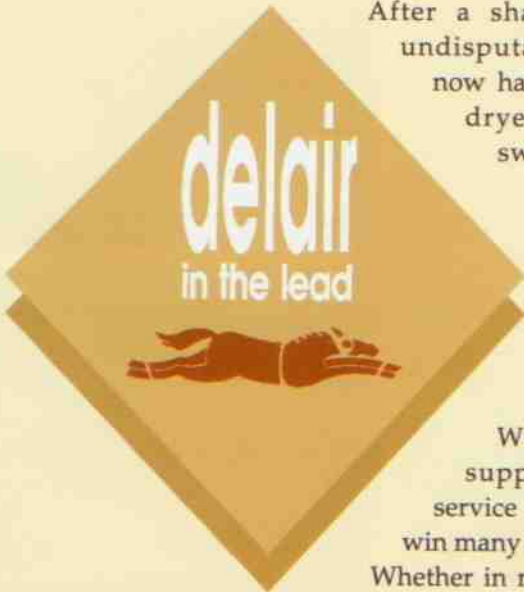


dry facts

...from BRY-AIR

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After a shaky start in 1988, Delair in India has established itself as an undisputable leader in the crowded compressed air dryer market. Delair now has almost over one thousand installations in India. The confidence in our dryers have made customers place repeat orders. Many others have switched to Delair Dryers after trying other brands.

Some of our lead customers include Glaxo, BPL, Bharat Electricals, Escorts, TISCO, Telco India, Onida, Titan, etc.

We thank them for their support and trust that our service and product quality will win many more in the years to come.

Whether in range, in technology or in product quality, Delair is way ahead of the rest



A broken tablet or a capsized capsule . .



. . . . Bry-Air has always provided the simplest and most economical solution to any humidity problem in the Pharmaceutical Industry.

Bry-Air shares a long and very special relationship with the pharma industry and thus always looks forward to opportunities to be in touch. Pharma tradeshows are one such forum. The Bry-Air/Arctic India Sales booth is a familiar sight at all pharma shows.

We take this opportunity to thank all those who visited our booth at Pharmatech'95 in Bombay and invite you to visit our booth at the Pharma

India - 16 - 20 Nov. 95, Bombay, and Indian Pharmaceutical Congress - 27 - 29 Dec. 95, Vizag.



Asian Seed' 95 was a milestone in the progress of the Seed Industry in the region. Organised by the Asian and Pacific Seed

Associate (APSA) and supported by world bodies like FAO, the conference provided a platform for discussion and exchange of views and technologies among the seed specialists in Asia Pacific Region.

Pioneers in dehumidification based seed dryers and seed storage systems, Bry-Air's and Arctic India Sales executives were able to offer a solution to seed preservation problems to several seed companies.

Many delegates took the opportunity to also visit the Bry-Air Plant, located at Gurgaon near Delhi.

ASIAN SEED' 95



IAQ
Related
News Inside

A

n update on our efforts to increase awareness on Indoor Air Quality (IAQ)

Workshops on "Indoor Air Quality "

Arctic India Sales sponsored a series of Workshops on "A Better Understanding of Indoor Air Quality (IAQ) and ASHRAE IAQ standard (Code) 62-1989" in Delhi, Bangalore, Madras, Bombay, Ahmedabad, Calcutta and Hyderabad.



The full day workshops, designed for aircon specialists like design engineers, consultants, contractors, architects, received an overwhelming response from the industry. The workshops were conducted by Mr. N. S. Hukmani Chief Executive, Hi-tech Consultants, and Mr. Mark Clark, Consultant from USA and covered all the aspects of Indoor Air Quality (IAQ), it's standards and technologies related to IAQ.

Seminars on "Indoor Air Quality and Health"



A series of seminars were also organised by Arctic India Sales along with workshops. While the workshops focussed on the designers, consultants and manufacturers of Aircon systems, the seminars focussed on the users, the owners of restaurants, fast food places, hotels and corporate offices.

Speakers at the seminars included eminent doctors and aircon consultants Dr. Nalin Nag, Dr. Mrs. Vasundra, Dr. Suba Rao, Mr. R.V. Simha, Mr. N.S. Hukmani. The fact, that good 'Indoor Air Quality' in conditioned areas is extremely important for health was reiterated.

Copies of seminar and workshop material are available on request.



A STEP Towards a Better



Did you

. . . that 99 %
of the pollut-
ants are too
small to be
seen with the
naked eyes?

FORWARD Indoor Environment

DRIVE TO COLLECT DATA on Indoor Air Quality

ASHRAE, (the American Society of Heating, Refrigerating, and Airconditioning Engineers), world's leading body of Aircon Engineers have over the last two years promoted research on technologies relevant to Indoor Air Quality. Worldwide, Indoor Air Quality in conditioned spaces has been an area of concern. Unfortunately, in India, neither has been there much awareness nor any concrete data is available.



SOME FACTS

A survey in Delhi to measure CO₂ levels in commercial buildings.

Types of Spaces (Airconditioned)	Time (AM-PM)	CO ₂ level (PPM)	
		Outdoor	Indoor
Hotels			960-1400
Fast food joints/Restaurants	10	440	1550-2000
Showrooms/Departmental Stores	To	TO	1002-1460
Hospitals / Nursing Homes	5	650	784-1025
Offices			1050-1340

Mr R.V.Simha, president, ASHRAE India Chapter commissioned a data collection drive to measure the levels of CO₂ in the airconditioned spaces in prime locations like hotels, offices, restaurants, hospitals. (CO₂ level has been recognized by ASHRAE as the surrogate ventilation index, as carbondioxide levels in an airconditioned room is a good indicator of occupancy and ventilation rate within a space) If the CO₂ levels are higher than 1000ppm, then it is an indication that not enough outdoor air is coming in to dilute the CO₂ level. Therefore, the indoor air is being recirculated and the levels of other pollutants in the enclosed space must be high.

A pilot study has already been conducted in Delhi. Reproduced above is a brief overview. It was found that even at peak hours of traffic CO₂ levels outside was much less than the CO₂ levels of the airconditioned spaces.

Arctic India Engineering, makers of Eco-Fresh cosponsored the Ashrae programme.

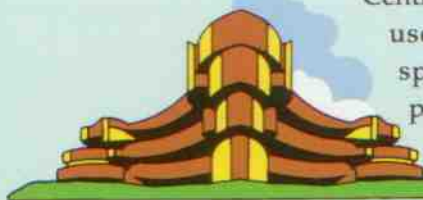
know . . .



IAQ and Hospitality Industry

Hotels, Restaurants, Pubs, Fast Food Centres are one of the largest users of airconditioned

spaces. In many cases, Indoor Air Quality is the problem area. Hotelica'95 provided the right forum for the company to discuss solutions to IAQ problems in the Hospitality Industry.



WHEN MOISTURE IS TORTURE

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

HUMIDITY PROBLEMS IN HOSPITALS

In many health care facilities, there is a necessity to assure good indoor air quality, thus large quantities of outside air must be brought into the building through the ventilation system.

This outside air can account for over 90% of the moisture load typically seen in many health care buildings. It is important to remember that bacteria travels on water vapor in the air. So, in order to avoid microbial growth and surgeon/patient discomfort, this moisture must be removed before the fresh air enters the building. This is particularly true in warm, humid climates.

Conventional air conditioning systems can create high humidity conditions. When room temperatures must be held at 65 deg.F and lower, conventional cooling systems cannot comply with humidity specifications of building codes without systems. In many critical health care facilities, humidity can cause problems and expose the institution to unnecessary risk.

Surgical Staff discomfort

Threat of HIV has led surgical staff to heavy gowning. Thick layers of protective garments have forced surgeons and their staff to

demand room temperatures as low as 61 to 65 deg F, which in turn makes humidity control difficult to achieve with conventional airconditioning and humidity can rise to over 75% RH.



These cool, damp conditions can cause the surgical staff to perspire and become very uncomfortable.

Hazardous Microbiological Growth

But at the relative humidity levels of 35% and lower the bacteria and viruses die very quickly. The high humidity levels found in ductwork downstream of cooling coils is an ideal environment for bacteria and viruses to flourish.

Desiccant Dehumidifier for humidity control.

Desiccant dehumidifiers offer a proven alternative for humidity control at low temperatures. Unlike conventional cooling - based equipment, the moisture removal capacity of desiccant systems actually improves at lower air temperatures.

BENEFITS OF DESICCANT DEHUMIDIFICATION

- Humidity control codes and standards can easily be met by Hospital Management.
- Eliminates high RH in duct work, allowing the HVAC systems to comply with ASHRAE STD-62 Guidelines - to maintain RH below 70% to avoid microbial contamination.
- Main chillers does need to be operated/run at a low chilled water temperature in operating room.
- At higher temperature, central system chiller run more efficiently, providing additional sensible cooling.
- RH can be maintained at 45% RH or lower even at temperature below 64 deg.F

“With a Bry Air Dehumidifier the surgeon can ‘dial’ the most appropriate temperature and humidity as required by the procedure.”



Bry-Air

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