

## Yet another 'innovation' by 'Bry-Air' setting new benchmarks in Gas phase filtration through its innovative Honeycomb matrix technology

## New Delhi: Monday, June 06, 2011

**Bry-Air,** today announced a yet another breakthrough in its 'in-situ' synthesized macro porous Honeycomb technology research by extending it to Gas phase filtration. In a chemical filter gases are filtered and cleaned out when they are passed through a chemical filter. The cleaning of gas occurs at molecular level, through a process known as chemisorption, when a pollutant gas molecule reacts with chemicals (e.g. KMnO4, KOH, etc) in the chemical filter. The chemicals in the chemical filter get consumed overtime as it reacts with gases. Bry-Air's new honeycomb matrix based macro-porous chemical filters provides the largest amount of impregnated chemical (typical 15% for KMnO4) for the chemical reaction for maximum efficiency for a given physical size and geometry of the media matrix and its air carrying capacity for a given pressure drop. The air flows through the honeycomb matrix are typically at 400 to 600 fpm (2 to 3 mtrs/sec) unlike the granular media bed at 80 to 120 fpm (0.4 to 0.6 mtrs/sec), thus shrinking substantially the chemical filter media bed/matrix face area as well as depth. The new desiccant based macro porous honeycomb matrix is even capable of removing ultra low concentration of gases from the supply air and is much more effective than previous generations.

Unlike the extruded honeycomb matrix with limited 'chemical' carrying capacity, this technology is the first ever such solution in the world which uses the 'in-situ' synthesized macro porous Honeycomb Matrix to remove Air borne contamination like formaldehyde, Hydrogen Sulphide, Sulphur Dioxide, Bromine and Oxides of Nitrogen & Chlorine, other lower molecular weight gaseous compounds and VOC's. Bry-Air's new Air and Gas purification System comprising of macro porous desiccant based honeycomb matrix is impregnated with oxidizing agents, alkaline solutions and is also made bactericidal by treating the same with antibacterial agents.

IT & electronic equipment's reliability and availability is critical for smooth operation of IT enabled services/ KPOs, BPOs, Telecom, News and Media, Data Centers, Semi-conductors, Distributed Control System (DCS), Switch Rooms and Motor Control Centers of Pulp & Paper, Refinery, Chemical, Fertilizers, Petrochemical, etc. This honeycomb matrix based Chemical filtration equipment for air & gas purification is ideal for electronic corrosion causing gases like Hydrogen Sulphide, Sulphur Dioxide, Bromine and Oxides of Nitrogen & Chlorine etc.

This breakthrough in gas filtration is particularly relevant for Data Centers, Server Rooms and DCS rooms which are located near to High density traffic Zones, Sewerages and Drains, Landfill Sites and Process Industries emanating such gases.

This proprietary technology not only reduces the size of chemical filtration equipment but also increases efficiency, life and decrease in energy usage. This patent pending technology has been developed by Bry-Air's R&D group. This is one of the five patents filed by the group in the last 2 years in field of Air Treatment and moisture measurement technology.

**Bry-Air** has always been in the forefront of technology and innovation through extensive R&D in moisture control, air treatment and optimization of energy usage.

This technology well expands the group's offering of air and gas purification systems. Bry-Air, a group company of Pahwa Enterprises, also has a large range of Air & Gas Purification systems, the Bry-Air EcoScrub series which removes air contaminants through a process of adsorption and chemisorptions.



## About Bry-Air

Bry-Air is one of the largest privately held HVAC Company from India with global manpower strength of 1000+. Bry-Air work force has an unshakeable faith in the R&D, innovations and the group places highest importance to quality assurance and technology development therefore it is always ahead of most companies in market place. The group extends immense importance to Patents & is consistently filing patents as well as it defends its patents vigorously. Bry-Air has more than five decades of experience in applications, manufacturing and engineering and R&D in the field of dehumidification & environment control solutions, with several patents to its credit. It specializes in designing and manufacturing the desiccant based engineered dehumidification systems capable of handling demanding applications such as Lithium-Battery, Pharmaceutical, Food Processing, Semiconductor, Electronic Industry, Turbine Storage, Cold Storages etc. Bry-Air (Asia) has been at the forefront of dehumidification and industrial air treatment technology with product range that also includes Air and Gas purification system, Resin Drying equipments, Product Drvers and complete environmental control systems. Bry-Air (Asia) has production Plants in Malaysia, China and Germany and representative offices in Middle East, South Africa, Philippines, Thailand, Italy, Korea, Japan and Australia. The company's range of products find application globally across 40 countries including South East-Asia, China, CIS countries, Indian subcontinent, West Asia, Middle East and Africa including South Africa & Australia as well as USA and Japan.

> For More Information, Visit us at <u>http://www.bryair.com</u> Email us at: bryairmarketing@pahwa.com