# ETHYLENE OXIDE (EtO) INDUSTRIAL SCRUBBERS



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The EtO Sterilization Specialist

EXCEL BALAJI STERILISATION CONCEPTS (EBSC) offers an efficient EtO Gas Scrubber with 99 % EtO removal efficiency with all safety measures.

# **TECHNOLOGY & PROCESS SYSTEM:**

The counter current packed tower type scrubber makes our EtO scrubber most efficient for removal of EtO. The basic design of the scrubber, channels the gas flow upwards through a packed bed while the scrubbing liquid flows downward by gravity over the packing.

The internal components of the scrubbing system consist of a Packed Bed Tower (packing support plate, a packing bed, a liquid distributor, and a mist eliminator), Scrubbing Liquid Circulation Pump, Reactor Tank, and Control Panel.

The scrubbing solution consists of water and a small amount (usually < 5%) of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>). The sulphuric acid catalyzes a hydrolysis reaction:

$$C_2H_4O + H_2O \longrightarrow C_2H_6O_2$$

The principal product  $(C_2H_6O_2)$  is ethylene glycol, which is relatively inert and may be recycled for use as antifreeze.

Whole scrubbing systems is specially designed to ensure adequate dwell time to achieve reaction completion.

## **SPECIFICATIONS**

■ EtO Concentration : 1 – 100 ppm (Typical),

Removal Efficiency: Up to 99 %

Material of Construction : Stainless Steel & FRP

Operating Weight: Approximate 1200 Kg

• EtO Removal Capacity per Unit per Cycle: 30 Kg of EtO @99% concentration.

# **FEATURES AND BENEFITS:**

- No Hazardous By Products
- All Stainless Steel and FRP construction No Rusting.
- No High Temperature Duct
- Room Temperature Operation
- Minimum Energy Costs
- Low Maintenance and Monitoring.

# **APPLICATIONS:**

- Chemical Reactors of EtO Manufacturing Plant
- Medical Disposable & Surgical Industry
- Contract Sterilization Facilities
- Spice & Food Processing
- Pharmaceutical Processes
- Storage Tank Venting
- EtO Bottling Plat

Purchase our EtO Gas Scrubber system and eliminate Ethylene Oxide emission from your facility.

Our design flexibility allows the use of preferred components and materials, ensuring that our system can be fully and safely integrated into your existing plant environment and methodologies.

Note: Design, Features and Specification of the units may change from time to time Images shown in the brochure are just for the idea & actual product vary as per requirements

Your Nearest EBSC Sales & Service Station



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