

Bry-Air[®]

Ethylene Scrubber (BES)

Setting New Benchmarks in Ethylene Removal Systems



Why Ethylene Removal is Important

All fruits and vegetables release Ethylene as a natural process. Ethylene plays a regulatory role in many processes of plant growth and development. Despite its minuscule molecular weight, it plays an exceedingly important role as a ripening agent in horticulture.

In current harvesting practices, various fruits and vegetables such as tomatoes, oranges are plucked/ picked in semi ripe stage, they are then stored in these huge cold storage and brought to ripeness by exposure to ethylene when market conditions are favourable. The ripening process is complex because it is not only accelerated by ethylene but it is also auto-catalytic producing additional ethylene as it proceeds. The sensitivity of fruits and vegetables to ethylene varies widely and so, when ethylene makes contact with the ethylene receptors, a reaction on the genetic level starts. It is also depends upon what stage of the life cycle the fruit and vegetable is in, as some fruits when exposed to prolonged cold storage require virtually ethylene-free conditions and in some cases even a small amount of ethylene in the exhaust may initiate premature ripening.



Hence, ethylene removal is important and since, it is a natural process and does not affect the property of fruits and vegetables it is all the more viable.

Bad Effects of Ethylene on Various Fruits and Vegetables



Presence of ethylene in amounts ranging from a few parts per billion (ppb) to a few parts per million (ppm) can reduce plant vigour, decrease life of various plant parts and reduce stock quality. 0.1 ppm is commonly considered the threshold level for ethylene action on plants.

Bry-Air Solution

Bry-Air Ethylene Scrubber (BES)

Based on the most advanced Honeycomb Filtration Technology

Bry-Air Ethylene Scrubber (BES) helps remove excess ethylene during fruits and vegetable storage. It removes the naturally released ethylene by the process of adsorption and chemisorption.

Process of Ethylene removal

Ethylene is slightly heavier than air. When Ethylene Scrubber is placed in airflow on the floor in a closed room, it sucks air mixed with ethylene from its lower ducts and passes it through the specially designed Honeycomb Matrix chemical filter where it immediately neutralizes ethylene chemically and releases clean air outside having no bad effects on fruits and vegetables.



Unique Features



Easily replaceable filter cassettes



UL certified media for post harvest storage of food and vegetables



Low footprint



Energy saving because of low-pressure drop



Removes ethylene most effectively

Honeycomb Chemical Filter DRISORB™ Series

Bry-Air Honeycomb Chemical filter, DRISORB™ series, is an 'in-situ' synthesised/deposited (insoluble metal silicate and activated carbon) macroporous desiccant honeycomb matrix, impregnated with choice of oxidising agents and alkaline solutions. It has high efficiency and reliability. The filter is specially designed for higher airflow, therefore, requires lower surface area and has lower pressure drop.



DRISORB™ 508

Granular Media – BRYSORB™ Series

	Media name	SO _x	NO _x	H ₂ S	Cl ₂	NH ₃	HF	O ₃	VOCs	ETHYLENE
	BRYSORB™ 508	✓		✓						✓



Bry-Air Gas Phase Filtration Research Lab



Comprehensive know-how about Gas Phase Filtration systems, and the use and development of innovative solutions for industry are what makes Bry-Air stand out as a research oriented enterprise. Continuous investment in research and development, combined with extensive application know-how of our technical experts are the sources of our innovative skills. Bry-Air recently, setup a state-of-the-art Gas Phase Filtration laboratory at its Gurgaon Plant. The lab is one of its kind in the world. The lab is equipped with world class technology and systems. It is capable of testing the performance of impregnated/ non-impregnated loose granular media. The tests can be conducted as per **ISO/ASHRAE standard 145.1** and **BSR/ASHRAE standard 145.2/ISO standard 11155-2** guidelines.

Bry-Air Gas Phase Filtration Range

Data Center Air Purifier



Control Room Air Purifier



Bry-Air BryShield



Honeycomb Chemical Filter - DRISORB™ series

Deep Bed System



Granular Media - BRYSORB™ series

Thin Bed System



Odour Control Unit



Atmospheric Corrosivity Monitor



Corrosion Classification Coupon



Leaders in Dehumidification... Worldwide

BRY-AIR (ASIA) PVT. LTD.

Corporate Office:
21C, Sector-18, Gurugram 122015
Phone: +91-124-4091111
Fax: +91-124-4091100
E-mail: bryairmarketing@pahwa.com

Registered Office:
20, Rajpur Road, Delhi 110054
Phone: +91-11-23906666
Fax: +91-11-23906660
E-mail: enquire@pahwa.com
Web.: www.bryair.com
CIN: U74210DL1981PTC012456

City	Phone
DELHI	+91-11-23906666
CHANDIGARH	+91-172-4678806/7
MUMBAI	+91-22-24935155/24947475
VADODARA	+91-265-2351493
KOLKATA	+91-33-22814841/22814877
BENGALURU	+91-80-43025562/3/4/5
HYDERABAD	+91-40-27154243
CHENNAI	+91-44-48606141/2/3
KOCHI	+91-484-2395940

E-mail
enquire@pahwa.com
bryairchandigarh@pahwa.com
bryairmumbai@pahwa.com
bryairbaroda@pahwa.com
bryairkolkata@pahwa.com
bryairbangalore@pahwa.com
bryairhyderabad@pahwa.com
bryairchennai@pahwa.com
bryairkochi@pahwa.com

BRY-AIR (USA)
Phone: +1-740-965-2974
Fax: +1-740-965-5470
E-mail: bryair1@bry-air.com
Website: www.bry-air.com

BRY-AIR (CHINA)
Phone: +86-21-34126537
E-mail: info@bryair.com.cn
Website: www.bryair.com.cn

BRY-AIR (MALAYSIA)
Phone: +60-3-89256622
Fax: +60-3-89259957
E-mail: bryair@bryair.com.my
Website: www.bryair.com.my

BRY-AIR (BRAZIL)
Phone: +55-41-36982222
E-mail: contato@bryair.com.br
Website: www.bryair.com.br

Country	Phone	E-mail	Website
BRY-AIR (UAE)	+971-6-5574622	support@bryair.ae	www.bryair.com/uae
BRY-AIR (PHILIPPINES)	+63-2-88078435/6/7	mail@bryair.com.ph	www.bryair.com/philippines
BRY-AIR (INDONESIA)	+62-21-79199023	indomark@bryair.com.my	www.bryair.com/my/indonesia
BRY-AIR (VIETNAM)	+84-28-39956498	vietmarketing@bryair.com.my	www.bryair.com/my/vietnam
BRY-AIR (NIGERIA)	+234-8097276772	bryairnigeria@pahwa.com	www.bryair.com/nigeria
BRY-AIR (SWITZERLAND)	+41-91-6830971	info@pro-kon.ch	www.bryairprokon.com
BRY-AIR (BANGLADESH)	+880-1819409100	bryairbangladesh@pahwa.com	www.bryair.com/bangladesh

Enter Bry-Air... exit moisture