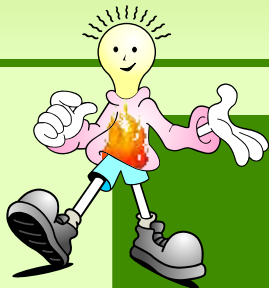


# delair facts<sup>®</sup>

www.delairindia.com

News on Compressed Air Treatment

Vol. 3



Please visit our newly updated website  
[delairindia.com](http://delairindia.com)

We are pleased to bring the next issue of Delfacts. In this issue we have highlighted the updates in our company and application of compressed air dryer in Power, Cement and Steel industry.

## Delair upgrades to ISO 9001:2008

At Delair we have always stressed on the quality of our process and product. Our quest for continuous improvement has led us upgrade to 9001:2008 from ISO 9001:2000. Delair assures you of products which meet high standard of quality. Our designs are based on a combination of solid know-how, sound engineering and the use of latest technologies.



## Bry-Air bags "HOTTEST EXPORT COMPANY" of the year 2010 Award

Bry-Air, associate group company of Delair, has been awarded the "HOTTEST EXPORT COMPANY" of the year 2010 at Annual Pharmaceutical Leadership Award, 2010, presented by Pharma Leaders & IACC. The award was received by Mr Deepak Pahwa, Managing Director of Bry-Air (Asia) Pvt Ltd and Director of Delair India Pvt Ltd.



## Delair at Plastivision India 2011

**8th Plastivision India 2011**  
International Plastics Exhibition & Conference  
20 - 24 January, 2011  
Bharat Exhibition Centre, Gurgaon, Haryana, India



Delair showcased delPET dryer at the 8th Plastivision India 2011. delPET dryers are specially designed for PET bottle manufacturing. Our participation was highly successful in generating enquiries and order booking.

## Delair at ACREX



Delair also participated in Acrex India 2011 from 24th-26th February 2011 at Pragati Maidan, New Delhi.

## Delair at Rice Pro-tech 2010



Delair participated in Rice Pro-tech Expo 2010, held at Ludhiana. Delair Refrigeration Dryer is highly useful for applications in Rice industry.

## News from Group companies

**Bry-Air (Asia) Pvt Ltd** - Bry-Air Prokon, was awarded the prestigious CTI "START -UP LABEL for "Ready for Sustainable Business Development" on Sept 14, 2010 by the Swiss Confederation's Innovation Promotion Agency CTI.

**DRI** - DRI bags EEPC (Engineering Export Promotion Council) India National Award for Export Excellence 2008-09 for its "Outstanding contribution to Engineering Exports" in the Product Group.

**TDS** - TDS opened its first international office in Malaysia for providing dry-air services on RENT.



## Delair provides solution for Ash Handling System

Delair has been able to save production and energy cost for many thermal and cement plants by installing its wide range of Refrigeration & Adsorption based Compressed Air Dryers and Customized / Engineered Adsorption based compressed air dryers. Some of the satisfied customers who have installed Delair Dryers in their manufacturing units include:

- NTPC
- Rajasthan Vidyut Nigam Ltd
- APGENCO
- Hindalco Industries
- West Bengal Power Corporation Ltd
- Ennore Thermal Power Station
- Indraprastha Power Station
- Tamil Nadu Electricity Board
- MAHAGENCO
- Himachal Pradesh State Electricity Board

### Process of Ash Handling System

Bulk material is conveyed by air under pressure. This system offers advantages of conveying material from one point to another or to a number of discharge points. The system is composed of a blower or a fan, rotary lock, cyclone separator, diverter, piping and fittings bag filter. Pressure conveying system needs dry compressed air to transport dry fly ash from the surge hopper to the silo for ash storage. Here, the dry ash is mixed with the compressed air and then the mixture is conveyed through the pipeline which runs upto the storage silo where the ash is discharged and the air is released into the atmosphere after filtration. If moisture is present in the compressed air stream, the ash gets moistened, sticking to the sides of the pipeline leading to scale formation and corrosion of pipes.

### Moisture in compressed air stream leads to :

- Corrosion in pipes, ash intake valves, air intake valves and other components.
- Increased downtime and maintenance costs of pneumatic controls.
- Contamination and damage at points where the compressed air comes directly in contact with sensitive materials.
- Rust and scale formation in pipelines, silos.
- Sluggish and inconsistent operation of air valves.
- Malfunctioning of pneumatic shutters.

## The Delair Solution

There can be tremendous saving of energy costs, if the compressed air is dried upto 2 to 5 °C PDP (Pressure Dew Point) i.e corresponding to (-)20°C ADP (Atmospheric Dew Point) instead of (-) 20°C PDP corresponding to (-)40°C ADP respectively. For most cost effective removal of moisture from the compressed air stream.

Delair engineers suggest installation of Refrigeration Type Dryers since in Heatless Type Dryers air is wasted for purges process of regeneration of the towers.



## Delete moisture from compressed air

Moisture in compressed air may lead to :

- Malfunctioning of pneumatic tools and machines
- Sluggish and inconsistent operation of valves and cylinder
- Corrosion in pipe lines, cylinder and other components.
- Increase in downtime
- Increase in maintenance cost of pneumatic machines / tools / controls.
- Freezing in exposed lines during cold weather.

**Delair has provided moisture free compressed air solution to many industries. We are highlighting on power, cement and steel.**

### Power Industry

Applications	
Ash Handling System	Starting gas turbine
Stamping	Tool powering
Insertion and withdrawing reactor rods	
Tools	
Emissions Control	Ventilation System for Boiler house
Pneumatic Controls and actuators	

### Cement Industry

Applications	
Ash Handling System	Tool Powering
Cleaning	Pneumatic control and actuator
Stamping	Conveying
Problems	
Moisture in compressed air also leads to problems like: <ul style="list-style-type: none"> <li>• Lump of ash in pipe lines during ash handling system</li> <li>• Blockage in pipe lines</li> <li>• Improper cleaning</li> </ul>	

### Steel Industry

Applications	
Welding	Injection molding
Spraying	Coolant for hot tools and system
Conveying	Assembling station powering
Feeding of metal sheets	Carbon reduction in steel production
Tool Powering	
Tools	
Jolt squeeze turnover machines	
Bundling machine for semi finished products	
Pneumatic control and actuators	

### SOLUTION

Remove water, dust particles, oil (oil particles are introduced by lubricated air compressors) and solid contaminants from compressed air. So that moisture free air can be used for different applications.

## The Delair Solution

Delair offers wide range of Refrigeration dryer, Adsorption dryers and Customized / engineered Adsorption dryers which removes water / moisture from compressed air.

#### Delair Refrigeration Dryer

This dryer operates on the method of cooling the air to near freezing point to remove the moisture and reheating it to approximately 10°C below the incoming compressed air temperature at nominal conditions.

#### Delair Adsorption Dryer

Adsorption dryer is based on the principle of heatless regeneration and the physical properties of the desiccant to adsorb and desorb the water vapour. It uses pressure swing principle / purge air to regenerate the desiccant bed.

#### Filters

Delair also offers Pre Filters and Oil Filters which remove dust particles, oil particles and other types of solid contaminated present in compressed air.

# Delair - recent projects



Delair successfully supplied the Refrigeration based Compressed Air Dryer for 4000 MW Ultra Mega Power Project for "Coastal Gujarat Power Limited".



Delair successfully completed the commissioning and installation of NLSF-Adsorption based dryer for Euro IV Project of "Chennai Petroleum Corporation Limited".

## Never too far from you

In just over two decades, Delair India's operation already has a established sales network across the country, which is backed by a strong after sales service network and trained & highly qualified engineers.



## Why Delair ?

- Over 20 years of experience in compressed air drying solutions
- Widest range of compressed air dryers
- Over 50 years of research, development and experience in air and gas treatment
- Designed and manufactured as per international standard. Such as ASME section VIII, ASME section IX, IS2825 and TEMA – C
- Only Delair dryers have Volume Liquid accumulator and Liquid receivers
- Reliable and of high quality with very low maintenance cost
- User friendly and designed totally according to industrial specification and requirement, this dryer outclasses other dryers in terms of controls and performance
- Eco friendly
- CE certified

## Products & Accessories



Refrigeration Dryer



Adsorption Dryer



Customized / Engineered Adsorption Dryer



Air Filter



Air Receiver



Water Cooled - After Cooler



Air Cooled After Cooler



Moisture Separator



Auto Drain Valve ZL series



Auto Drain Valve EO series



Auto Drain Valve BF series

## delair™ India Pvt. Ltd.

**Gurgaon** : 21-C, Sector-18, Gurgaon-122015, Ph: 0124-4091111, Fax: 0124-4091100, E-mail: delair@pahwa.com

**Kolkata** : 168, Linton Street, 2nd Floor, Kolkata-700 014, Ph: 033-64570568, Fax: 033-22896834, E-mail: delairkolkata@pahwa.com

**Mumbai** : 319, TV Tower, INDS. Estate, Worli, Mumbai-400 030, Ph: 022-24935155, 24947475, 24925175, Fax: 022-24931020, E-mail: delairmumbai@pahwa.com

**Chennai** : New-5 (old 20), 2nd Street, E-Block, Anna Nagar-East, Chennai-600 012, Ph: 044-42693761/62, Fax: 044-42693764, E-mail: delairchennai@pahwa.com

ISO 9001:2008 Company

A **PAHWA** ENTERPRISE

www.delairindia.com