



Dry facts

...from Arctic India Sales

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IACC Delegation Visits U.S.A.

Bry-Air (India) was one of the first joint ventures with a U.S. company to mature in the high technology small scale sector.

An average businessman in the U.S. has always been wary of investments in India due to restrictionist government policies and other apprehensions of the general availability of the infrastructure. However the picture is fast changing and a recent report on current investment climate in South Asia voted India as the country offering the maximum promise to companies contemplating investments. In April this year Indo-American Chamber of Commerce sponsored a delegation of successful Indian businessmen representing every type of Industry to tour the U.S. to sell 'India' to the average American businessman. These chief executives

BRY-Air's Humble Contribution to India's First Joint Space Mission

Our first Indian astronaut Rakesh Sharma carried aboard the Soyoz T specially prepared Indian food, which was scientifically prepared at the Defence Food Research Laboratory at Mysore. Our 1500 cfm dehumidifier was used in dehydrating the food.

spent time meeting with local business people, exploring technological capabilities, licence agreements, sales & joint venture possibilities.

Mr. Deepak Pahwa, Managing Director of BRY-AIR (India) was also selected to be a member of the IACC delegation to the US. He spoke on the topic 'Joint Ventures & Technology Transfers in India' during the seminars.

Bry-Air Bets on Exports

For Starters.

nearly Rs. 1 million exports from Bry-Air

Due to consistent efforts by Bry-Air (India) in international markets, exports of Bry-Air dehumidifiers have picked up fast and are increasing at a rapid clip.

The office of Trade Representation of USSR in India has shown keen interest in Bry-Air dehumidifier. Dr. J Spolokhov, Senior Expert of Russian Trade Representation in India visited Bry-Air plant in Dundahera, Gurgaon and was impressed by our manufacturing facility. Bry-Air expects to do good business with the Russians in the coming years.

In Thailand, Bry-Air expects to commission its 3000 Cfm engineered system in August '84, for the first Soft Gelatin Capsules manufacturing plant of South East Asia.

In Bangladesh, Bry-Air (India) have supplied Dehumidifiers to M/s Square Pharmaceuticals, M/s Oponin Chemicals and 3 numbers dehumidifiers for Bangladesh Pharmaceutical Industries are under advanced stage of manufacture.

In Philippines, Bry-Air (India) has recently shipped a dehumidifier for M/s Mead Johnson Phils. Inc. for their quality control room.

Bry-Air Export Division in the first six months of the current year have supplied & booked orders for dehumidifiers for nearly one million rupees.



From L. to R.—Earnest Hartong, Chamber Vice-President for Economic Development, Deepak Pahwa, Mr. Manmohan Singh, Ho Blair, World Trade & Technology Centre.

The 'New Look' for the Compacts

Our compact series comprises of the models BA—.5A (50 Cfm), BA—1.5A (150 Cfm) & the BA—3A (300 Cfm) units.

Durable, portable & energy efficient the compacts are versatile & find varied applications in all industries. We at BRY-AIR believe in continuously improving upon our product to give the customer a trouble & maintenance free equipment at any time.

Starting with a new and brighter colour the **compacts** are all fitted with motors specially designed for the application by the leading FHP motor manufacturer in the country and with a belt drive assembly from the No. 1 manufacturer in the world. Quick disconnect screws have replaced the old screws to facilitate quicker access to the internals for servicing. These standard **compacts** are under assembly line manufacture and will shortly be available ex-stock. Despite the steep price rise in steel and all other components, we have retained the old prices on the **compacts**; thus giving you good value for your money.



Think of Savings, Think of Heat Recovery

Haven't you ever given a thought to the millions of BTUs being wasted daily from your dryers, dehumidifiers, ovens, boiler exhausts, furnaces & kilns? Have you ever thought of the savings in lakhs of Rs. by simply just recycling the wasted heat? Just go through the following example which will give you an idea of the savings you can effect in your industry.

Dehumidifiers

Volumes : 7,210 SCFM supply and exhaust
Exhaust Temperature : 200°F
Cost : Rs. 62,760
Recovered BTUs : 2,63,703/hr

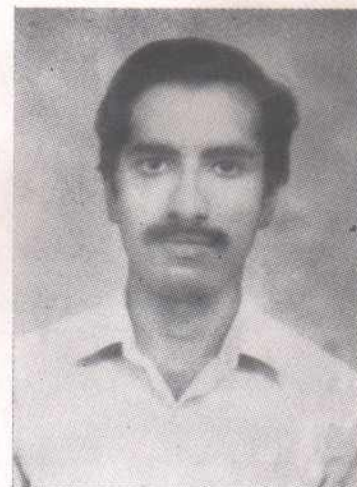
Savings

Electric Cost : Rs. 117/million BTU
Operating Hours : 4,000
Annual Savings : Rs. 1,23,413
Payback Period : 6.1 months.

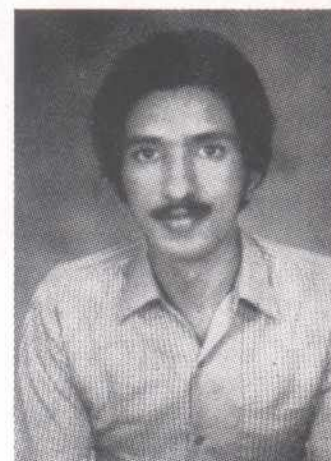
We at BRY-AIR have the solution for you. Our air-to-air heat recovery system using the time proven heat pipe concept can recover above 85% of the wasted heat & are suitable for exhaust temperatures from 50°F to 600°F.

Write to us today for more details on the application areas and the heat pipe heat exchanger. We may have the right answer to your problem.

An organization's strength lies in its people. India Sales can boast of its sales oriented men & women.



Mr. Rajiv Khanna will be lending support to our Delhi Sales team and will be involved with all aspects of sales & after sales service of dehumidifiers.

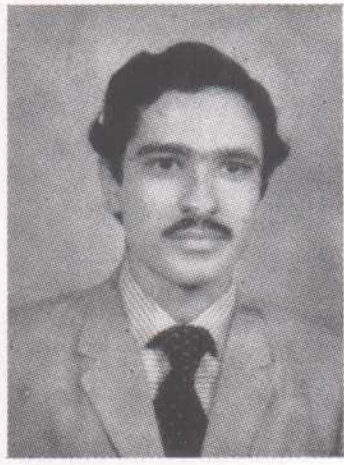


s in its trained manpower. Arctic
ff of young, enthusiastic and result

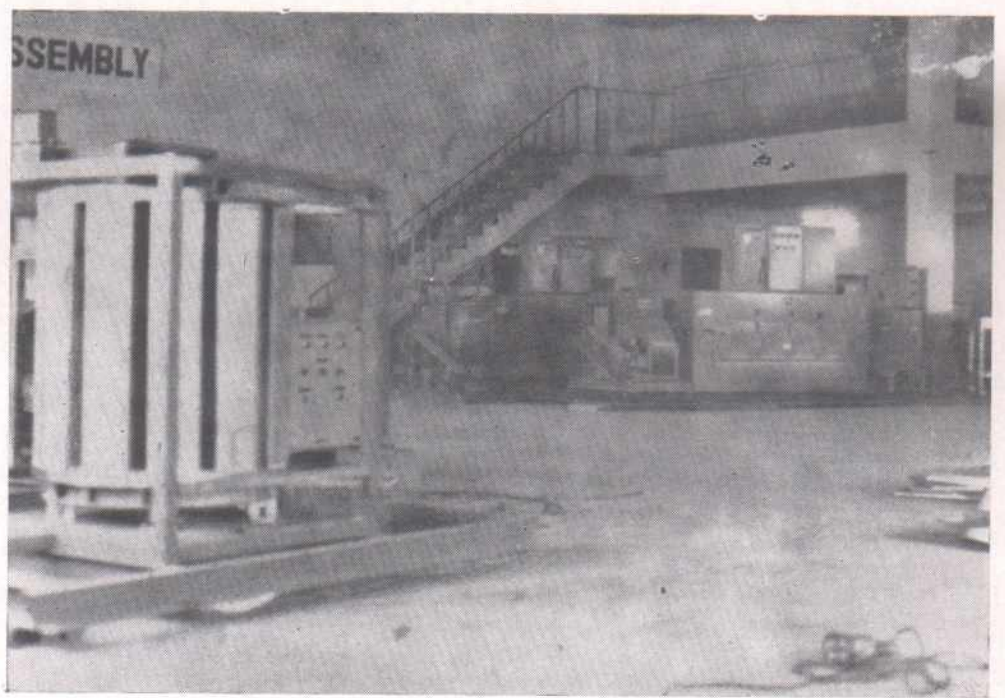
The Flat Bed Makes Way for the MVB.

Picture shows two of the 3000 Cfm units sent to RSSC, & a MVB under production.

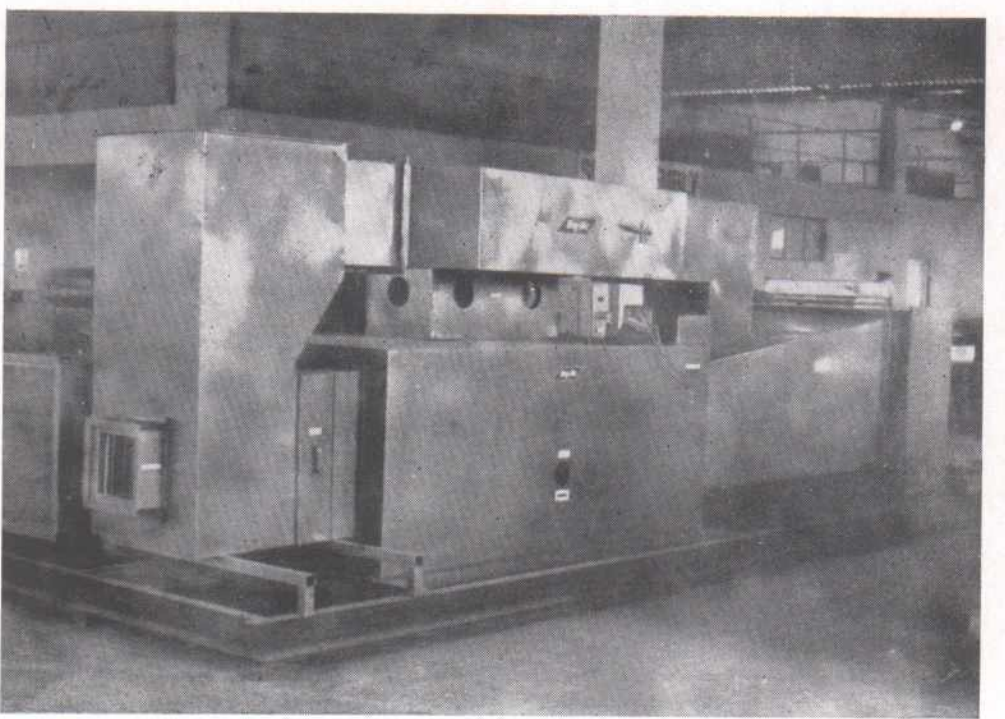
We are happy to have with us now Mr. Raman who will be co-ordinating the marketing of Heat Recovery product line, another indigenously manufactured product from BRY-AIR (INDIA) based on the latest U.S. technology. Under his capable guidance and direction this product line will soon become as well known in the industry as the BRY-AIR dehumidifier.



Mr. K. Suresh Kumar will be giving his all important technical assistance to the sales force in designing & selection of dehumidifiers.



Modern Scientific Seed Storage methods to give better seeds which are germ free, toxin free and which retain their viability even after long periods of storage have come of age in India. A number of seed stores which are being planned all over the country have all opted for BRY-AIR Dehumidifiers. Followed by Pioneer Seeds & H.A.U., Hissar; three 3000 cfm units are to be supplied to RSSC for their stores at Jaipur, Sriganaga Nagar and Kota. A 750 cfm dehumidifier is also being sent to Sutton & Sons Pvt. Ltd., Calcutta.



4500 Cfm unit supplied to Bharat Dynamics Ltd., Hyderabad for the Missile assembly area.

WHEN MOISTURE IS TORTURE !!!!!

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

For the 200 million 'paan' chewing population of India 'Katha' needs no introduction. For the others, the tell-tale orange stains on walls, corridors and roadside are the result of the red, oily pasty ingredient used in the paan popularly known as 'Katha' or Catechu.

The edible 'Katha' comes from the bark of the 'Catechu' tree found in abundance in forests of U.P., Bihar, M.P. & Himachal region. Total output of Katha in the country increased from 2500 metric tons to 4000 metric tons in the last decade. The current rate at which Katha sells is at Rs. 7500 per quintal. The sale price of 'Katha' is determined by the colour of the dry Katha cake. If there is no deterioration in colour of Katha cakes during the drying process, the lighter coloured Katha sells at a higher price by about Rs. 4-6 a kg.

The process of converting raw Catechu bark into edible Katha is long and tedious. The most important process is the drying of Katha tablets. The conventional method involves passing cold air over the spread out Katha tablets. Experience gained over the last 15 years by various Katha manufacturers is to dry the product at low temperatures i.e. 40°F to 45°F. However, the low temperatures which they find necessary to preserve the colour limits the drying time, hence production is considerably slowed. This process of drying

takes 23 days to 35 days and leads to deterioration of colour also. The change in colour takes place essentially due to oxidation; in other words the moisture content present in the cold air used for drying oxidises it, leading to change in colour. To overcome this Katha tablets should be kept standing in the trays in rows so that minimum surface area is exposed to the cold air. To do away with the oxidation and thus the change in colour either the air should be very dry upto the order of 30% RH or lower. At such low RH levels or low vapour pressure levels it is observed that the drying rate of Katha becomes too fast and results in the cracking of tablets.

New Application !!! Do you have any ideas ???

We invite our readers to send us their suggestions for a new and interesting application where they have felt that moisture control is imperative. Our management team will adjudge the best response. For this our company will provide a free trip to Delhi and also to our plant. The name of the adjudged winner will be announced in our next issue of newsletter. So hurry and send in your suggestions for new applications to our office at 20, Rajpur Road, Delhi-110054.

Keeping the above facts in mind the most appropriate/optimum condition under which Katha is recommended to be dried is at a temperature of about 50°F and RH of 55 ± 5%.

It is known that the Katha tablets

have an initial moisture content of 45% to 50%. Further it is recommended that the Katha tablets should be kept 'standing' in the trays till a certain moisture has been removed and then 'flattened'. In doing so the colour is best retained.

It is observed that initially i.e. from the time the 'Wet' Katha, with a moisture content of 45% or more is introduced into the chamber, till the time the moisture content is reduced to about 32-35%, the temperature should be controlled at about 50°F. After the above moisture content has been achieved, the Katha tablets may be 'flattened'. It is also observed that at 32-35% moisture content if the temperature of the chamber is increased to 60-65°F, it will have no appreciable effect in loss of colour of Katha.

In other words colour fixation occurs at 32-35% moisture level and an increase of temperature to 60-65°F will hasten the drying time.

Further it is observed that when the moisture content of the Katha tablet is reduced to 20% or lower it can be subject to ambient temperature without any kind of problem.

Thus the drawbacks of the current drying process namely (1) colour retention and (2) the drying time can be and have been successfully overcome by using the BRY-AIR dehumidifier.

By drying Katha at a temperature of 50°F & 55 ± 5% RH, colour is retained fetching a premium rate and drying time is lowered to almost half i.e. between 10-15 days, hence increasing output.

This dual advantage has been successfully proved true with a Bry-Air unit at work at a large Katha factory near Gwalior.