bottles and PET Jars. Incorporated in 1998 with just 3 people, the group presently employs a work force of 165 people, rendering its range of services to its clientele, comprising reputed National and Multinational companies. The group has grown to its present stature through constant improvement, expansion, innovation and strict quality control.

The group companies are strategically well equipped with vertically integrated manufacturing setup to produce:

#### PET bottles for

- + Mineral Water
- + Edible Oil
- + Phenyle/Chemicals
- + Pesticide
- + Soda
- + Cosmetics
- + Squashes, Etc.

#### PET Jars for

- + House Hold Usage
- + Confectionary
- + Pickles
- + Herbal/Ayurvedic Preparations
- + Mineral Water

Jeevan Polymers opted for Bry-Air Plastic Dryers (BPDs), of different capacities along with suitable Hoppers to be installed with their moulding machines, which has ensured highest quality for their products and efficiency of the plant.

Since their installation in the year 1998, Bry-Air dryers and hoppers have been giving consistent performance and maintaining required dewpoints constantly.



# **Bry-Air**® Centralized Drying System

packages a dehumidifying dryer with upto six drying hopper on a single stand

## Customized for Special Applications :

The Bry-Air Dehumidifying Dryer packages, with their modular construction, can be easily customized for special application like PET preform, Optic Fiber cables and CD manufacturing.

**The most advanced solution for drying technical / engineering plastic materials.**

- ✦ The closed loop circuit assures consistent (-)40°C/F dewpoint with reduced energy consumption.
- ✦ Insulated drying hoppers assure drying of all the hygroscopic resins in order to reduce very low moisture contents before plastification.
- ✦ Bry-Air Centralised drying system offers the most cost effective means of drying of Hygroscopic resins to meet the high standards of product quality.

## Feature Highlights

- ✦ Digital control with highly accurate diagnostic fault indicator and drying station display.
- ✦ Highly effective audio visual alarm (optional)
- ✦ Low energy consumption
- ✦ Display of temperature at each hopper as well as the dryer.



Assured -40°C Dew Point

CNC Manufactured Powder Coated

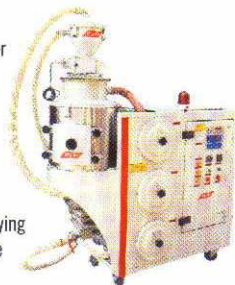


Hopper (Hot Air) Dryer

## At the heart of perfect moulding **Bry-Air**® Plastics Dryers



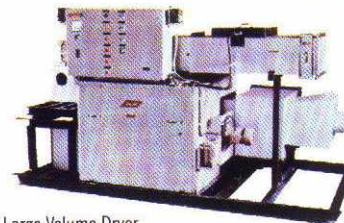
Dehumidifying Dryer



COMBO Drying Package



Centralized Drying System

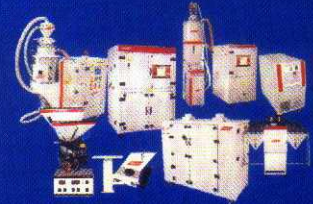


Large Volume Dryer

Products from

**PAHWA**  
ENTERPRISES

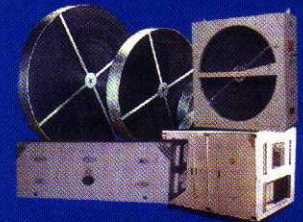
**EGG PLAST**™



**Bry-Air**®



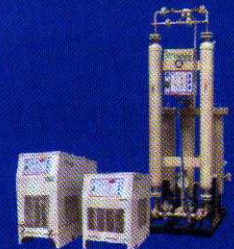
**EGG FRESH**®



**EGG COOL**™



**delair**



**Bry-Air**

Visit us at [www.bryair.com](http://www.bryair.com)

For more information log in to [www.bryair.com](http://www.bryair.com) or email at [ecoplast@pahwa.com](mailto:ecoplast@pahwa.com) or contact Bry-Air offices at:

BRY-AIR (ASIA) PVT. LTD. : 21C, Sector-18, Gurgaon-122015 INDIA Phone : 91-124-5091111 Fax : 91-124-5091100 E-Mail : [enquire@pahwa.com](mailto:enquire@pahwa.com) Website : [www.bryair.com](http://www.bryair.com)  
 BRY-AIR (MALAYSIA) : Sdn. Bhd. (197712-W) Lot 11 Jalan P/7, Bangi Ind. Est. 43650 Bandar Baru Bangi, Selangor-Malaysia Phone : 60-3-89256622 Fax : 60-3-89259957  
 E-Mail : [bam@bryair.com.my](mailto:bam@bryair.com.my) Website : [www.bryair.com.my](http://www.bryair.com.my)  
 BRY-AIR (CHINA) : Phone : 86-21-64480631 Fax : 86-21-64480633 Ext. 8001 E-Mail : [bryairc@online.sh.cn](mailto:bryairc@online.sh.cn) Website : [www.bryair.com.cn](http://www.bryair.com.cn)  
 BRY-AIR (AUSTRALIA) : Phone : 61-0412932317 Fax : 61-8-93494511 E-Mail : [smalkani@bigpond.com](mailto:smalkani@bigpond.com)  
 BRY-AIR (DUBAI) : Phone : 971-4-2868669 Fax : 971-4-2868645 E-Mail : [bryair@emirates.net.ae](mailto:bryair@emirates.net.ae) Website : [www.bryair.ae](http://www.bryair.ae)